



DEVORA "DEV" DAVIS, CHAIR  
STEVE HEMINGER, VICE CHAIR  
CINDY CHAVEZ  
JEFF GEE  
GLENN HENDRICKS  
DAVE PINE  
CHARLES STONE  
SHAMANN WALTON  
MONIQUE ZMUDA

MICHELLE BOUCHARD  
ACTING EXECUTIVE DIRECTOR

April 14, 2021

Mr. Deno Milano  
Environmental Health Services  
San Mateo County Health  
2000 Alameda de las Pulgas  
Suite 100  
San Mateo, CA 94403

REF: San Mateo County Case #119191 / RO2243; APN 035-200-999

SUBJECT: Subsurface Investigation Summary Report, Hayward Park Caltrain Station, San Mateo

Dr. Mr. Milano:

In response to your letter dated December 9, 2020, the Peninsula Corridor Joint Powers Board (JPB) is submitting the attached *Subsurface Investigation Summary Report* prepared by ERM-West, Inc. Please note that the subject document does not contain a corrective action plan. The JPB's legal counsel and appropriate environmental professionals are currently preparing a corrective action plan that takes into account short- and long-term site considerations associated with the planned, upcoming site redevelopment. The corrective action plan will be discussed with and submitted to San Mateo County Health by June 2021.

Please contact me at (650) 508-6301 or [ChaoS@samtrans.com](mailto:ChaoS@samtrans.com) if you have any questions or would like to discuss this case further.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen Chao".

Stephen Chao  
Deputy Director, Engineering

cc Brian Fitzpatrick, San Mateo County Transit District  
Ian Hull, ERM

attachment



Peninsula Corridor Joint Powers  
Board (JPB)

## **Subsurface Investigation Summary Report**

Hayward Park Caltrain Station, San Mateo,  
California

14 April 2021

Project No.: 0520818

*The business of sustainability*



---

## Signature Page

14 April 2021

# Subsurface Investigation Summary Report

Hayward Park Caltrain Station, San Mateo, California



---

John Cavanaugh, P.G.  
Partner



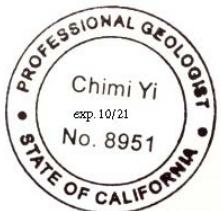
---

Clinton Harms  
Project Manager



---

Chimi Yi, P.G.  
Senior Consultant



## ERM-West, Inc.

1277 Treat Blvd., Suite 500  
Walnut Creek, California 94597  
T: 925 946 0455  
F: 925 946 9968

© Copyright 2021 by ERM Worldwide Group Ltd and / or its affiliates ("ERM").  
All rights reserved. No part of this work may be reproduced or transmitted in any form,  
or by any means, without the prior written permission of ERM

**CONTENTS**

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. SITE BACKGROUND.....</b>	<b>2</b>
2.1 Geologic and Hydrogeological Setting.....	3
2.2 Adjacent Sites.....	4
<b>3. CHARACTERIZATION ACTIVITIES.....</b>	<b>5</b>
3.1 Pre-Fieldwork.....	5
3.2 Site Preparation Work.....	5
3.3 Borehole Advancement.....	5
3.4 Lithological Logging, Field Screening, and Soil Sample Collection.....	5
3.5 Well Installation Activities.....	6
3.6 Monitoring Well Development.....	7
3.7 Surveying.....	7
3.8 Low-Flow Groundwater Sample Collection .....	7
3.9 Quality Assurance/Quality Control .....	8
3.10 Equipment Decontamination and Investigation-Derived Waste .....	8
<b>4. ASSESSMENT RESULTS .....</b>	<b>9</b>
4.1 Evaluation Relative to Environmental Screening Levels.....	9
4.2 Soil Analytical Results.....	10
4.2.1 Total Petroleum Hydrocarbons in Soil.....	10
4.2.2 Volatile Organic Compounds in Soil.....	11
4.2.3 Semivolatile Organic Compounds in Soil .....	11
4.3 Groundwater Analytical Results .....	12
4.3.1 Total Petroleum Hydrocarbons in Groundwater .....	12
4.3.2 BTEX and MTBE in Groundwater .....	12
4.3.3 Groundwater Gradient and Flow Direction.....	12
<b>5. RESPONSE TO REGULATORY COMMENTS.....</b>	<b>13</b>
<b>6. CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>15</b>
<b>7. CORRECTIVE ACTION PLAN.....</b>	<b>16</b>
<b>8. REFERENCES .....</b>	<b>17</b>

<b>APPENDIX A</b>	<b>PERMITS</b>
<b>APPENDIX B</b>	<b>FIELD NOTES</b>
<b>APPENDIX C</b>	<b>MONITORING WELL LOGS</b>
<b>APPENDIX D</b>	<b>LABORATORY ANALYTICAL REPORTS</b>
<b>APPENDIX E</b>	<b>WELL DEVELOPMENT LOGS</b>
<b>APPENDIX F</b>	<b>SURVEY DATA</b>
<b>APPENDIX G</b>	<b>WELL SAMPLING DATA SHEETS</b>
<b>APPENDIX H</b>	<b>DATA QUALITY REVIEW</b>
<b>APPENDIX I</b>	<b>WASTE MANIFEST</b>
<b>APPENDIX J</b>	<b>SANBORN MAPS</b>

## **List of Figures**

- 1 Site Location Map
- 2 Historical Topographic Map
- 3 Historical Site Features
- 4 Current and Previous Assessment Locations
- 5 Groundwater Monitoring Well Locations
- 6 TPH-Diesel Soil Isoconcentration, 0.5 to 5 ft bgs
- 7 TPH-Diesel Soil Isoconcentration, 6 to 11 ft bgs
- 8 Cross Section A-A'
- 9 Cross Section B-B', Cross Section C-C', and Cross Section Location Map
- 10 TPH-Diesel Concentrations in Soil: Cross Section A-A'
- 11 TPH-Diesel Concentrations in Soil: Cross Section B-B', Cross Section C-C', and Cross Section Location Map
- 12 TPH-Diesel Isoconcentration in Groundwater
- 13 Groundwater Elevation Contours

## **List of Tables**

- 1 Summary of Analytical Results for TPH in Soil and Groundwater
- 2 Summary of Analytical Results for VOCs in Soil
- 3 Summary of Analytical Results for SVOCs in Soil
- 4 Summary of Analytical Results for Metals in Soil
- 5 Summary of Analytical Results for VOCs in Groundwater
- 6 Well Construction Details
- 7 Groundwater Elevation Data
- 8 Summary of Analytical Results for VOCs in Soil Vapor

## **Acronyms and Abbreviations**

µg/kg	Micrograms per kilogram
µg/L	Micrograms per liter
AST	Aboveground storage tank
BTEX	Benzene, toluene, ethylbenzene, and xylenes
CAP	Corrective Action Plan
COC	Constituent of concern
cy	Cubic yard
DCA	Dichloroethane
ERM	ERM-West, Inc.
ESL	Environmental Screening Level, San Francisco Bay Regional Water Quality Control Board
ft bgs	Feet below ground surface
HPK	Hayward Park
IDW	Investigation-derived waste
JPB	Peninsula Corridor Joint Powers Board
LTCP	Low-Treat Closure Policy
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MTBE	Methyl tert-butyl ether
PID	Photoionization detector
QA/QC	Quality assurance/quality control
RWQCB	Regional Water Quality Control Board, San Francisco Bay Region
SB	Soil boring
SMCEHSD	San Mateo County Environmental Health Services Department
SVOC	Semivolatile organic compound
TPH	Total petroleum hydrocarbons
TPH-d	Total petroleum hydrocarbons as diesel
TPH-g	Total petroleum hydrocarbons as gasoline
TPH-mo	Total petroleum hydrocarbons as motor oil
USEPA	United States Environmental Protection Agency
UST	Underground storage tank
VOA	Volatile organic analysis
VOC	Volatile organic compound

## 1. INTRODUCTION

On behalf of the Peninsula Corridor Joint Powers Board (JPB), ERM-West, Inc. (ERM) has prepared this *Subsurface Investigation Summary Report and Corrective Action Plan* (Summary Report) for the Hayward Park Caltrain Station site located at 401 Concar Drive in San Mateo, California (site; Figure 1). This Summary Report presents the results of characterization activities that were performed to address comments provided in the San Mateo County Environmental Health Services Department (SMCEHSD) letter dated 9 December 2020 (SMCEHSD 2019).

The objective of the investigation was to assess the lateral and vertical extent of impacts at the site. The remainder of this Summary Report is organized into the following sections:

- Section 2 – Site Background
- Section 3 – Characterization Activities
- Section 4 – Assessment Results
- Section 5 – Response to Regulatory Comments
- Section 6 – Conclusions and Recommendations
- Section 7 – Corrective Action Plan
- Section 8 – References

## 2. SITE BACKGROUND

The site is located at 401 Concar Drive in San Mateo, California, and includes the Hayward Park Caltrain Station and associated parking areas. The site is currently used to provide commuter rail service and is predominantly paved.

Sanborn Fire Insurance Maps indicate that the site was previously occupied by portions of an asphalt plant and other industrial operations, as shown on Figure 3. The Sanborn maps show the presence of a rail spur on the property from approximately 1900 to the 1960s that was used by the property occupants. Additionally, various tanks are noted on the Sanborn maps and included on Figure 3. The Sanborn maps indicate that the previous industrial facilities were present until approximately 1973. The JPB purchased the site from Southern Pacific Railroad in 1992 and has continued to operate the site as a train station parking lot since that purchase.

On 20 January 2016, SMCEHSD contacted the JPB and stated that contamination encountered during construction at the adjacent Station Park Green Redevelopment Project to the east appeared to extend to, or perhaps originate from, the Hayward Park Caltrain Station. Consequently, the SMCEHSD opened an environmental case for the Hayward Park Caltrain Station via a letter dated 18 April 2018. A previous subsurface investigation was completed at the site in May 2016 by West Environmental Services and Technology, Inc. (West Environmental) as documented in the *Draft Site Assessment Report* (West Environmental 2019).

In 2018, the JPB Board of Directors approved a Transit-Oriented Development Agreement with a third-party property developer to develop the Hayward Park Caltrain Station parking lot into a mixed commercial-residential property. Development plans have not been finalized but are anticipated to include ground-level parking with multi-family residential apartments constructed above the parking structure; no significant excavation for subterranean construction (other than for foundation and utility installation) are planned at this time.

In December 2019 and January 2020, ERM advanced 12 soil borings (HPK-SB-1 through HPK-SB-12) to further assess site soil and groundwater (Figure 4). The results of this investigation were documented in the *Subsurface Investigation Summary Report* (ERM 2020).

The results show the presence of total petroleum hydrocarbons (TPH) as diesel (TPH-d) in a number of potential source locations on the property including the area around HPK-SB-12/W-14, HPK-SB-03, HPK-SB-07, W-12, and W-6. Many of these detections appear to be isolated and most do not exceed the commercial/industrial (1,200 milligrams per kilogram [mg/kg]) or construction worker (1,100 mg/kg) Environmental Screening Levels (ESLs) set for TPH-d.

TPH analysis was performed on 53 soil samples. Table 1 presents the TPH-d results for samples collected during this investigation, previous investigations conducted by West Environmental, and samples collected near the property lines of nearby sites including Station Park Green (1700, 1750, and 1790 South Delaware Street) and Vail Burner & Oil Company (1741 Leslie Street). The sources of the data from adjacent properties are referenced on Table 1.

As detailed in Table 1, compounds detected above the laboratory reporting limit included TPH as gasoline (TPH-g), TPH-d, and TPH as motor oil (TPH-mo). TPH compound detections are summarized below:

- TPH-d was detected in all 53 of the samples analyzed with concentrations ranging from 0.41 mg/kg in HPK-SB-06 at 11 feet below ground surface (ft bgs) to 8,200 mg/kg in HPK-SB-07 at 5 ft bgs in current borings, and up to 14,700 mg/kg in the earlier borings (W-6).
- TPH-mo was detected in 42 of 53 samples analyzed with concentrations ranging from 1.7 J mg/kg in HPK-SB-02 at 9 ft bgs to 11,000 mg/kg in HPK-SB-07 at 5 ft bgs.

- TPH-g was detected in 48 of 53 samples analyzed with concentrations ranging from 0.12 mg/kg in HPK-SB-02 at 13 ft bgs to 45 mg/kg in HPK-SB-12 at 5 ft bgs.

TPH-d, the most widely detected TPH compound at the site in the current and previous investigations, is used to evaluate the occurrence and potential sources of TPH in soil.

Volatile organic compounds (VOCs) detected above the laboratory reporting limit included acetone; methylene chloride; carbon disulfide; 2-butanone; chloroform; benzene, toluene, ethylbenzene, and xylenes (BTEX); and naphthalene and are presented in Table 2. Of the VOCs detected during this investigation, only naphthalene in one sample exceeded the screening value for future high-density residential use, based on leaching to non-drinking water. Naphthalene was detected in 12 of the 53 samples analyzed with concentrations ranging from 0.33 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) in sample HPK-SB-12 at 20 ft bgs to 1,500  $\mu\text{g}/\text{kg}$  in sample HPK-SB-03 at 5 ft bgs. This naphthalene exceedance coincides with one location where elevated TPH-d was also detected and appears to be isolated.

Semivolatile organic compound (SVOC) analysis was performed on 14 of the 53 soil samples collected and the results are presented in Table 3. In general, soil samples that contained TPH concentrations were further analyzed for SVOCs. As detailed in Table 3, compounds detected above the reporting limit in one or more samples included 2-methylnaphthalene, fluorine, phenanthrene, pyrene, and bis (2-ethylhexyl) phthalate. 2-Methylnaphthalene was detected in three of the 14 samples collected with concentrations ranging from 110 J to 4,300 J  $\mu\text{g}/\text{kg}$  in samples HPK-SB-07 at 5 ft bgs and HPK-SB-05 at 0.5 ft bgs, respectively. All three detections occurred between 0.5 and 5 ft bgs and correspond to intervals that contain elevated concentrations of TPH-d.

Metals detected in soil at the site are included in Table 4.

TPH-d and TPH-mo analysis was performed on four groundwater samples collected from three borings and TPH-g analysis was performed on five groundwater samples from four borings. As shown in Table 1, compounds detected above the reporting limit in one or more samples included TPH-g, TPH-d, and TPH-mo. TPH-d was detected at concentrations ranging from 420 to 8,600 micrograms per liter ( $\mu\text{g}/\text{L}$ ).

BTEX and methyl tert-butyl ether (MTBE) analyses were performed on five groundwater samples collected from four boring locations. As detailed in Table 5, compounds that were detected at or above the reporting limit in one or more samples included benzene, toluene, ethylbenzene, m,p-xylenes, o-xylene, and MTBE. Benzene was detected in samples from three borings with concentrations ranging from 0.1 J to 2.3  $\mu\text{g}/\text{L}$ .

## **2.1 Geologic and Hydrogeological Setting**

Regional geology in shallow strata is composed predominantly of alluvial sediments that were deposited into the historical bay marshland. Historical topographic maps of the Site area prior to the filling of marshlands indicate that the Site was at the western edge of the filled marshlands (Figure 2). Within shallow soils (approximately 1 to 3 ft bgs), debris from historical site activities is present, such as brick fragments, small to large concrete fragments, wood fragments (historical rail line), and marshland materials. Based on site and nearby subsurface assessment data, depth to groundwater locally is approximately 3.5 to 8 ft bgs (at equilibrium) and the groundwater flow direction is to the east/northeast. ERM has identified two groundwater zones during site investigations. A perched groundwater zone appears to be present at various locations across the site at a depth of approximately 3 to 4 ft bgs. It should be noted that the perched groundwater zone may be a seasonal feature. A shallow groundwater aquifer consisting of discontinuous lenses of sand appears to be present at approximately 10 to 11 ft bgs.

Reports for the adjacent Station Park Green site (1700, 1750, and 1790 S. Delaware Street) indicate that the first groundwater unit is characterized as containing high total dissolved solids concentrations, up to 214,000 milligrams per liter (mg/L); these values exceed the 3,000 mg/L exception criteria for suitability of groundwater as a municipal or domestic water supply as outlined in State Water Resources Control Board Resolution No. 88-63 and the San Francisco Bay Regional Water Quality Control Board (RWQCB) Basin Plan (Geocon 2015). This finding is consistent with the groundwater characterization results for the upgradient Former Vail Burner & Oil Company site (1741 Leslie Street) as documented in *Report of Additional Site Characterization* (Golden Gate Tank Removal, Inc. 2006) prepared for that site.

## **2.2 Adjacent Sites**

From 2015 to 2018, the property adjacent to the east of the site was redeveloped as part of the Station Park Green Project. That project involved soil excavation and construction of mixed-use commercial and residential structures across most of the property. Previous site uses of the Station Park Green property included asphalt preparation, automotive repair with hydraulic lifts, and a retail fuel station with underground storage of petroleum products. Significant portions of the industrial facilities present on the Hayward Park Caltrain Station site, including the former asphalt plant, were also present on the Station Park Green property. Historical chemical releases at the Station Park Green property were overseen as SMCEHSD Cases #110022, #110046, #119172, and #119181. Subsurface environmental investigations related to these cases and the redevelopment were conducted from approximately 2001 through 2016.

On 30 September 2016, SMCEHSD issued a letter stating that remedial actions performed at the Station Park Green property had adequately addressed contamination and closed the environmental cases for the property. Similar resolution has not yet occurred at the Hayward Park Caltrain Station site and the current investigation addresses the SMCEHSD request for site characterization.

The Former Vail Burner & Oil Company site (1741 Leslie Street) is west and upgradient of the Hayward Park Caltrain Station. This site served as a bulk oil distribution facility from approximately 1940 to 1989 (Golden Gate Tank Removal, Inc. 2006). Bulk petroleum hydrocarbons including kerosene, diesel, and motor oil were stored in aboveground storage tanks (ASTs) and heating oil and gasoline were stored in smaller underground storage tanks (USTs). The ASTs were removed from the site prior to 1989; the USTs were removed in the 1990s. Based on the results of the tank removal sampling, the SMCEHSD required characterization of the occurrence of TPH at the site. Excavation of impacted soil was completed in 1999 and 2009. Following approximately 5 years of monitoring and post-excavation characterization to address potential data gaps, the site was granted closure by SMCEHSD using the Low Threat UST Closure Policy for hydrocarbons.

### 3. CHARACTERIZATION ACTIVITIES

Between 8 and 10 February 2021, ERM oversaw the advancement of nine soil borings and installation of monitoring wells MW-1 through MW-9 at the boring locations (Figure 5). The wells were developed on 23 February 2021 and purged and sampled on 26 February 2021. The purpose of the work was to further assess shallow soil conditions and close soil data gaps, and to collect representative groundwater data for the site. The investigation is described below.

#### 3.1 Pre-Fieldwork

ERM conducted the following activities prior to the start of fieldwork:

- Obtained boring permit 21-0308 from the SMCEHSD, which is included in Appendix A.
- Prepared a site-specific Health and Safety Plan, which all field staff and contractors reviewed before beginning fieldwork.

#### 3.2 Site Preparation Work

Preparatory actions were taken to prevent encountering and disturbing subsurface utilities, as follows:

- Marked proposed boring locations and notified Underground Services Alert to coordinate subsurface utility marking by utility providers in the area.
- Engaged a third-party utility-locating company to confirm and mark the locations of underground utilities; where necessary, boring locations were adjusted from proposed locations to avoid underground utilities.
- Coordinated with Caltrain utility personnel to further confirm that each boring location was clear of railroad-related utilities.

Once all utilities were marked and the planned boring locations were confirmed to be clear of known subsurface utilities, staff used hand augers and an air vacuum rig to clear the top 5 ft bgs of each borehole. The use of hand-auger and air-vacuum minimizes the potential for disturbing unknown utilities, if present, in shallow soil (where utilities are typically installed). Field notes are presented in Appendix B. Additional information about field screening, lithological logging, and soil sample collection during hand-auger soil boring advancement is presented in Section 3.4. Well logs are presented in Appendix C.

#### 3.3 Borehole Advancement

After hand augering the upper portions of each borehole, soil borings were advanced to total depth using direct-push technology to collect/identify soil prior to well installation. Total boring depths ranged from 10 to 12 ft bgs; the total depth of each boring was determined in the field based on field screening results and soil lithology. Despite encountering perched groundwater conditions (discussed in Section 2.1), boreholes were advanced past the identified perched groundwater zone. However, the boreholes were terminated prior to reaching the groundwater zone at approximately 11 ft bgs to avoid cross-contamination between the two groundwater zones.

#### 3.4 Lithological Logging, Field Screening, and Soil Sample Collection

Soil borings were continuously logged for subsurface conditions and lithology in accordance with the Unified Soil Classification System by an ERM geologist under direction of a California Professional Geologist. The soil cores were continuously field-screened using an organic vapor analyzer with a photoionization detector (PID) and visual observations. PID measurements were collected at 1-foot

intervals unless field screening results indicated more frequent testing was appropriate. During hand-augering, soil cuttings were collected from the hand auger bucket and used for lithological logging and field screening. During direct-push coring, soil was exposed from within acetate liners for field-screening and sample collection purposes. Monitoring well logs, including logs generated during hand-auger clearance, are presented in Appendix C.

Soil samples were collected based on lithological observations and field-screening results. ERM used the following observations to determine sample collection locations in each borehole:

- Significant changes in lithology
- Significant changes in water content (e.g., first encountered groundwater)
- Staining and other visual indications
- Olfactory indications
- Elevated PID detections

Soil samples were collected based on elevated field PID screenings at specific depths. Some samples were collected to delineate elevated concentrations of constituents of concern (COCs) in previous samples, and as such, these samples may have been collected where no indications of COCs were observed. If soil intervals did not indicate presence of impacts, i.e., high screening level, lack of odor or staining, target sample depths were collected from 5 to 10 or 5 to 12 ft bgs.

Soil samples for laboratory analysis were collected from hand-auger cuttings, where applicable, or directly from acetate liners during direct-push work. For all laboratory analyses except VOCs, samples were either transferred directly into laboratory-provided glassware or sealed in the acetate liner with polytetrafluoroethylene tape and caps. For analysis of VOCs, soil samples were collected from hand-auger cuttings or acetate liners using soil jars and TerraCore® samplers per United States Environmental Protection Agency (USEPA) SW-846 Method 5035. Soil aliquots were placed in pre-weighed, 40-milliliter volatile organic analysis (VOA) vials prepared and provided by Enthalpy Analytical (Enthalpy; California Environmental Laboratory Accreditation Program #2896 and National Environmental Laboratory Accreditation Program #4044-001), a California-certified laboratory in Berkeley, California. Upon collection, sample numbers were written on the VOA vial and the samples were placed in plastic Ziploc bags. Samples were logged on a chain-of-custody form and placed in an ice-filled cooler for transport under chain-of-custody protocol to Enthalpy. Soil samples were analyzed as follows:

- TPH-g by USEPA Method 8260B
- TPH-d and TPH-mo by USEPA Method 8015B without silica gel cleanup
- BTEX, MTBE, and naphthalene by USEPA Method 8260B
- VOCs by USEPA Method 8260B (selected locations in 2019)
- SVOCs by USEPA Method 8270C (select locations)

Per SMCEHSD request in a 9 December 2020 letter, SVOC analysis was performed on representative samples in which elevated TPH-d or TPH-mo was detected. Analytical results for soil samples are presented in Tables 1 through 4. Laboratory analytical reports are provided in Appendix D.

### **3.5 Well Installation Activities**

Monitoring wells MW-1 through MW-9 were installed by Penecore Drilling on 8 to 10 February 2021. Well construction details are included in Table 6.

Upon completion of soil logging and sampling activities discussed in Section 3.4, the borehole was reamed with an 8-inch-diameter, hollow-stem auger to the total depth and the borehole was completed as a monitoring well. The monitoring well was constructed with 2-inch-diameter, Schedule 40 polyvinyl chloride well screen and well casing. The well screen is 0.010-inch, machine-slotted at an interval of 3 to 10 or 12 ft bgs. A #2/12 sand filter pack was installed around the well screen from 2 to 10 or 12 ft bgs. A transition seal of 3/8-inch, hydrated bentonite chips was installed above the filter pack from 1 to 2 ft bgs. Neat cement grout was placed in the remaining annular space. Well surface completion was installed with a flush-mounted well box.

### **3.6 Monitoring Well Development**

Wells MW-1 through MW-9 were developed on 23 and 24 February 2021 using surge, bail, and pump methodology. Well screens were vigorously surged using a 2-inch surge block along the length of the well screen and a stainless-steel bailer was used to remove sediment from the water column. Following surging and bailing, over 10 well volumes were pumped from wells MW-1 through MW-9 using a downhole submersible electric pump at an approximate flow rate of 150 to 800 milliliters per minute; the variation in flow rate was due to some wells across the site having slow (MW-1 and MW-2) and fast (MW-7) groundwater recharge. Groundwater parameters were measured every well few minutes and included temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity. Pumping continued until groundwater parameters stabilized for three consecutive readings. Well development logs are included in Appendix E.

### **3.7 Surveying**

Wells MW-1 through MW-9 were surveyed on 24 February 2021 by Calvada Surveying Inc., a California-licensed land surveyor. The well was surveyed at the top of the monitoring well box, the top of the well casing, and at ground surface. Horizontal coordinates were surveyed using California State Plane Coordinates, Zone 3, 1983 datum to an accuracy of  $\pm 0.1$  foot. Vertical coordinates were surveyed using North American Vertical Datum of 1988 to an accuracy of  $\pm 0.01$  foot. Survey data are included as Appendix F.

### **3.8 Low-Flow Groundwater Sample Collection**

Groundwater samples were collected from wells MW-1 through MW-9 on 26 February 2021. Groundwater samples were collected using a low-flow peristaltic pump. Each well was sampled using 0.25-inch polyethylene tubing, which was placed in the middle of the screen interval (approximately 7.5 to 8 ft bgs) for each well. The water was pumped into a “flow through cell” where parameters (temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity) were measured prior to sampling. Following stabilization of parameters, groundwater samples were collected into clean, laboratory-provided glassware and recorded on chain-of-custody forms. The samples were then placed in an ice-filled cooler and submitted under chain-of-custody protocol to Enthalpy in Berkeley, California. Groundwater samples were analyzed as follows:

- TPH-g by USEPA Method 8260B
- TPH-d and TPH-mo by USEPA Method 8015B
- BTEX and MTBE by USEPA Method 8260B

Information about sample collection details, including approximate sampling depths, is provided in the groundwater sampling data sheets included in Appendix G. Analytical results for groundwater samples are presented in Tables 1 and 5. Laboratory analytical reports are provided in Appendix D.

### **3.9 Quality Assurance/Quality Control**

The analytical laboratory performed internal quality assurance/quality control (QA/QC) tests to ensure data accuracy and precision. These tests included method blanks, laboratory control sample recovery, and surrogate recovery analyses. In addition to the laboratory-provided QA/QC results, ERM performed a data quality review of the collected media from the site. The report provides a review of the laboratory QA/QC process, flags any data qualifiers, and reports on the validity of the data analyzed by the laboratory. The data quality review determined that the data is suitable and can be used for decision-making purposes. The data quality review is provided in Appendix H.

### **3.10 Equipment Decontamination and Investigation-Derived Waste**

Between drilling locations, all drilling equipment, downhole drilling, and sampling devices were decontaminated. All investigation-derived waste (IDW) was temporarily stored on site in appropriate Department of Transportation 55-gallon steel drums. As appropriate, the IDW was sampled to generate the required waste profile. All IDW was characterized as non-hazardous waste. American Integrated Services, Inc., was contracted to transport the IDW offsite for disposal at the Potrero Hills Landfill, Inc., facility (a State of California licensed disposal facility) in Suisun City, California. Waste manifests are included in Appendix I.

## 4. ASSESSMENT RESULTS

The following sections present the soil and groundwater analytical results obtained during the assessment activities.

### 4.1 Evaluation Relative to Environmental Screening Levels

The analytical results presented in this Summary Report are screened against RWQCB (2019) ESLs for two site use scenarios (current and potential future as described above). Based on likely sources for petroleum for the site, this site most closely approximates a candidate for petroleum under the Low Threat Closure Policy (LTCP) (California State Water Resources Control Board [State Water Board], 2012). However, review of the LTCP indicates no numerical media criteria for bulk petroleum hydrocarbons (e.g., gasoline, diesel, motor oil). Four possible criteria are available as published in the ESLs for possible comparison: direct contact for a future receptor (future high density resident, future worker, future construction worker), migration to groundwater, odor and nuisance, and gross contamination.

Direct contact for all future long term receptors (workers, high density residential occupants) will be precluded through the high density redevelopment plan for the site; all of the property will be covered in hardscape (asphalt), buildings, or imported clean fill. As necessary, a Land Use Covenant will include provisions that preclude unprotected intrusive activities and a Soil Management Plan will be employed to protect site workers during soil disturbance activities. Odor and nuisance would be precluded for future receptor/users by these same measures. Construction workers would also not be expected to experience unprotected exposure to these soils; subsequently, the definition of nuisance<sup>1</sup> would not be met and the ESLs associated with these conditions are not applicable.

The ESLs for gross contamination for gasoline (1,000 mg/kg), diesel (2,300 mg/kg) and motor oil (5,100 mg/kg) are based on more conservative assumptions than are present at the site, specifically, TPH gross contamination ESL values are estimated based on residual saturation estimates for coarse gravel (RWQCB 2019). As also stated in the ESLs, estimated saturation concentrations would be higher in finer grained soils (RWQCB 2019), which have been observed at the site (ERM 2020). Visual observations generally support that the gross contamination ESL values may be overly conservative for the Site. Site-specific observations have noted no visible residues in samples (SB-03, SB-05, SB-12) containing up to 5,500 mg/kg diesel, and 6,100 mg/kg motor oil. Previous investigations (West 2019) did not note residues in any of the samples collected from the Site. However, visible residues were noted in sample W-6-2, where diesel was observed at 14,700 mg/kg. This suggests that the visible residue range for diesel at the Site is more consistent with concentrations greater than 7,000 mg/kg diesel, or in the range of the leaching based ESL for diesel.

For continued use of site as parking lot or with the installation of hardscape and structures, native soils will not be available for exposure due to hardscape (asphalt), but these impediments to exposure cannot preclude infiltration in all areas; therefore, the minimum of ESLs for non-drinking water infiltration are presented. As motor oil does not have a leaching ESL, the ESL for commercial direct contact is conservatively presented.

<sup>1</sup> Water code Section 13050, "(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal."

The analytical results collected during this investigation are first screened against ESLs appropriate for the current site use (surface parking) as follows:

- TPH in Soil: Leaching to Groundwater Levels, Non-Drinking Water (ESL Table S-3) (ESLs for leaching of TPH constituents from soil to groundwater protective of water not used for drinking water). It should be noted that TPH-mo does not have a leaching ESL because it does not migrate to groundwater without a continuing source. Petroleum Motor Oil is composed of large carbon chain compounds (C24-C36+) having negligible solubility. Oils of the C25 to C32 hydrocarbon range are nearly insoluble in groundwater, are not volatile, and pose virtually no risk to human health (State Water Board 2015).
- VOCs and SVOCs in Soil: Leaching to Groundwater Non-Drinking Water (ESL Table S-3) (ESLs for leaching of constituents from soil to groundwater protective of water not used for drinking water). Groundwater: The lesser of Gross Contamination Levels, Non-Drinking Water (ESL Table GW-4) and Commercial/Industrial Groundwater Vapor Intrusion Human Health Risk Levels (ESL Table GW-3).
- Soil Vapor: No criteria are available or provided. Migration of vapor-phase chemicals through the vadose zone and asphalt and into outdoor air is considered a potentially complete but insignificant migration pathway due to rapid dilution by wind into outdoor air.

Analytical results were also screened against ESLs appropriate for the planned future site use (residential development with parking on the ground floor and residences above the parking) as follows:

- TPH in Soil: Leaching to Groundwater Levels, Non-Drinking Water (ESL Table S-3) (ESLs for leaching of TPH constituents from soil to groundwater protective of water not used for drinking water). It should be noted that TPH-mo does not have a leaching ESL, as stated above.
- VOCs and SVOCs in Soil: Leaching to Groundwater Levels, Non-Drinking Water (ESL Table S-3) (ESLs for leaching of constituents from soil to groundwater protective of water not used for drinking water).<sup>2</sup> Groundwater: The lesser of the Gross Contamination Levels, Non-Drinking Water (ESL Table GW-4) and Commercial/Industrial Groundwater Vapor Intrusion Human Health Risk Levels (ESL Table GW-3), as the ground floor will not be occupied by residents, only by parking and commercial offices.
- Soil Vapor: Commercial/Industrial Subslab/Soil Gas Vapor Intrusion Human Health Risk Levels (ESL Table SG-1), as the ground floor will not be occupied by residents, only by parking and commercial offices.

## 4.2 Soil Analytical Results

Soil analytical results are presented in Tables 1 through 4 and TPH-d isoconcentrations in soil are shown on Figures 6 and 7. Cross sections depicting soil lithology and vertical impacts of TPH-d are included as Figures 8 through 11. The site assessment results for soil are discussed below.

### 4.2.1 Total Petroleum Hydrocarbons in Soil

As shown on Figures 6 and 7, TPH-d was detected in several potential source locations including the area around HPK-SB-03, HPK-SB-07, HPK-SB-12/W-14, W-6, W-12, W-14, and MW-9. The data also show the sporadic occurrence of TPH-d in shallow (0.5 to 5 ft bgs) and deep (6 to 11 ft bgs) soil above the leaching to non-drinking water screening level.

<sup>2</sup> The construction worker ESL was not considered for screening of results as exposure to soils during redevelopment will be controlled by implementation of a soils management plan and health and safety plan.

TPH analysis was performed on 18 soil samples during this 2021 assessment. As detailed in Table 1, compounds detected above the laboratory reporting limit included TPH-g, TPH-d, and TPH-mo. TPH compounds that exceeded the respective ESLs are summarized below:

- TPH-d was detected in 12 of the 18 samples analyzed with concentrations ranging from 1.4 mg/kg at 7 ft bgs in MW-4 to 11,000 mg/kg in MW-9 at 4 ft bgs in current borings, and up to 14,700 mg/kg in the earlier borings (W-6). TPH-d concentrations exceeded the screening value for the leaching to non-drinking water level of 7,300 mg/kg in one sample at well MW-9 at 4 ft bgs.
- TPH-mo was detected in 12 of 18 samples analyzed with concentrations ranging from 3.3 mg/kg in MW-4 at 11 ft bgs to 3,000 mg/kg in MW-9 at 4 ft bgs. TPH-mo does not have a soil leaching ESL.
- TPH-g was detected in all 18 samples analyzed with concentrations ranging from 0.021 mg/kg in MW-4 at 11 ft bgs to 250 mg/kg in MW-9 at 4 ft bgs. TPH-g concentrations did not exceed the screening value for the leaching to non-drinking water level of 4,900 mg/kg.

As shown on the isoconcentration maps provided in Figures 6 and 7 and the cross sections in Figures 8 through 11, TPH-d is delineated at the site to below the ESL of 7,300 mg/kg except in shallow soil south of MW-9. Additional investigation may be required to determine the lateral extent of TPH-d south of MW-9.

#### **4.2.2 Volatile Organic Compounds in Soil**

Table 2 presents the results of VOC analyses in soil samples collected during the current investigation. As shown in Table 2, VOC compounds detected above the laboratory reporting limit included acetone; 2-butanone; bromomethane; chloroform; chloromethane; benzene; ethylbenzene; naphthalene; isopropyl benzene; n-propyl benzene; sec-butyl benzene; n-butyl benzene; 1,1,2-trichloroethane; 1,2-dibromoethane; vinyl chloride; 1,1-dichloroethene; 1,2-dichloroethane; trichloroethene; bromodichloromethane; dibromomethane; and bromoform.

Of the VOCs detected during this investigation, ESL exceedances (future high-density residential use, based on leaching to non-drinking water) were only reported in samples from MW-9. The following VOCs exceeded ESLs in soil:

- 1,1,2-Trichloroethane
- 1,2-Dibromoethane
- Vinyl chloride
- 1,2-Dichloroethane
- Bromodichloromethane
- Dibromomethane

Based on all historical data for the site, VOCs exceed screening levels at two locations (HPK-SB-03 and MW-9). Additional investigation may be required to determine the lateral extent of VOCs south of MW-9.

#### **4.2.3 Semivolatile Organic Compounds in Soil**

SVOC analysis was performed on 18 soil samples collected and the results are presented in Table 3. As detailed in Table 3, compounds detected above the reporting limit in one or more samples included 2-methylnaphthalene, fluorine, and phenanthrene. No SVOCs detected during this investigation exceeded the screening value for /leaching to non-drinking water.

SVOCs exceed the ESL at three locations onsite at former boring locations HPK-SB-03, HPK-SB-05, and W-14.

### 4.3 Groundwater Analytical Results

Groundwater samples were analyzed by USEPA Method 8260B for the presence of TPH, BTEX, and MTBE. Groundwater analytical results are presented in Table 1 for TPH and Table 5 for BTEX and MTBE. The results are summarized below.

#### 4.3.1 Total Petroleum Hydrocarbons in Groundwater

TPH-d and TPH-mo analysis was performed on groundwater samples collected from all site wells. TPH-d was detected at concentrations ranging from 360 to 3,300 µg/L and was the only TPH compound that exceeded the 2,500 µg/L screening value for future high-density residential use, based on the gross contamination, non-drinking water level ESL.

Figure 12 presents the results of TPH-d in groundwater from this investigation. As seen in Figure 12, the areas with the highest TPH-d concentrations in groundwater at the site is in the vicinity of MW-9. Remaining TPH concentrations across the site are below the applicable ESL.

#### 4.3.2 BTEX and MTBE in Groundwater

BTEX and MTBE analysis was performed on groundwater samples collected from wells MW-1 through MW-9. As detailed in Table 5, no BTEX or MTBE was detected in the samples from these monitoring wells at or above the laboratory reporting limit.

Historically, benzene was detected in samples from three borings with concentrations ranging from 0.1 J to 2.3 µg/L; the benzene concentration in the sample from SB-12-GW (2.3 µg/L) slightly exceeded the screening value for future high-density residential use of 1.8 µg/L, based on vapor intrusion in commercial/industrial land use scenarios (no residential ground floor construction is planned for the future site redevelopment).

#### 4.3.3 Groundwater Gradient and Flow Direction

Based on depth-to-groundwater measurements (Table 7) collected on 26 February 2021 and the calculated groundwater elevations, there does not appear to be a definite, consistent groundwater gradient or flow direction in the first encountered groundwater measured at the site (Figure 13).

## 5. RESPONSE TO REGULATORY COMMENTS

The following are comments from the SMCEHSD letter dated 9 December 2020 in italics and ERM responses in bold.

*It may be prudent to install shallow monitoring wells screened between 3 and 12 fbg to satisfy this objective given the reported slow seepage of groundwater into site borings and the registered professional's concern with sediment potentially biasing grab groundwater sampling results. It also may be prudent to first install shallow monitoring wells adjacent to Borings W-6, W-12, W-14, HPK-SB-01, HPK-SB-03, and HPK-SB-07.*

**Based on the above comment, the most recent assessment documented above resulted in the installation of nine groundwater monitoring wells. The wells were properly developed and sampled; therefore, the analytical results are representative of groundwater conditions beneath the site.**

*Additional soil assessment also should be incorporated into the investigation to demonstrate the elevated diesel and motor oil impact in soil between Borings W-12 and W-14 does not extend south towards Borings W-15 and W-17 and north to W-11, HPK-SB-07, and HPK-SB-03, and possibly almost as far north to Borings W-9, HPK-SB-09, and HPKSB- 10.*

**Based on the results of the current assessment and the soil isoconcentration maps (Figures 6 and 7), it appears that the elevated concentrations have been delineated by MW-8.**

*The April 2014 report prepared for Station Park Green site immediately northeast of the subject site states the former asphalt mixing plant had three underground fuel storage tanks (USTs) and four aboveground tanks (ASTs) storing fuel oil and asphalt. No information has been provided to show where these tanks were located, what type of fuel was stored in the USTs, and whether the USTs were removed. In addition, the location of the asphalt plant shown on the figures in various reports has not been consistent. Understanding where these potential petroleum source areas were located is essential. Therefore, please review Sanborn maps, aerial photos, and City building and fire department records to determine where the historical buildings and product storage and dispensing facilities were located at the asphalt plant and incorporate the findings in the assessment report due by April 13, 2021. Please complete the field work portion of this task as soon as possible because the findings may influence the assessment sampling locations.*

**ERM reviewed the Sanborn maps as discussed in Section 2 and added the locations of all obvious oil storage from the maps onto Figure 3. The Sanborn maps are included as Appendix J.**

The following are comments in SMCEHSD's letter dated 2 March 2021 in italics and ERM responses in bold.

*The following results represent a potential concern in addition to the elevated petroleum concentrations reported: 1) the semi-volatile organic compound concentrations reported in the soil samples from Boring W-14; 2) the lead concentrations reported in the soil samples from Borings W-11, W-16, and W-17; and 3) the 10.9 mg/l soluble lead concentration reported from the waste extraction test analysis of the soil sample from W-11 at 3 fbg. The registered professional should evaluate the extent of this impact in the upcoming assessment report.*

**Regarding the SVOCs detected in soil in boring W-14, no SVOCs were detected west of W-14 in MW-6 or MW-7 or south of W-14 in MW-8. The extent of SVOCs in soil exceeding the Leaching to Non-Drinking Water Soil ESLs appears limited. SVOCs exceeding the Leaching to Non-Drinking Water Soil ESLs will be evaluated in combination with the TPH-d criteria during the Corrective Action Plan (CAP) process discussed in Section 7.**

Based on the future use of the site, the proposed ESL for lead is Commercial/Industrial Direct Contact (380 mg/kg). Only the soil sample collected at 3 and 7 ft bgs in W-17 exceeded this ESL. The planned excavation during redevelopment will not go that deep. Therefore the lead in that location does not pose a risk to commercial/industrial users during construction. Further protection would be provided by a land use covenant that could limit future soil excavation.

*The 5,750 ug/l of 1,2-dichloroethane (1,2-DCA) reported in the groundwater sample collected from Boring W-22 is a concern. However, this concentration is not supported by the low concentrations of TPH-g and BTEX reported in the sample. Therefore, a confirmation groundwater sample from the affected depth during the upcoming assessment should be considered.*

**The closest soil samples collected to W-22 were from well MW-9, which reported several chlorinated VOCs exceeding the Leaching to Non-Drinking Water Soil ESLs. Groundwater samples from MW-9 were not analyzed for full scan VOCs; however, elevated dissolved-phase TPH-g was also detected in MW-9 at concentrations close to the ESL for gross contamination in non-drinking water sources. Because TPH-g was evaluated using EPA 8260 laboratory methods, a potential interference from the VOCs related to the elevated soil concentrations is possible. Soil in the vicinity of MW-9 may be a potential source for the nearby dissolved-phase COCs detected at W-22.<sup>3</sup> ERM recommends that future groundwater samples from the MW-9 area be analyzed for full scan VOCs as part of the necessary, additional investigation required to evaluate appropriate corrective action alternatives in this area.**

---

<sup>3</sup> As 1,2-DCA was used in leaded gasoline as a lead scavenger, a historical release of leaded gasoline could be the source of the 1,2-DCA detected downgradient in boring W-22.

## **6. CONCLUSIONS AND RECOMMENDATIONS**

The primary objective of this investigation was to assess potential historical sources onsite and the lateral and vertical extent of COC impacts, where present, at the site. Additionally, an objective was to determine the extent to which the site may be impacting, or is impacted by offsite properties. The results of the investigation, in tandem with previous results, provide characterization of the occurrence of TPH in site soil and groundwater to allow for the analysis of potential remedial alternatives for the site. The following conclusions can be made from the data collected to date:

- The results of TPH-d analyses in soil samples from shallow depths to the water table indicate the presence of potential soil sources of TPH on the property including the areas around HPK-SB-12/W-14, HPK-SB-03, HPK-SB-07, W-12, W-6, and MW-9.
- Only a limited number of these potential source areas contain TPH in excess of the applicable leaching to groundwater ESLs, based on the leaching to non-drinking water level.
- Naphthalene was detected in soil samples above its screening value for future high-density residential use in one sample (HPK-SB-03-5) that also contained an elevated concentration of TPH-d. The naphthalene impact will be evaluated in combination with the TPH-d in this area as part of the evaluation for the CAP discussed in Section 7.
- Site groundwater is impacted by TPH-d at concentrations generally below the leaching to groundwater ESL, non-drinking water level, with the exception of MW-9. As detailed in Section 2.2, shallow groundwater in the site vicinity does not meet the drinking water suitability criteria. Site data indicate that there is no definitive, consistent groundwater gradient or flow direction in the first encountered groundwater measured at the site.
- Utilizing historical West Environmental data, VOCs in groundwater exceed the screening value for future high-density residential use at W-12, W-14, and W-22 due to vapors. Additional evaluation of concentrations at W-22 is recommended. Additional soil vapor sampling in these areas may be necessary to assess the need for corrective action.
- Soil vapor data collected during the West Environmental investigation were all below their respective screening values for future high-density residential use, as shown on Table 8. Additional soil vapor sampling may be necessary to complete the existing data set.

Overall, assessment of the site indicates the following:

- Several limited areas of soil impact exist that exceed the proposed screening levels.
- Additional assessment in the area of MW-9 is needed for delineation and to evaluate potential corrective action alternatives in this area.
- As discussed in Section 7, a CAP is being developed and will be submitted under separate cover. The CAP for the proposed Site redevelopment is being prepared to address short-term construction consideration and long-term Site management.

## **7. CORRECTIVE ACTION PLAN**

The JPB is currently preparing a CAP for the Site; the CAP will be provided in an upcoming submittal.

## 8. REFERENCES

- California State Water Resources Control Board (State Water Board). 2012. Low-Treat Underground Storage Tank Case Closure Policy. 19 April.
- State Water Board. 2015. *Leaking Underground Fuel Tank Guidance Manual*. September 2012, revised December 2015.
- ERM-West, Inc. (ERM). 2019. *Work Plan for Subsurface Assessment of the Hayward Park Caltrain Station*. 4 January.
- ERM. 2020. *Subsurface Investigation Summary Report of the Hayward Park Caltrain Station*. 23 September.
- Geocon. 2015. *Soil and Groundwater Management Plan, Station Park Green, 1700 South Delaware Street, San Mateo, California*. 6 April.
- Geocon. 2016. *Report of Findings, Station Park Green*. 2 February.
- Golden Gate Tank Removal, Inc. 2006. *Report of Additional Site Characterization, Former Vail Burner & Oil Company, 1741 Leslie Street, San Mateo, California, San Mateo County Site #110049*. 13 July.
- Peninsula Corridor Joint Powers Board (JPB). 2019. "Preliminary Transit Oriented Development Plans for Hayward Park Caltrain Parking Lot." Letter to San Mateo County Environmental Health Services Department. July 10.
- Regional Water Quality Control Board (RWQCB). 2019. *ESL Workbook*. San Francisco Bay Region.
- San Mateo County Environmental Health Services Department (SMCEHSD). 2016. "Case Closure, Remedial Action Oversight, Station Park Green, 1700 South Delaware Street, San Mateo, California." Letter to Essex Portfolio, L.P., dated 30 September.
- SMCEHSD. 2018a. "Petroleum Adjacent to Northeast Side of Hayward Park Caltrain Station Parking Lot, San Mateo, California." Letter to Stephen Chao, Peninsula Corridor Joint Powers Board, dated 18 April.
- SMCEHSD. 2018b. *Remedial Action Agreement for Hayward Park Caltrain Station, San Mateo County Case #119191*. 26 July.
- SMCEHSD. 2018c. "Petroleum Adjacent to Northeast Side of Hayward Park Caltrain Station Parking Lot, San Mateo, California." Letter to Stephen Chao, Peninsula Corridor Joint Powers Board. 16 October.
- SMCEHSD. 2019a. "Petroleum Contamination beneath Parking Lot of Caltrain Hayward Park Station, 401 Concar Drive, San Mateo, California." Letter to Stephen Chao, Peninsula Corridor Joint Powers Board, dated 12 February.
- SMCEHSD. 2019b. "Environmental Assessment at the Station Green Development, Western Corner of S. Delaware Street and Concar Drive, San Mateo, California." Letter to Mr. Wurzelbacher and Mr. Berger. 14 February.
- SMCEHSD. 2020. "Petroleum Beneath Parking Lot of Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California." Letter to Stephen Chao, Peninsula Corridor Joint Powers Board. 9 December.
- SMCEHSD. 2021. "Petroleum Beneath Parking Lot of Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California." Letter to Stephen Chao, Peninsula Corridor Joint Powers Board. 2 March.

TEC Environmental. 2014. *Soil and Soil Vapor Investigation and July 2014 Groundwater Monitoring Report, Former Vail Burner & Oil Company, 1741 Leslie Street, San Mateo, California, SMCo #110049.* 8 October.

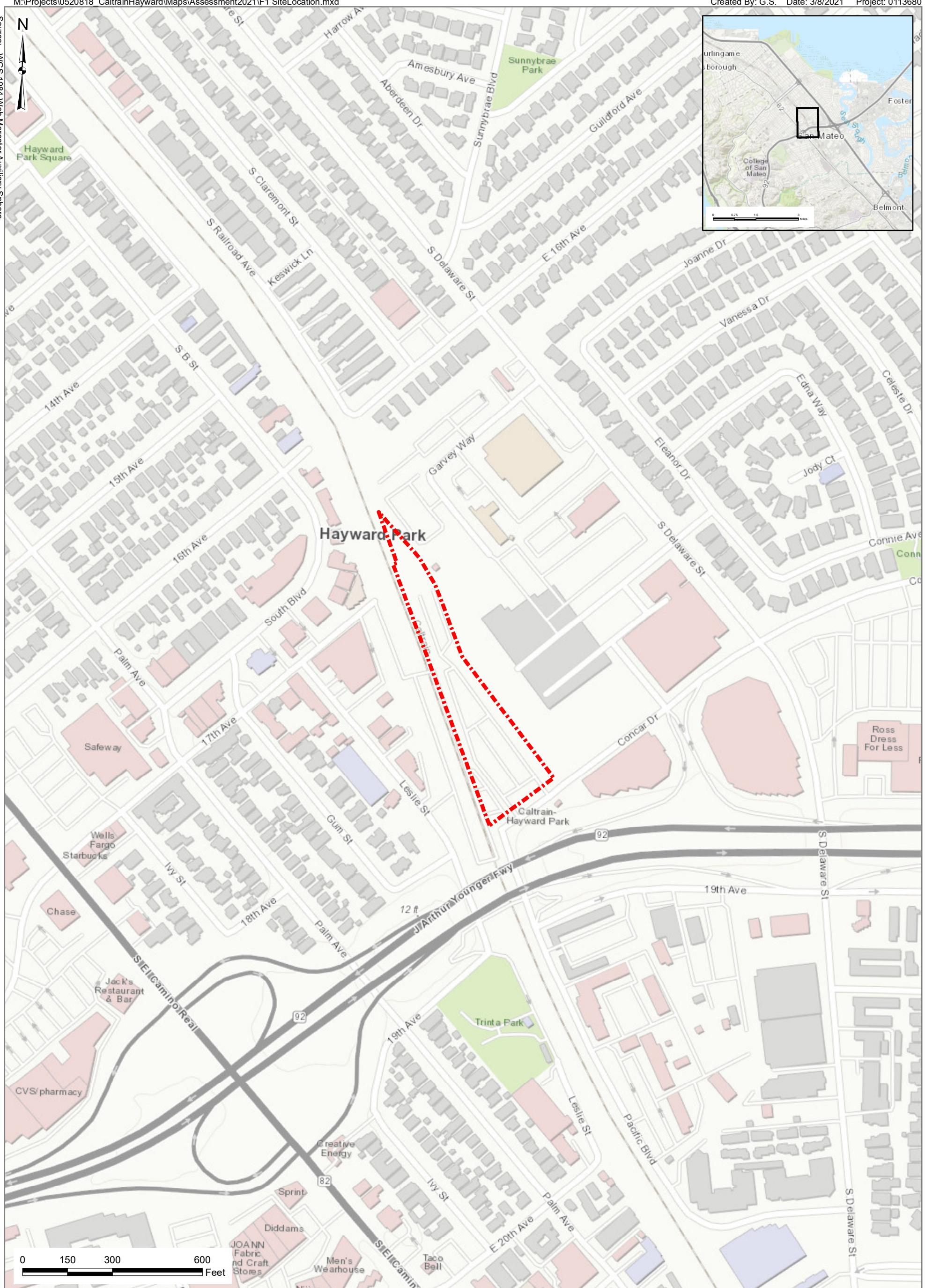
Versar, Inc. 2014. *Phase II Environmental Site Assessment, Station Park Green, 1700, 1750, and 1790 S. Delaware Street, San Mateo, California.* 24 April.

Versar, Inc. 2015. *Supplemental Phase II Environmental Site Assessment, Station Park Green, 1700, 1750, and 1790 S. Delaware Street, San Mateo, California.* 27 January.

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191.* August.

## FIGURES

Source: WGS 1984 Web Mercator Auxiliary Sphere

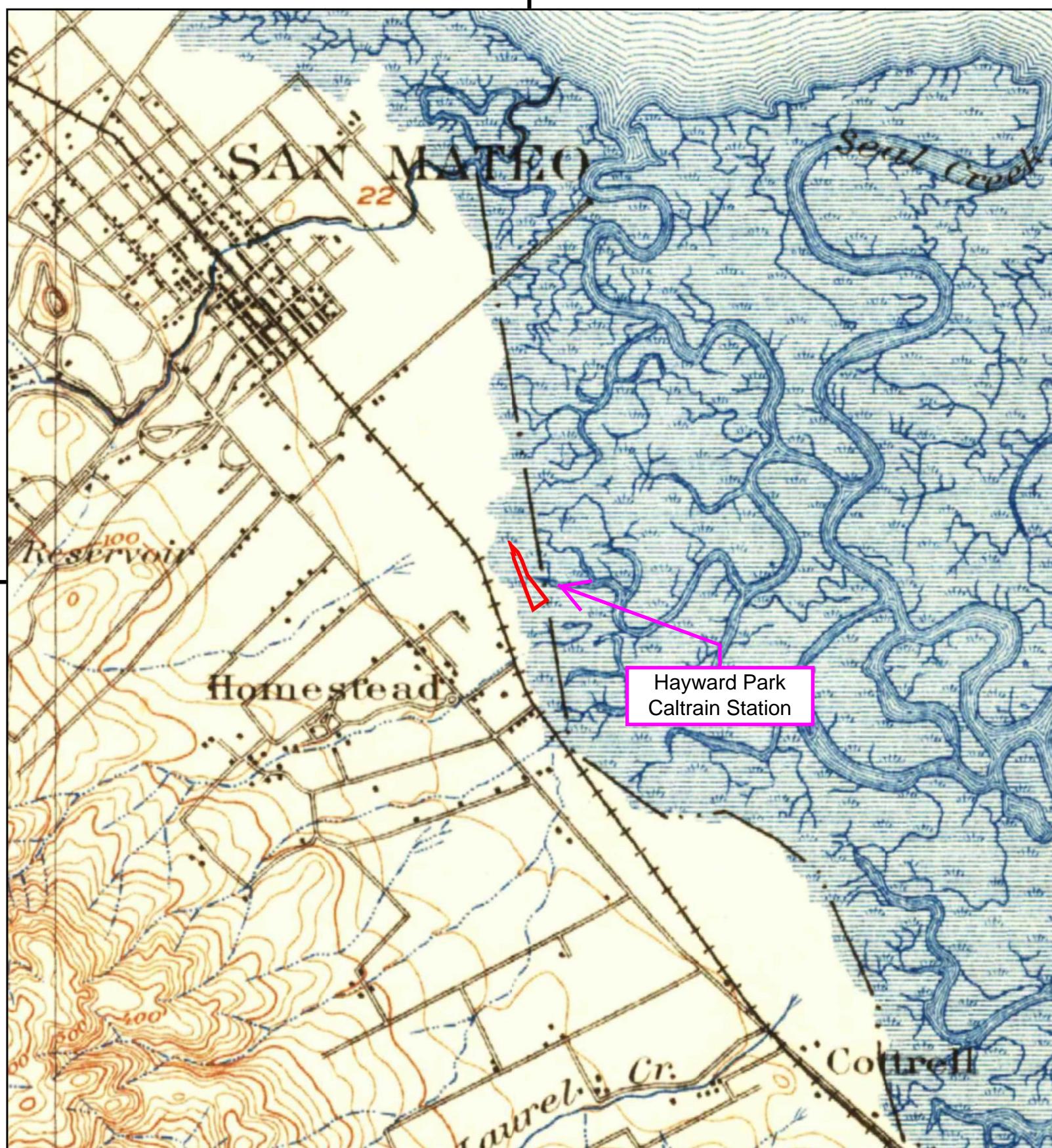
**Legend**

Site Boundary

**Figure 1**  
**Site Location Map**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

**Historical Topo Map**

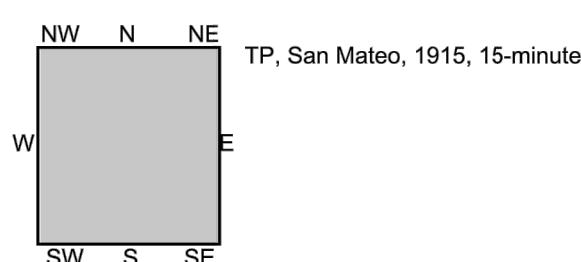
1915



This report includes information from the following map sheet(s).



0 Miles 0.25 0.5 1 1.5

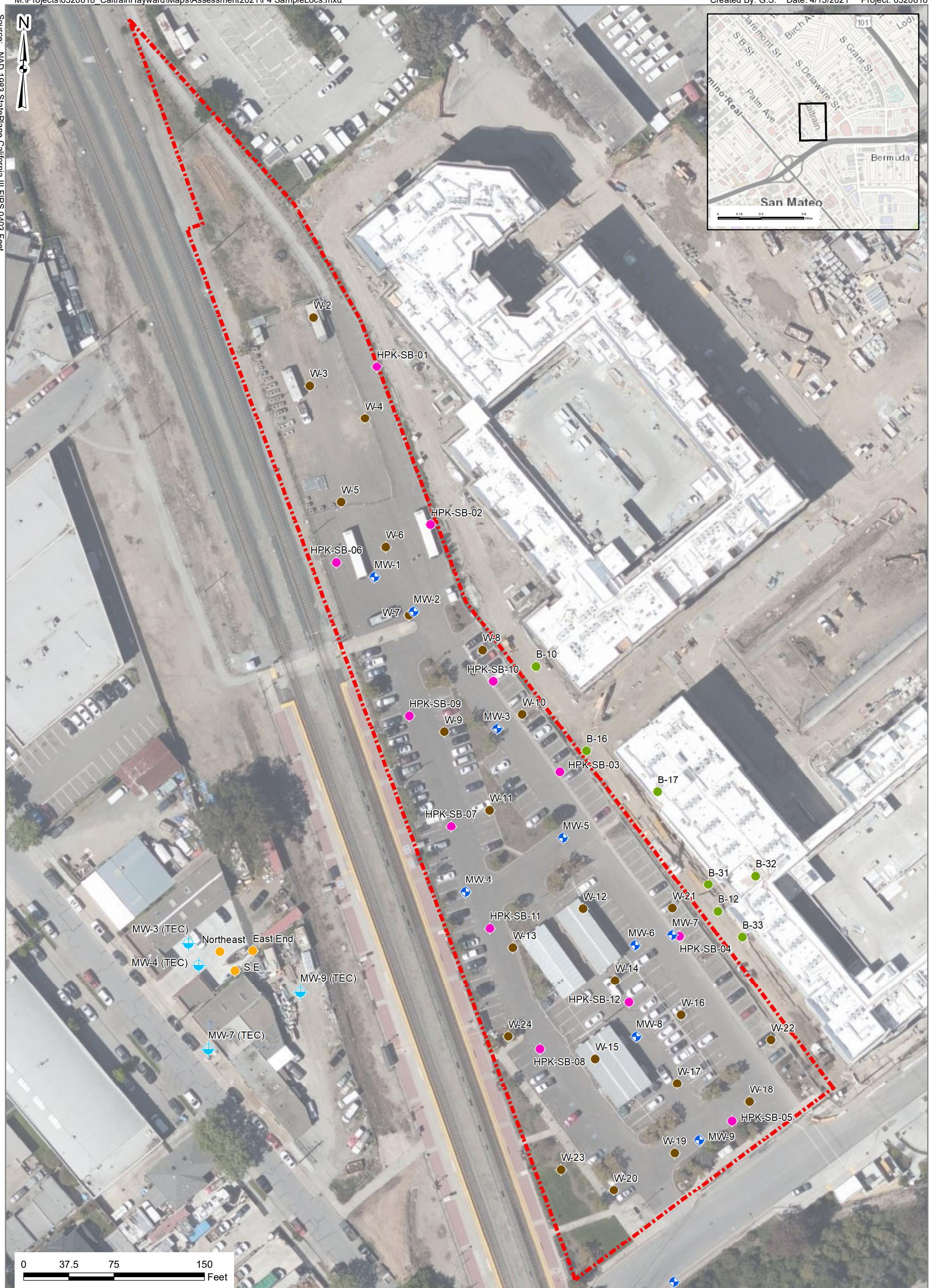


**Figure 2**  
*Historical Topographic Map*  
*Hayward Park Caltrain Station*  
*San Mateo, California*

**Legend**

- Asphalt Mixing Plant: Various Oil Tanks (Sanborn 1953 to 1961)
- Cement with Hydraulic Oil, Sanborn 1953 to 1969
- Potential Ground Stain, Aerial Photo 1943 to 1956
- Previous Oil Tank / Oil Pad, Sanborn 1953 to 1961
- Steel Storage Tank, Sanborn 1953 to 1969
- Historical Rail Spur Track
- Site Boundary

**Figure 3**  
**Historical Site Features**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

**Legend**

- Monitoring Well - ERM 2021
- Boring Location - ERM 2019
- Boring Location - Station Park Green
- Boring Location - West 2016
- Vail Burner & Oil Co. Excavation Sample
- Monitoring Well - TEC 2014

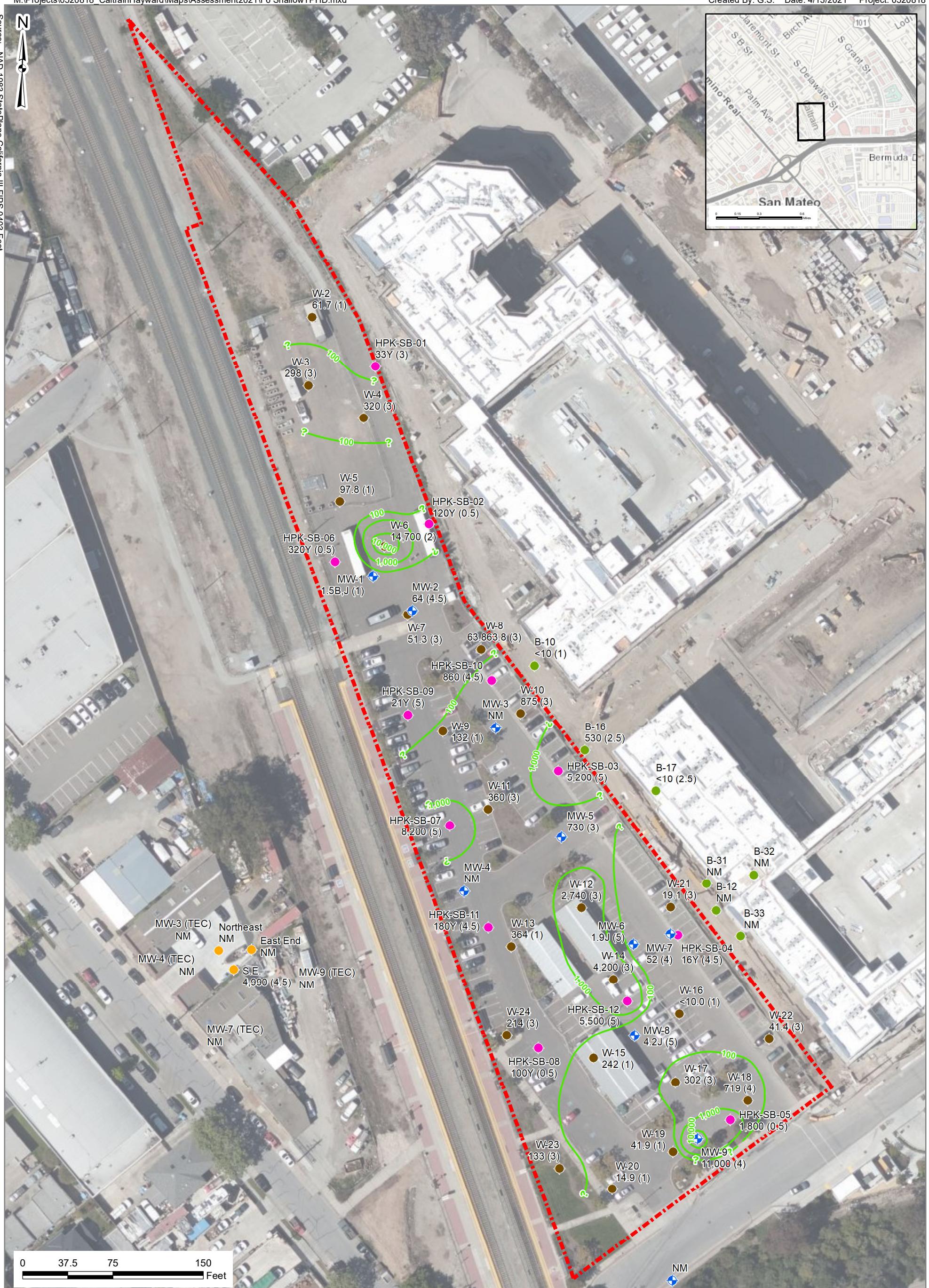
**Site Boundary**

**Figure 4**  
*Current and Previous Assessment Locations  
 Hayward Park Caltrain Station  
 San Mateo, California*

**Legend**

- ◆ Monitoring Well
- ◆ Site Boundary

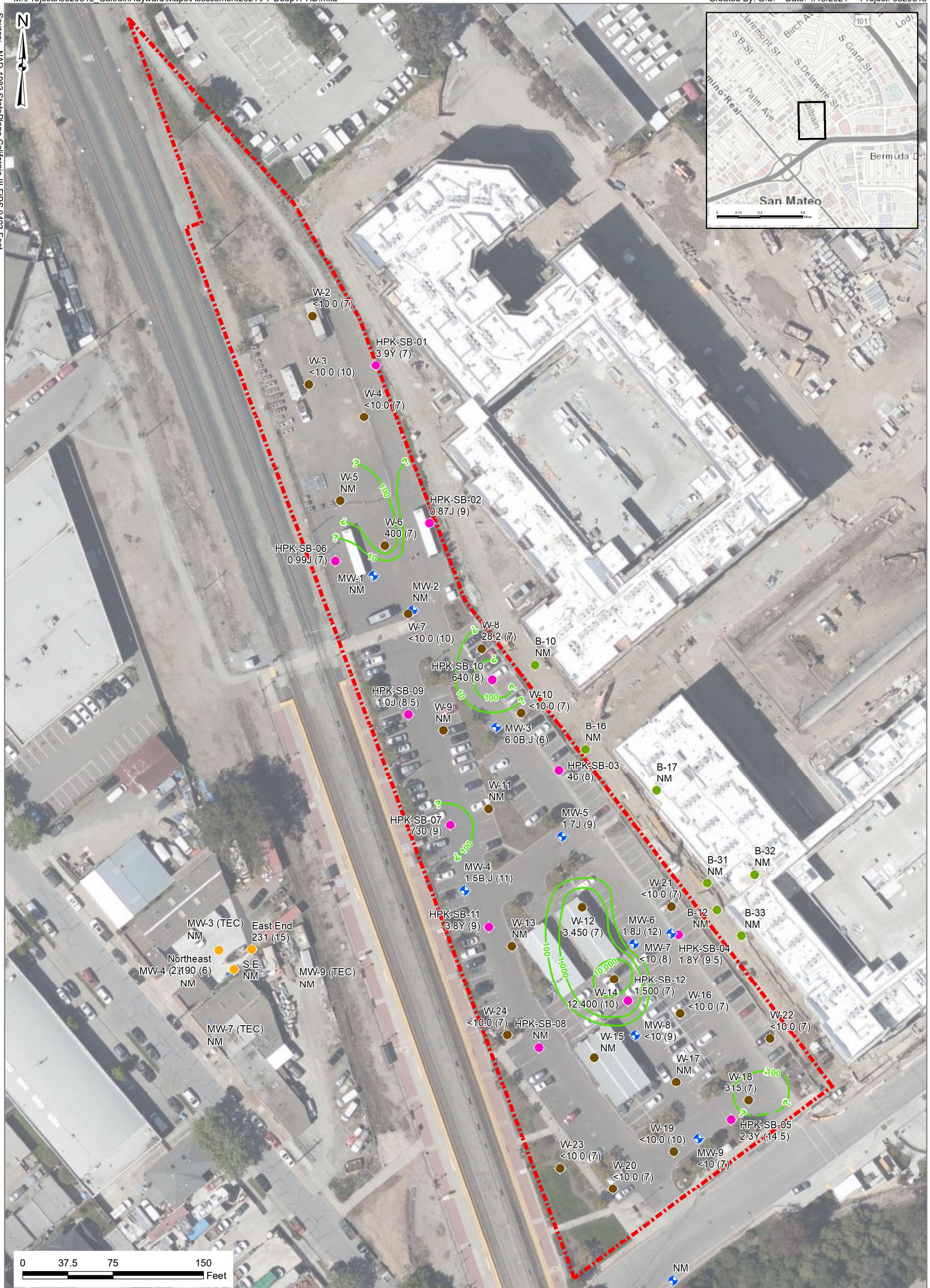
**Figure 5**  
**Groundwater Monitoring Well Locations**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

**Legend**

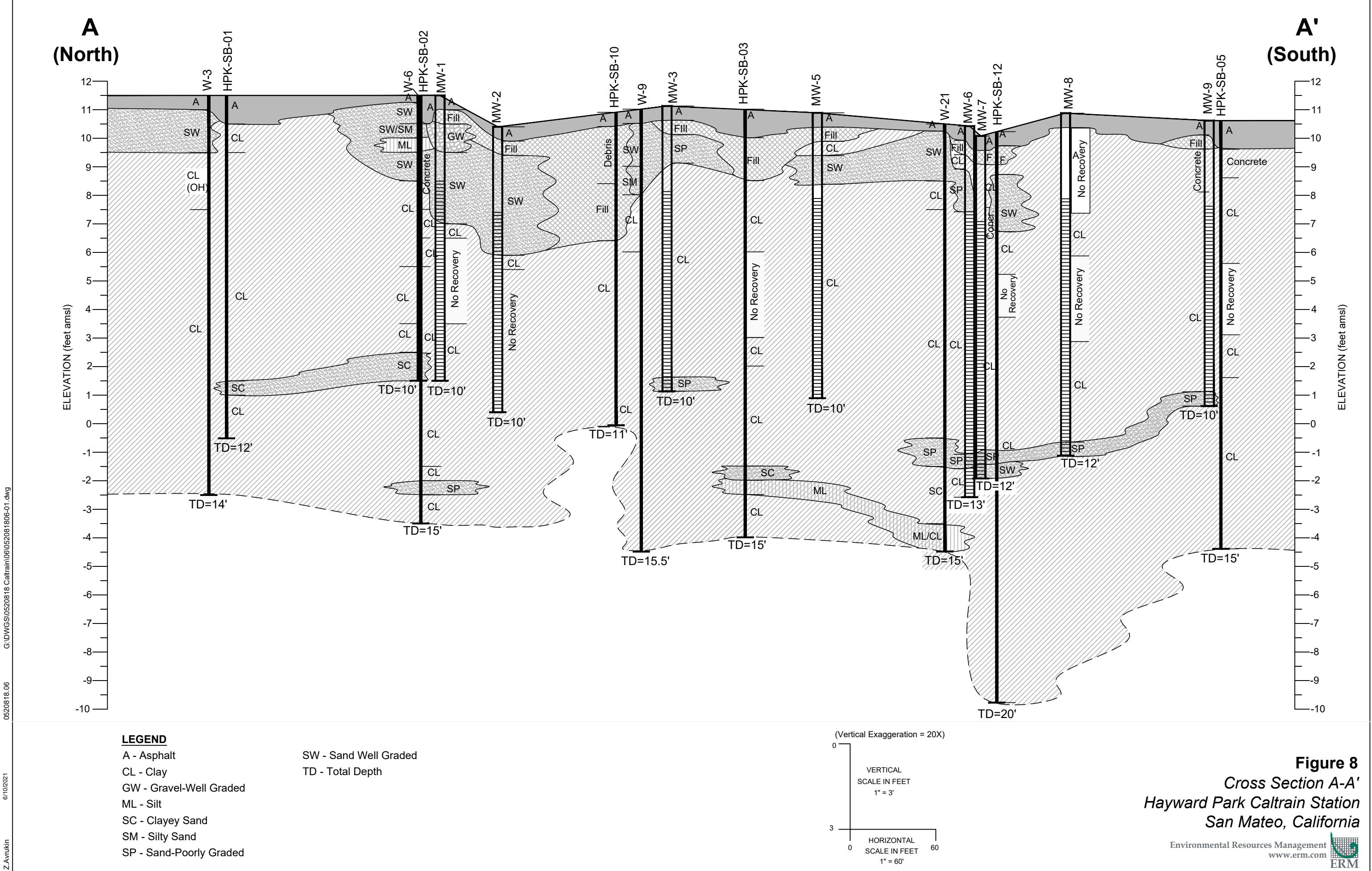
- Monitoring Well - ERM 2021
  - Boring Location - ERM 2019
  - Boring Location - Station Park Green
  - Boring Location - West 2016
  - Vail Burner & Oil Co. Excavation Sample
- TPH-Diesel Isoconcentration, Dashed where Inferred, Queried where Uncertain
- Site Boundary
- W-18 Location ID  
719 (4) Concentration (Depth)

Notes:  
Results in mg/kg  
NM = Not Measured

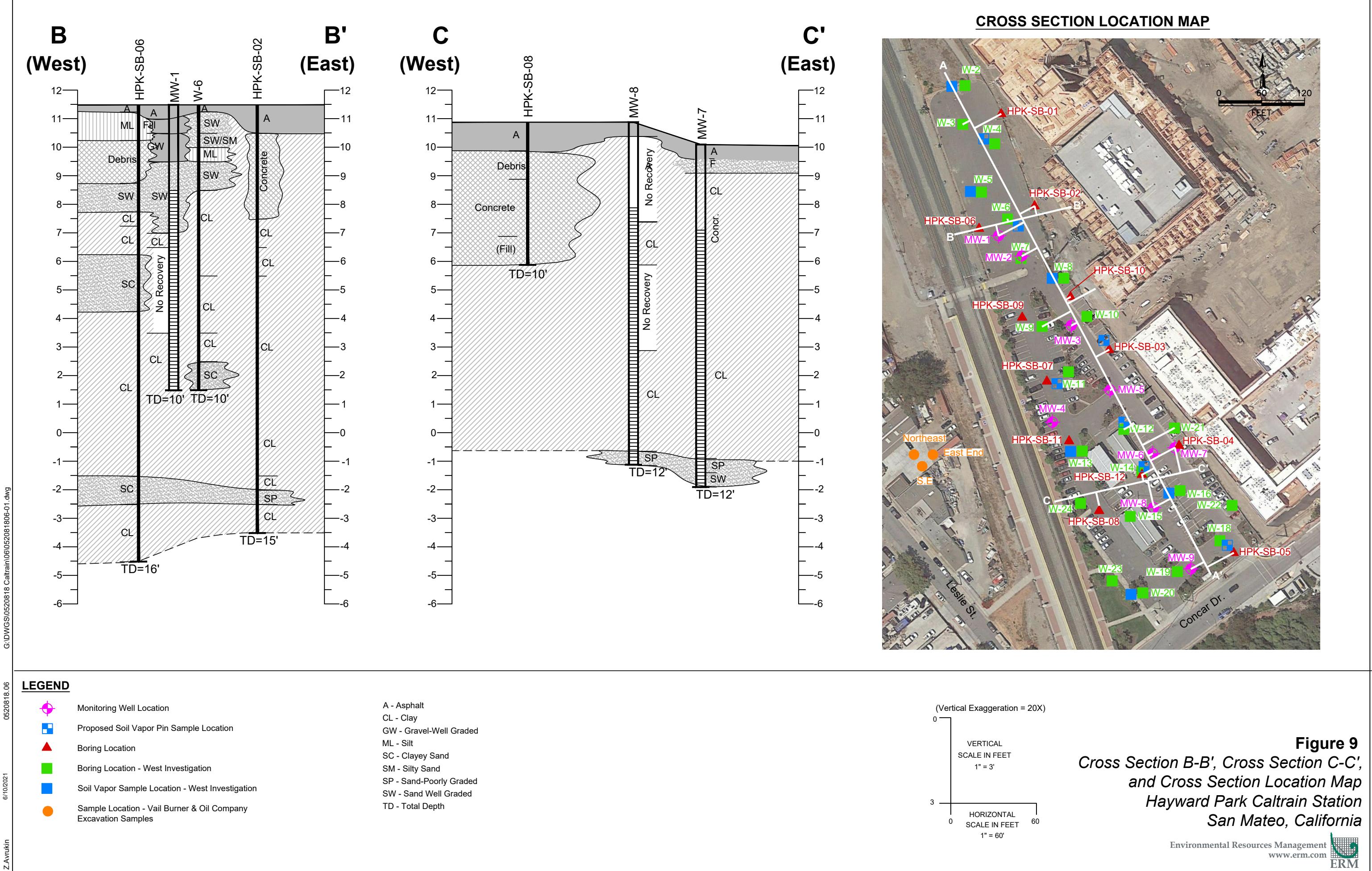
**Figure 6**  
**TPH-Diesel Soil Isoconcentration**  
**0.5 to 5 ft bgs**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

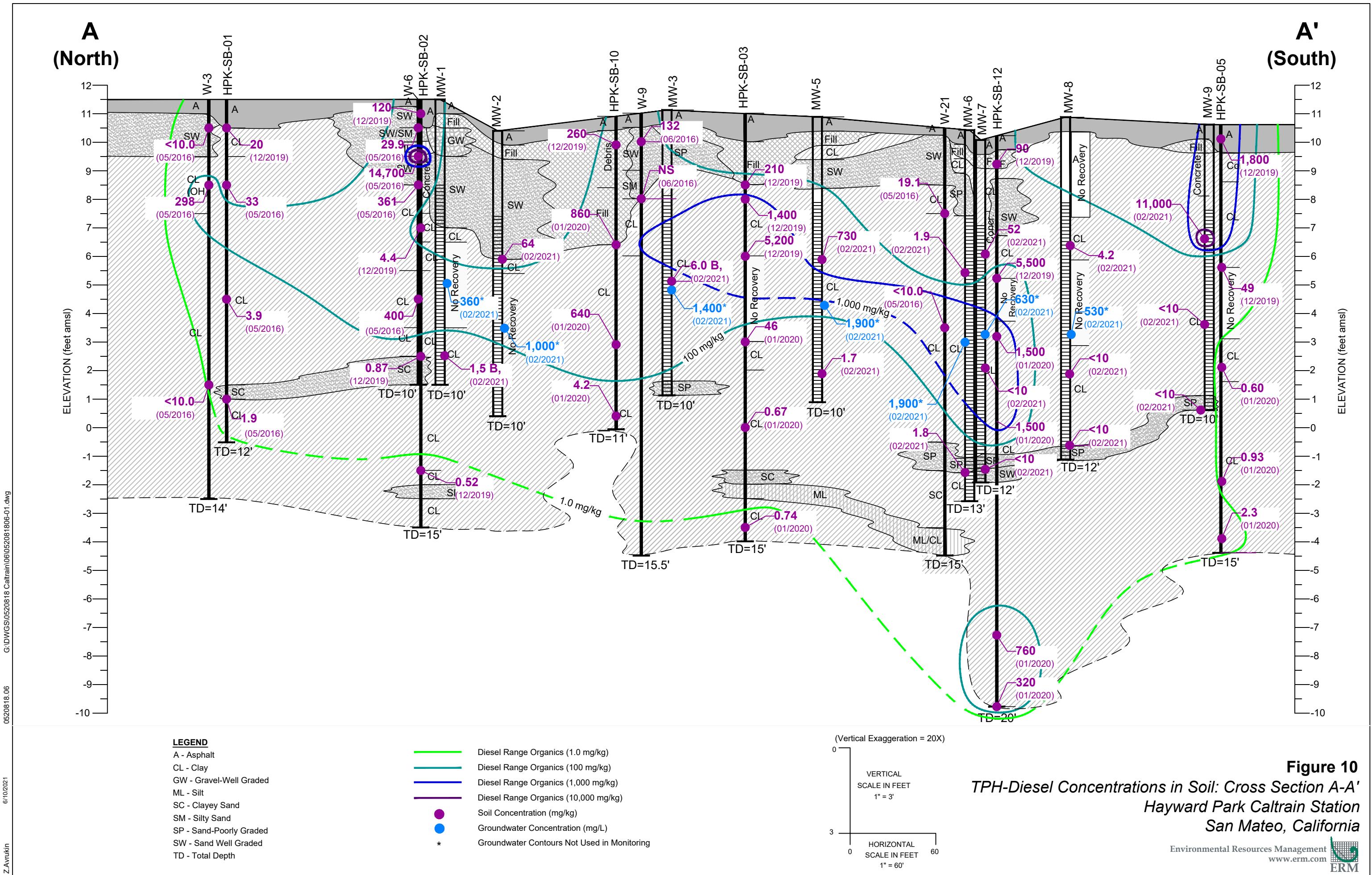


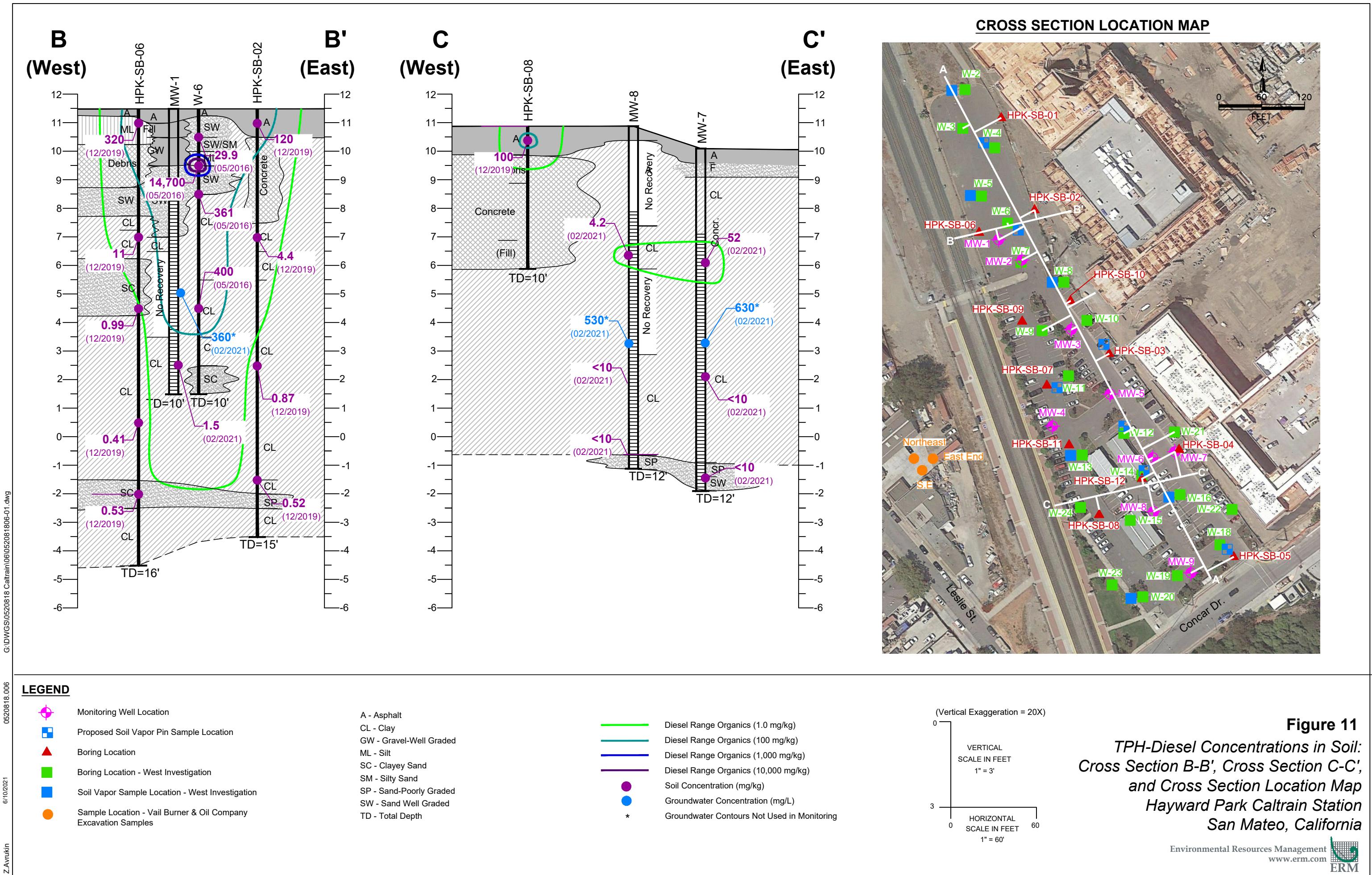
**Figure 7**  
**TPH-Diesel Soil Isoconcentration**  
**6 to 11 ft bgs**  
**Hayward Park Caltrain Station**  
**San Mateo, California**



**Figure 8**  
**Cross Section A-A'**  
**Hayward Park Caltrain Station**  
**San Mateo, California**







**Figure 11**  
**TPH-Diesel Concentrations in Soil:**  
**Cross Section B-B', Cross Section C-C',**  
**and Cross Section Location Map**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

**Legend**

- ◆ Monitoring Well - ERM 2021
- Groundwater Sample - Station Park Green
- ◆ Monitoring Well - TEC
- TPH-Diesel Isoconcentration, Dashed where Inferred, Queried where Uncertain
- MW4 Location ID  
(360) TPH-Diesel Concentration ( $\mu\text{g/L}$ )

■ Site Boundary

**Figure 12**  
**TPH-Diesel Isoconcentration in Groundwater**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

**Legend**

- ◆ Monitoring Well
- Groundwater Elevation Contour
- Site Boundary
- MW4 Location ID  
(4.47) Groundwater Elevation

**Figure 13**  
**Groundwater Elevation Contours**  
**Hayward Park Caltrain Station**  
**San Mateo, California**

## TABLES

**Table 1**  
**Summary of Analytical Results for TPH in Soil and Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Gasoline (C7-C12)	Diesel (C10-C24)	Motor Oil (C24-C36)
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>			<b>4,900</b>	<b>7,300</b>	<b>NA</b>
MW-1-9	02/09/21	Soil	<b>0.084</b>	B,U	<b>1.5</b>
MW-2-4-5	02/10/21	Soil	<b>0.10</b>	B,U	<b>64</b>
MW-3-6	02/09/21	Soil	<b>76</b>	<b>6.0</b>	B,J,U
MW-4-7	02/09/21	Soil	<b>0.023</b>	B,J,U	<b>1.4</b>
MW-4-11	02/09/21	Soil	<b>0.021</b>	B,J,U	<b>1.5</b>
MW-5-3	02/08/21	Soil	<b>44</b>	(3)	<b>730</b>
MW-5-9	02/08/21	Soil	<b>0.030</b>	B,J,U	<b>1.7</b>
MW-6-5	02/08/21	Soil	<b>17</b>	B	<b>1.9</b>
MW-6-12	02/08/21	Soil	<b>0.033</b>	B,J,U	<b>1.8</b>
MW-7-4	02/10/21	Soil	<b>0.04</b>	B,J,U, (3)	<b>52</b>
MW-7-8	02/10/21	Soil	<b>0.078</b>	B,U	<10
MW-7-11-12	02/10/21	Soil	<b>0.062</b>	B,J,U	<10
MW-8-4-5	02/10/21	Soil	<b>0.045</b>	B,J,U	<b>4.2</b>
MW-8-9	02/10/21	Soil	<b>0.026</b>	B,J,U	<10
MW-8-11.5	02/10/21	Soil	<b>0.025</b>	B,J,U	<10
MW-9-4	02/09/21	Soil	<b>250</b>	(3)	<b>11,000</b>
MW-9-7	02/10/21	Soil	<b>67</b>		<10
MW-9-9-10	02/10/21	Soil	<b>0.50</b>		<10
<b>Phase II Site Assessment Report, Hayward Park Caltrain Station (ERM, 2020)</b>					
HPK-SB-01-1	12/30/19	Soil	<b>0.20</b>	B, J, (3)	<b>20</b>
HPK-SB-01-3	12/30/19	Soil	<b>0.25</b>	B, J, (3)	<b>33</b>
HPK-SB-01-07	01/03/20	Soil	<b>0.14</b>	J	<b>3.9</b>
HPK-SB-01-10.5	01/03/20	Soil	<1.0		<b>Y</b>
					<b>21</b>
					<b>2.0</b>
					J
HPK-SB-02-0.5	12/19/19	Soil	<b>0.19</b>	J, (3)	<b>120</b>
HPK-SB-02-4.5	12/19/19	Soil	<b>0.16</b>	J, (3)	<b>4.4</b>
HPK-SB-02-09	01/03/20	Soil	<1.0		<b>0.87</b>
HPK-SB-02-13	01/03/20	Soil	<b>0.12</b>	J	<b>0.52</b>
					J
					<5.0
HPK-SB-03-2.5	12/20/19	Soil	<b>0.25</b>	J, (3)	<b>210</b>
HPK-SB-03-3	12/20/19	Soil	<b>1.6</b>	Y, (3)	<b>1,400</b>
HPK-SB-03-5	12/20/19	Soil	<b>7.0</b>	Y	<b>5,200</b>
HPK-SB-03-8	01/03/20	Soil	<b>0.33</b>	J	<b>46</b>
HPK-SB-03-11	01/03/20	Soil	<b>0.14</b>	J	<b>0.67</b>
HPK-SB-03-14.5	01/03/20	Soil	<0.96		<b>0.74</b>
					J
					<5.0
HPK-SB-04-1	12/30/19	Soil	<b>0.24</b>	B, J, (3)	<b>3.7</b>
HPK-SB-04-4.5	12/30/19	Soil	<b>0.45</b>	B, J, (3)	<b>16</b>
HPK-SB-04-9.5	01/03/20	Soil	<b>0.14</b>	J	<b>1.8</b>
HPK-SB-04-13.5	01/03/20	Soil	<b>0.33</b>	J	<b>0.89</b>
HPK-SB-04-15.5	01/03/20	Soil	<b>0.39</b>	J	<b>0.50</b>
					J
					<5.0
HPK-SB-05-0.5	12/20/19	Soil	<b>0.99</b>	Y, (3)	<b>1,800</b>
HPK-SB-05-5	12/20/19	Soil	<b>0.26</b>	J	<b>49</b>
HPK-SB-05-8.5	01/03/20	Soil	<b>0.23</b>	J	<b>0.60</b>
HPK-SB-05-12.5	01/03/20	Soil	<b>0.20</b>	J	<b>0.93</b>
HPK-SB-05-14.5	01/03/20	Soil	<b>0.20</b>	J	<b>2.3</b>
					Y
					<b>7.7</b>
HPK-SB-06-0.5	12/19/19	Soil	<b>0.16</b>	J, (3)	<b>320</b>
HPK-SB-06-4.5	12/19/19	Soil	<b>0.23</b>	J, (3)	<b>11</b>
HPK-SB-06-7	12/19/19	Soil	<b>0.17</b>	J	<b>0.99</b>
HPK-SB-06-11	12/19/19	Soil	<b>0.21</b>	J	<b>0.41</b>
HPK-SB-06-13.5	12/19/19	Soil	<b>0.23</b>	J	<b>0.53</b>
					J
					<5.0

**Table 1**  
**Summary of Analytical Results for TPH in Soil and Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Gasoline (C7-C12)	Diesel (C10-C24)	Motor Oil (C24-C36)
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>			<b>4,900</b>	<b>7,300</b>	<b>NA</b>
HPK-SB-07-1	12/30/19	Soil	<b>0.17</b>	B, J, (30)	<b>120</b>
HPK-SB-07-5	12/30/19	Soil	<b>44</b>	Y	<b>8,200</b>
HPK-SB-07-6	01/03/20	Soil	<b>2.9</b>	Y	<b>98</b>
HPK-SB-07-9	01/03/20	Soil	<b>20</b>	Y	<b>730</b>
HPK-SB-07-11.5	01/03/20	Soil	<b>0.55</b>	J	<b>2.4</b>
HPK-SB-08-0.5	12/20/19	Soil	<0.93	(3)	<b>100</b>
HPK-SB-09-0.5	12/19/19	Soil	<b>0.16</b>	J, (3)	<b>3.5</b>
HPK-SB-09-5	12/19/19	Soil	<b>0.28</b>	J	<b>21</b>
HPK-SB-09-8.5	01/03/20	Soil	<b>0.13</b>	J	<b>1.0</b>
HPK-SB-09-11.5	01/03/20	Soil	<0.95		<b>0.87</b>
HPK-SB-10-1	12/20/19	Soil	<b>0.23</b>	J, (3)	<b>260</b>
HPK-SB-10-4.5	01/03/20	Soil	<b>1.1</b>	Y, (3)	<b>860</b>
HPK-SB-10-8	01/03/20	Soil	<b>1.2</b>	Y	<b>640</b>
HPK-SB-10-10.5	01/03/20	Soil	<b>0.16</b>	J	<b>4.2</b>
HPK-SB-11-0.5	12/30/19	Soil	<b>0.20</b>	B, J, (3)	<b>18</b>
HPK-SB-11-4.5	12/30/19	Soil	<b>0.33</b>	B, J, (3)	<b>180</b>
HPK-SB-11-9	01/03/20	Soil	<b>0.37</b>	J	<b>3.8</b>
HPK-SB-11-14.5	01/03/20	Soil	<b>0.28</b>	J	<b>1.4</b>
HPK-SB-12-1	12/30/19	Soil	<b>0.19</b>	B, J, (3)	<b>90</b>
HPK-SB-12-5	12/30/19	Soil	<b>45</b>	Y	<b>5,500</b>
HPK-SB-12-7	01/03/20	Soil	<b>3.5</b>	Y	<b>1,500</b>
HPK-SB-12-10	01/03/20	Soil	<b>10</b>	Y	<b>1,500</b>
HPK-SB-12-17.5	01/03/20	Soil	<b>3.1</b>	Y	<b>760</b>
HPK-SB-12-20	01/03/20	Soil	<b>1.0</b>		<b>320</b>
					<b>350</b>

**Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)**

W-2-1	05/23/16	Soil	<1.00	<b>61.7</b>	<b>237</b>
W-2-7	05/23/16	Soil	<1.00	<10.0	<10.0
W-3-1	05/23/16	Soil	<1.00	<10.0	<b>16.6</b>
W-3-3	05/23/16	Soil	<1.00	<b>298</b>	<b>671</b>
W-3-10	05/23/16	Soil	<1.00	<10.0	<10.0
W-4-1	05/26/16	Soil	<1.00	<b>39.5</b>	<b>53.5</b>
W-4-3	05/26/16	Soil	<1.00	<b>320</b>	<b>487</b>
W-4-7	05/26/16	Soil	<1.00	<10.0	<10.0
W-5-1	05/23/16	Soil	<1.00	<b>97.8</b>	<b>353</b>
W-5-3	05/23/16	Soil	<1.00	<b>18.9</b>	<b>13.4</b>
W-6-1	05/23/16	Soil	<1.00	<b>29.9</b>	<b>123</b>
W-6-2	05/23/16	Soil	<1.00	<b>14,700</b>	<b>11,600</b>
W-6-3	05/23/16	Soil	<1.00	<b>361</b>	<b>665</b>
W-6-7	05/23/16	Soil	<1.00	<b>400</b>	<b>376</b>
W-7-1	05/26/16	Soil	<1.00	<10.0	<10.0
W-7-3	05/26/16	Soil	<1.00	<b>51.3</b>	<b>105</b>
W-7-10	05/26/16	Soil	<1.00	<10.0	<10.0
W-8-1	05/23/16	Soil	<1.00	<10.0	<b>17.1</b>
W-8-3	05/23/16	Soil	<1.00	<b>63.8</b>	<b>63.8</b>
W-8-7	05/23/16	Soil	<1.00	<b>28.2</b>	<b>35.6</b>
W-9-1	05/23/16	Soil	<1.00	<b>132</b>	<b>335</b>
W-9-3	05/23/16	Soil	NS	NS	NS
W-10-1	05/26/16	Soil	<1.00	<b>439</b>	<b>365</b>
W-10-3	05/26/16	Soil	<b>181</b>	<b>875</b>	<b>27.6</b>
W-10-7	05/26/16	Soil	<1.00	<10.0	<10.0

**Table 1**  
**Summary of Analytical Results for TPH in Soil and Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Gasoline (C7-C12)	Diesel (C10-C24)	Motor Oil (C24-C36)
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>			<b>4,900</b>	<b>7,300</b>	<b>NA</b>
W-11-1	05/26/16	Soil	<1.00	<b>94.5</b>	<b>126</b>
W-11-3	05/26/16	Soil	<1.00	<b>360</b>	<b>183</b>
W-12-1	05/25/16	Soil	<1.00	<b>146</b>	<b>329</b>
W-12-3	05/25/16	Soil	<b>1.2</b>	<b>2,740</b>	<b>1,690</b>
W-12-7	05/25/16	Soil	<b>25.5</b>	<b>3,450</b>	<b>1,860</b>
W-12-10	05/25/16	Soil	<b>25.2</b>	<b>1,800</b>	<b>867</b>
W-13-1	05/24/16	Soil	<1.00	<b>364</b>	<b>1,140</b>
W-13-3	05/24/16	Soil	<1.00	<b>10</b>	<b>48.1</b>
W-14-1	05/25/16	Soil	<1.00	<b>136</b>	<b>398</b>
W-14-3	05/25/16	Soil	<b>3.78</b>	<b>4,200</b>	<b>2,850</b>
W-14-7	05/25/16	Soil	<b>10.5</b>	<b>8,490</b>	<b>5,430</b>
W-14-10	05/25/16	Soil	<b>122</b>	<b>12,400</b>	<b>6,200</b>
W-15-1	05/24/16	Soil	<1.00	<b>242</b>	<b>513</b>
W-15-3	05/24/16	Soil	<1.00	<b>90.3</b>	<b>169</b>
W-16-1	05/23/16	Soil	<1.00	<10.0	<10.0
W-16-7	05/23/16	Soil	<1.00	<10.0	<10.0
W-17-1	05/25/16	Soil	<1.00	<b>20.1</b>	<b>81.5</b>
W-17-3	05/25/16	Soil	<1.00	<b>302</b>	<b>1,020</b>
W-18-1	05/26/16	Soil	<1.00	<b>67</b>	<b>254</b>
W-18-4	05/26/16	Soil	<1.00	<b>719</b>	<b>259</b>
W-18-7	05/26/16	Soil	<1.00	<b>315</b>	<b>128</b>
W-19-1	05/26/16	Soil	<1.00	<b>41.9</b>	<b>60</b>
W-19-3	05/26/16	Soil	<1.00	<b>23.4</b>	<10.0
W-19-10	05/26/16	Soil	<1.00	<10.0	<10.0
W-20-1	05/24/16	Soil	<1.00	<b>14.9</b>	<b>65.3</b>
W-20-7	05/24/16	Soil	<1.00	<10.0	<10.0
W-21-3	05/25/16	Soil	<1.00	<b>19.1</b>	NS
W-21-7	05/25/16	Soil	<1.00	<10.0	NS
W-22-3	05/25/16	Soil	<1.00	<b>41.4</b>	NS
W-22-7	05/25/16	Soil	<1.00	<10.0	NS
W-23-3	05/25/16	Soil	<1.00	<b>133</b>	NS
W-23-7	05/25/16	Soil	<1.00	<10.0	NS
W-24-3	05/24/16	Soil	<1.00	<b>214</b>	NS
W-24-7	05/24/16	Soil	<1.00	<10.0	NS

**Off-Site Investigation Data**

Phase II Environmental Site Assessment, Station Park Green (Versar, Inc. 2014)

B-10-1	03/17/14	Soil	<0.5	<10	<10
B-10-5	03/17/14	Soil	<0.5	<10	<10
B-16-2.5	03/17/14	Soil	<b>0.63</b>	<b>530</b>	<b>710</b>
B-16-5	03/17/14	Soil	<0.5	<10	<10
B-17-2.5	03/17/14	Soil	NS	<10	<10

Soil and Soil Vapor Investigation and July 2014 Groundwater Monitoring Report (TEC Environmental 2014)

Northeast (6 feet)	12/01/09	Soil	<b>120</b>	<b>2,190</b>	<b>632</b>
East End (15 feet)	11/06/09	Soil	<b>30</b>	<b>231</b>	<b>73</b>
S.E. (4.5 feet)	12/01/09	Soil	<b>170</b>	<b>4,990</b>	<b>1,420</b>

**Table 1**  
**Summary of Analytical Results for TPH in Soil and Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Gasoline (C7-C12)	Diesel (C10-C24)	Motor Oil (C24-C36)
Leaching to Non-Drinking Water Soil ESLs ( $\mu\text{g}/\text{kg}$ ) (Table S-3)			4,900	7,300	NA
<i>Commercial Vapor Intrusion ESLs (from Groundwater)</i>			NA	NA	NA
<i>Non-Drinking Water ESLs (<math>\mu\text{g}/\text{L}</math>) Gross Contamination</i>			50,000	2,500	NA
MW-1	2/26/2021	Groundwater	150	360	B <300
MW-2	2/26/2021	Groundwater	<50	1,000	170 J
MW-3	2/26/2021	Groundwater	25	J 1,400	<1,400
MW-4	2/26/2021	Groundwater	25	J 810	<1,500
MW-5	2/26/2021	Groundwater	<500	1,900	180 J
MW-6	2/26/2021	Groundwater	320	1,500	100 J
MW-7	2/26/2021	Groundwater	26	J 630	B <1,400
MW-8	2/26/2021	Groundwater	200	530	B 76 J
MW-9	2/26/2021	Groundwater	46,000	3,300	<3,000
<i>Phase II Site Assessment Report, Hayward Park Caltrain Station (ERM, 2020)</i>					
HPK-SB-02-GW	01/03/20	Groundwater	19	J (1) 420	Y (1) 430 (1)
HPK-SB-04-GW	01/03/20	Groundwater	60	(1)(2) 2,900	Y (1) 3,600 (1)
HPK-SB-04-GW (DUP)	01/03/20	Groundwater	62	(1)(2) 2,400	Y (1) 2,900 (1)
HPK-SB-10-GW	01/03/20	Groundwater	26	J (2) NS	NS
HPK-SB-12-GW	01/03/20	Groundwater	94	(1) 8,600 (1)	5,300 (1)
<i>Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)</i>					
W-3	05/24/16	Groundwater	<50	325	NS
W-6	05/24/16	Groundwater	<50	2,950	NS
W-9	05/25/16	Groundwater	<50	838	NS
W-12	05/25/16	Groundwater	198	11,700	NS
W-14	05/25/16	Groundwater	185	8,460	NS
W-15	05/25/16	Groundwater	<50	1,260	NS
W-17	05/25/16	Groundwater	<50	566	NS
W-21	05/25/16	Groundwater	<50	NS	NS
W-22	05/25/16	Groundwater	256	811	NS
W-23	05/25/16	Groundwater	<50	264	NS
W-24	05/24/16	Groundwater	<50	570	NS
<b>Off-Site Investigation Data</b>					
Phase II Environmental Site Assessment, Station Park Green (Versar, Inc. 2014) and Supplemental Phase II Environmental Site Assessment, Station Park Green (Versar, Inc. 2015)					
B-10	03/17/14	Groundwater	<50	<50	<100
B-12	03/17/14	Groundwater	19,000	120,000	8,700
B-31	11/03/14	Groundwater	<50	<50	<100
B-32	11/03/14	Groundwater	<50	<50	<100
B-33	11/03/14	Groundwater	<50	670	<100
<i>Soil and Soil Vapor Investigation and July 2014 Groundwater Monitoring Report (TEC Environmental 2014)</i>					
MW-3	07/23/14	Groundwater	86	3,300	1,700
MW-4	07/23/14	Groundwater	56	3,300	9,100
MW-7	07/23/14	Groundwater	54	1,800	1,500
MW-9	07/23/14	Groundwater	99	150	1,800

**Table 1**  
**Summary of Analytical Results for TPH in Soil and Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Gasoline (C7-C12)	Diesel (C10-C24)	Motor Oil (C24-C36)
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>			<b>4,900</b>	<b>7,300</b>	<b>NA</b>

**References:**

TEC Environmental. 2014. *Soil and Soil Vapor Investigation and July 2014 Groundwater Monitoring Report, Former Vail Burner & Oil Company, 1741 Leslie Street, San Mateo, California, SMCo #110049.* 8 October.  
 Versar, Inc. 2014. *Phase II Environmental Site Assessment, Station Park Green, 1700, 1750, and 1790 S. Delaware Street, San Mateo, California.* 24 April.  
 Versar, Inc. 2015. *Supplemental Phase II Environmental Site Assessment, Station Park Green, 1700, 1750, and 1790 S. Delaware Street, San Mateo, California.* 27 January.  
 West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191.* August.

**Notes:**

TPH = Total petroleum hydrocarbons

Soil sample concentrations reported in milligrams per kilogram (mg/kg)

Groundwater sample concentrations reported in micrograms per liter (µg/L)

Environmental Screening Levels (ESLs) for Soil published by the San Francisco Bay Regional Water Quality Control Board (Rev. 2, 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5	Compound not detected at or above the laboratory reporting limit
#	Indicates a concentration detected above the Leaching to Non-Drinking Water (soil) and Non-Drinking Water ESLs (groundwater) screening levels
B	Contamination found in associated Method Blank
J	Detected compound qualified as estimate
Y	Sample exhibits chromatographic pattern that does not resemble standard
NS	No sample collected
NA	Not applicable
(1)	Results may not be indicative of first encountered groundwater
(2)	Results may not be representative; laboratory reported headspace in sample
(3)	Result may not be representative, sample obtained from portion of boring where air-knife was used for utility clearance

For continued use of site as parking lot, native soils will not be available for exposure due to hardscape (asphalt).

These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented. Motor oil does not have a leaching ESL.

For redevelopment as high-density residential, native soils will not be available for exposure due to hardscape (asphalt and structures). These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented. Motor oil does not have a leaching ESL.

While construction workers will be present during development, application of a soils management plan and health and safety plan will control these exposures.

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Notes	Acetone	Methylene Chloride	Carbon Disulfide	2-Butanone	Bromo-methane	Chloroform	Chloro-methane	Benzene	Toluene	2-Hexanone
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>				920	190	--	15,000	830	23	15000	25	10,300	--
<b>Phase II Site Assessment Report, Hayward Park Caltrain Station (ERM, 2020)</b>													
MW-1-9	02/09/21	Soil		<76	<3.8	NS	4.6	J	<3.8	<3.8	<3.8	<3.8	<3.8
MW-2-4-5	02/10/21	Soil		240	<4.0	NS	52	J	0.3	B,J,b,U	<4.0	0.3	J
MW-3-6	02/09/21	Soil		<4,200	<210	NS	<4,200	63	B,J,b,U	<210	<210	<210	NS
MW-4-7	02/09/21	Soil		<68	<3.4	NS	<68	<3.4	<3.4	<3.4	<3.4	<3.4	NS
MW-4-11	02/09/21	Soil		<69	<3.5	NS	<69	<3.5	<3.5	<3.5	<3.5	<3.5	NS
MW-5-3	02/08/21	Soil	(3)	<6,000	<300	NS	220	J	150	B,J,b,U	<300	41	B,J,U
MW-5-9	02/08/21	Soil		<69	<3.5	NS	2.9	J	<3.5	<3.5	<3.5	<3.5	NS
MW-6-5	02/08/21	Soil		<4,800	<240	NS	<4,800	82	J,b	<240	44	J	<240
MW-6-12	02/08/21	Soil		<74	<3.7	NS	<74	<3.7	<3.7	<3.7	<3.7	<3.7	NS
MW-7-11-12	02/10/21	Soil		<74	<3.7	NS	<74	0.9	B,J,b,U	<3.7	0.5	J	<3.7
MW-7-4	02/10/21	Soil	(3)	<91	<4.5	NS	7.6	J	<4.5	<4.5	<4.5	<4.5	NS
MW-7-8	02/10/21	Soil		<68	<3.4	NS	2.4	J	<3.4	<3.4	<3.4	<3.4	NS
MW-8-4-5	02/10/21	Soil		85	<4.0	NS	15	J	<4.0	<4.0	<4.0	<4.0	NS
MW-8-9	02/10/21	Soil		<68	<3.4	NS	<68	<3.4	<3.4	<3.4	<3.4	<3.4	NS
MW-8-11.5	02/10/21	Soil		<70	<3.5	NS	<70	<3.5	<3.5	<3.5	<3.5	<3.5	NS
MW-9-4	02/09/21	Soil	(3)	<9,800	<490	NS	<9,800	97	B,J,b,U	<490	<490	<490	NS
MW-9-7	02/10/21	Soil		<3,700	<190	NS	<3,700	49	B,J,b,U	13	J	<190	<190
MW-9-9-10	02/10/21	Soil		<76	<3.8	NS	3.3	J	<3.8	4.6	<3.8	0.2	J
HPK-SB-01-1	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<4.5	0.23	J
HPK-SB-01-3	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<4.2	<4.2	NS
HPK-SB-01-07	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.6	<3.6	NS
HPK-SB-01-10.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-02-0.5	12/19/19	Soil	(3)	43	<30	<6.0	<12	<12	<6.0	<12	<6.0	<6.0	<12
HPK-SB-02-4.5	12/19/19	Soil	(3)	4.0	J	<19	0.22	J,b	<7.6	<7.6	0.46	J,B	<7.6
HPK-SB-02-09	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.4	<3.4	NS
HPK-SB-02-13	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.2	<3.2	NS
HPK-SB-03-2.5	12/20/19	Soil	(3)	31	<20	1.9	J,b	6.5	J	<8.1	0.49	J,B	<8.1
HPK-SB-03-3	12/20/19	Soil	(3)	100	<20	2.2	J	27	<8.1	<4.0	<8.1	0.44	J
HPK-SB-03-5	12/20/19	Soil		<920	<1,100	<230	<460	320	J	<230	<460	<230	<460
HPK-SB-03-8	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.4	0.57	J
HPK-SB-03-11	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.6	<3.6	NS
HPK-SB-03-14.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<4.0	<4.0	NS
HPK-SB-04-1	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<3.9	<3.9	NS
HPK-SB-04-4.5	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	0.22	J	
HPK-SB-04-9.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.6	<3.6	NS
HPK-SB-04-13.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.1	2.4	J
HPK-SB-04-15.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.6	<3.6	NS
HPK-SB-05-0.5	12/20/19	Soil	(3)	31	<17	4.6	b	6.3	J	<7.0	<3.5	<7.0	<3.5
HPK-SB-05-5	12/20/19	Soil		19	<21	1.1	J,b	5.4	J	<8.3	<4.1	<8.3	<4.1
HPK-SB-05-8.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-05-12.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.2	<3.2	NS
HPK-SB-05-14.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.7	<3.7	NS
HPK-SB-06-0.5	12/19/19	Soil	(3)	27	5.5	J	0.40	J,b	4.4	J	<9.8	<4.9	<9.8
HPK-SB-06-4.5	12/19/19	Soil	(3)	31	<12	<2.5	5.4	<4.5	<2.5	<4.5	<4.5	<2.5	<4.9
HPK-SB-06-7	12/19/19	Soil		16	<16	0.12	J	2.6	J	<6.4	0.63	J,B	<6.4
HPK-SB-06-11	12/19/19	Soil		26	2.1	J	<3.6	1.5	J	<7.1	0.82	J,B	<7.1
HPK-SB-06-13.5	12/19/19	Soil		30	<20	<3.9	1.4	J	<7.8	0.90	J,B	<7.8	<3.9
HPK-SB-07-1	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<6.1	<6.1	NS
HPK-SB-07-5	12/30/19	Soil		NS	NS	NS	NS	NS	NS	NS	<360	<360	NS
HPK-SB-07-6	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-07-9	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-07-11.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	0.25	J
HPK-SB-08-0.5	12/20/19	Soil	(3)	6.4	J	<21	1.9	J,b	2.7	J	<8.3	<8.3	<4.1
HPK-SB-09-0.5	12/19/19	Soil	(3)	37	<22	2.2	J,b	14	<8.9	0.48	J,B	<8.9	<4.5
HPK-SB-09-5	12/19/19	Soil		<13	<16	0.44	J, b	<6.5	<6.5	0.38	J, B	<6.5	<6.5
HPK-SB-09-8.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.0	<3.0	NS
HPK-SB-09-11.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Notes	Acetone	Methylene Chloride	Carbon Disulfide	2-Butanone	Bromo-methane	Chloroform	Chloro-methane	Benzene	Toluene	2-Hexanone
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>				920	190	--	15,000	830	23	15000	25	10,300	--
HPK-SB-10-1	12/20/19	Soil	(3)	<19	<23	1.3	J,b	<9.3	0.60	J,B	<9.3	<4.7	<4.7
HPK-SB-10-4.5	01/03/20	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-10-8	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<4.1	<4.1	NS
HPK-SB-10-10.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.2	<3.2	NS
HPK-SB-11-0.5	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<4.2	0.19	J
HPK-SB-11-4.5	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<3.3	<3.3	NS
HPK-SB-11-9	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.8	<3.8	NS
HPK-SB-11-14.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	<3.6	<3.6	NS
HPK-SB-12-1	12/30/19	Soil	(3)	NS	NS	NS	NS	NS	NS	NS	<4.0	<4.0	NS
HPK-SB-12-5	12/30/19	Soil		NS	NS	NS	NS	NS	NS	NS	<180	<180	NS
HPK-SB-12-7	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	0.65	J	0.39
HPK-SB-12-10	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	0.59	J	0.43
HPK-SB-12-17.5	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	0.31	J	0.18
HPK-SB-12-20	01/03/20	Soil		NS	NS	NS	NS	NS	NS	NS	0.42	J	<3.5
<i>Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)</i>													
W-2-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.76	<1.76	NS
W-2-7	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.28	<3.28	NS
W-3-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.65	<1.65	NS
W-3-3	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.66	<1.66	NS
W-3-10	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.85	<1.85	NS
W-4-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.72	<1.72	NS
W-4-3	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.86	<1.86	NS
W-4-7	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.63	<1.63	NS
W-5-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.53	<1.53	NS
W-5-3	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<2.90	<2.90	NS
W-6-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.89	<1.89	NS
W-6-2	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<25.0	<25.0	NS
W-6-3	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.08	<3.08	NS
W-6-7	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.61	<1.61	NS
W-7-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.71	<1.71	NS
W-7-3	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.78	<1.78	NS
W-7-10	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.74	<1.74	NS
W-8-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.60	<1.60	NS
W-8-3	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.37	<3.37	NS
W-8-7	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.59	<1.59	NS
W-9-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.74	<1.74	NS
W-9-3	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.66	<1.66	NS
W-10-3	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<24.4	<24.4	NS
W-10-7	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.79	<1.79	NS

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Notes	Acetone	Methylene Chloride	Carbon Disulfide	2-Butanone	Bromo-methane	Chloroform	Chloro-methane	Benzene	Toluene	2-Hexanone
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg) (Table S-3)</b>				<b>920</b>	<b>190</b>	--	<b>15,000</b>	<b>830</b>	<b>23</b>	<b>15000</b>	<b>25</b>	<b>10,300</b>	--
W-11-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.54	<1.54	NS
W-11-3	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.66	<1.66	NS
W-12-1	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.64	<1.64	NS
W-12-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.67	<1.67	NS
W-12-7	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<43	<43	NS
W-12-10	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<44.1	<44.1	NS
W-13-1	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.71	<1.71	NS
W-13-3	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.35	<3.35	NS
W-14-1	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.54	<1.54	NS
W-14-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.60	<1.60	NS
W-14-7	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<55.6	<55.6	NS
W-14-10	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<50	<50	NS
W-15-1	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.70	<1.70	NS
W-15-3	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.17	<3.17	NS
W-16-1	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.79	<1.79	NS
W-16-7	05/23/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.59	<1.59	NS
W-17-1	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.56	<1.56	NS
W-17-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.83	<1.83	NS
W-18-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.74	<1.74	NS
W-18-4	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.42	<1.42	NS
W-18-7	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.70	<1.70	NS
W-19-1	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.53	<1.53	NS
W-19-3	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.53	<1.53	NS
W-19-10	05/26/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.80	<1.80	NS
W-20-1	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<3.15	<3.15	NS
W-20-7	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.85	<1.85	NS
W-21-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<2.94	<2.94	NS
W-21-7	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.70	<1.70	NS
W-22-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.67	<1.67	NS
W-22-7	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.68	<1.68	NS
W-23-3	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.70	<1.70	NS
W-23-7	05/25/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.80	<1.80	NS
W-24-3	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.62	<1.62	NS
W-24-7	05/24/16	Soil		NS	NS	NS	NS	NS	NS	NS	<1.68	<1.68	NS

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191. August.

**Notes:**

VOCs = Volatile organic compounds

MTBE = Methyl tert-butyl ether

TMB = Trimethylbenzene

Sample concentrations reported in micrograms per kilogram (µg/kg)

Environmental Screening Levels (ESLs) for Soil published by the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Future High-Density Residential Use screening level

J Detected compound qualified as estimate

B Contamination found in associated Method Blank

b See lab case narrative; related to high response rate in calibration standards

Sample results less than the reporting limit and within 5times the associated method blank concentrations as adjusted for dilution

U were qualified as non-detect (U) - ERM Qualifier

(3) Results may not be representative, sample obtained from portion of boring where air-knife was used for utility clearance

For continued use of site as parking lot, native soils will not be available for exposure due to hardscape (asphalt). These impediments to exposure require planned land use covenant and soils management plan.

As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented.

For redevelopment as high-density residential, native soils will not be available for exposure due to hardscape (asphalt and structures). These impediments to exposure require planned land use covenant and soils management plan.

As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented. While construction workers will be present, soils management plan and health and safety plan will control these exposures.

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Ethyl-benzene	m,p-Xylenes	o-Xylene	Naphthalene	MTBE	Isopropyl benzene	N-propyl benzene	1,2,4 - TMB	1,3,5-TMB	sec-Butyl benzene	4-Isopropyl toluene	N-butyl benzene	1,1,2-Trichloroethane	1,2-Dibromoethane
<b>Leaching to Non-Drinking Water</b>	<b>430</b>	<b>10,000</b>	<b>10,000</b>	<b>1,200</b>	<b>2,500</b>	--	--	--	--	--	--	--	<b>79</b>	<b>1.9</b>
<b>Phase II Site Assessment</b>														
MW-1-9	<3.8	<7.6	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
MW-2-4-5	<4.0	<7.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<b>2.0</b>
MW-3-6	<210	<420	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
MW-4-7	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
MW-4-11	<3.5	<6.9	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-5-3	<b>94</b>	J	<600	<300	<b>150</b>	J	<300	<b>56</b>	J	<300	<300	<300	<300	<300
MW-5-9	<3.5	<6.9	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-6-5	<240	<480	<240	<240	<240	<240	<240	<240	<240	<240	<240	<240	<240	<240
MW-6-12	<3.7	<7.4	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7
MW-7-11-12	<3.7	<7.4	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7
MW-7-4	<4.5	<9.1	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5
MW-7-8	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
MW-8-4-5	<4.0	<7.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
MW-8-9	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
MW-8-11.5	<3.5	<7.0	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-9-4	<b>59</b>	J	<980	<490	<490	<b>99</b>	J	<b>150</b>	J	<490	<490	<b>170</b>	J	<490
MW-9-7	<b>31</b>	J	<370	<190	<190	<b>37</b>	J	<b>52</b>	J	<190	<190	<b>52</b>	J	<190
MW-9-9-10	<3.8	<7.6	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<b>14000</b>
HPK-SB-01-1	<4.5	<4.5	<4.5	<4.5	<4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-01-3	<4.2	<4.2	<4.2	<4.2	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-01-07	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-01-10.5	<3.3	<3.3	<3.3	<3.3	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-02-0.5	<6.0	<6.0	<6.0	<6.0	<6.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-02-4.5	<3.8	<3.8	<3.8	<3.8	<3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-02-09	<3.4	<3.4	<3.4	<3.4	<3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-02-13	<3.2	<3.2	<3.2	<3.2	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-03-2.5	<4.1	<4.1	<4.1	<4.1	<4.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-03-3	<b>3.0</b>	J	<b>2.5</b>	J	<b>1.5</b>	J	<b>13</b>	<4.0	NS	NS	NS	NS	NS	NS
HPK-SB-03-5	<b>100</b>	J	<b>95</b>	J	<b>51</b>	J	<b>1,500</b>	<4.0	NS	NS	NS	NS	NS	NS
HPK-SB-03-8	<b>2.6</b>	J	<3.4	<b>1.4</b>	J	<b>34</b>	<3.4	NS	NS	NS	NS	NS	NS	NS
HPK-SB-03-11	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-03-14.5	<4.0	<4.0	<4.0	<4.0	<4.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-04-1	<3.9	<3.9	<3.9	<3.9	<3.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-04-4.5	<3.5	<3.5	<3.5	<3.5	<3.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-04-9.5	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-04-13.5	<b>5.6</b>	<b>24</b>	<b>10</b>	<b>9.4</b>	<3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-04-15.5	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-05-0.5	<3.5	<3.5	<3.5	<3.5	<3.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-05-5	<4.1	<4.1	<4.1	<4.1	<4.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-05-8.5	<3.3	<3.3	<3.3	<3.3	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-05-12.5	<3.2	<3.2	<3.2	<3.2	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-05-14.5	<3.7	<3.7	<3.7	<3.7	<3.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-06-0.5	<4.9	<4.9	<4.9	<4.9	<4.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-06-4.5	<2.5	<2.5	<2.5	<2.5	<2.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-06-7	<3.2	<3.2	<3.2	<3.2	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-06-11	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-06-13.5	<3.9	<3.9	<3.9	<3.9	<3.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-07-1	<6.1	<6.1	<6.1	<6.1	<6.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-07-5	<360	<360	<b>35</b>	J	<b>140</b>	J	<360	NS	NS	NS	NS	NS	NS	NS
HPK-SB-07-6	<3.3	<3.3	<3.3	<b>1.2</b>	J	<b>3.3</b>	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-07-9	<3.3	<3.3	<3.3	<b>1.1</b>	J	<b>3.3</b>	NS	NS						

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Ethyl-benzene	m,p-Xylenes	o-Xylene	Naphthalene	MTBE	Isopropyl benzene	N-propyl benzene	1,2,4 - TMB	1,3,5-TMB	sec-Butyl benzene	4-Isopropyl toluene	N-butyl benzene	1,1,2-Trichloroethane	1,2-Dibromoethane
<b>Leaching to Non-Drinking</b>	<b>430</b>	<b>10,000</b>	<b>10,000</b>	<b>1,200</b>	<b>2,500</b>	--	--	--	--	--	--	--	<b>79</b>	<b>1.9</b>
HPK-SB-10-1	<4.7	<4.7	<4.7	<4.7	<4.7	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-4.5	<3.3	<3.3	<3.3	<3.3	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-8	<4.1	<4.1	<4.1	<4.1	<4.1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-10.5	<3.2	<3.2	<3.2	<3.2	<3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-0.5	<4.2	<4.2	<4.2	<4.2	<4.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-4.5	<3.3	<3.3	<3.3	<3.3	<3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-9	<3.8	<3.8	<3.8	<3.8	<3.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-14.5	<3.6	<3.6	<3.6	<3.6	<3.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-1	<4.0	<4.0	<4.0	<4.0	<4.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-5	<b>30</b>	J	<180	<180	<b>130</b>	J	<180	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-7	<b>2.5</b>	J	<3.6	<3.6	<b>9.2</b>		<3.6	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-10	<b>11</b>	<b>5.4</b>	<b>4.4</b>		<b>42</b>		<3.4	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-17.5	<b>4.8</b>	<3.4	<b>1.4</b>	J	<b>15</b>		<3.4	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-20	<3.5	<3.5	<3.5		<b>0.33</b>	J	<3.5	NS	NS	NS	NS	NS	NS	NS
<b>Draft Site Assessment Results</b>														
W-2-1	<1.76	<1.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-2-7	<3.28	<3.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-1	<1.65	<1.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-3	<1.66	<1.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-10	<1.85	<1.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-1	<1.72	<1.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-3	<1.86	<1.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-7	<1.63	<1.63	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-5-1	<1.53	<1.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-5-3	<2.90	<2.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-1	<1.89	<1.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-2	<25.0	<25.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-3	<3.08	<3.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-7	<1.61	<1.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-1	<1.71	<1.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-3	<1.78	<1.78	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-10	<1.74	<1.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-1	<1.60	<1.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-3	<3.37	<3.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-7	<1.59	<1.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-9-1	<1.74	<1.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-9-3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-1	<1.66	<1.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-3	<24.4	<24.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-7	<1.79	<1.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Ethyl-benzene	m,p-Xylenes	o-Xylene	Naphthalene	MTBE	Isopropyl benzene	N-propyl benzene	1,2,4 - TMB	1,3,5-TMB	sec-Butyl benzene	4-Isopropyl toluene	N-butyl benzene	1,1,2-Trichloro-ethane	1,2-Dibromo-ethane
<b>Leaching to Non-Drinking</b>	<b>430</b>	<b>10,000</b>	<b>10,000</b>	<b>1,200</b>	<b>2,500</b>	--	--	--	--	--	--	--	<b>79</b>	<b>1.9</b>
W-11-1	<1.54	<1.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-11-3	<1.66	<1.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-1	<1.64	<1.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-3	<1.67	<1.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-7	<43	<43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-10	<b>119</b>	<b>81.3</b>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-13-1	<1.71	<1.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-13-3	<3.35	<3.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-1	<1.54	<1.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-3	<1.60	<b>4.25</b>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-7	<b>143</b>	<b>407</b>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-10	<b>90.8</b>	<b>273</b>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-15-1	<1.70	<1.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-15-3	<3.17	<3.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-16-1	<1.79	<1.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-16-7	<1.59	<1.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-17-1	<1.56	<1.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-17-3	<1.83	<1.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-1	<1.74	<1.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-4	<1.42	<1.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-7	<1.70	<1.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-1	<1.53	<1.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-3	<1.53	<1.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-10	<1.80	<1.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-20-1	<3.15	<3.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-20-7	<1.85	<1.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-21-3	<2.94	<2.94	NS	<5.88	NS	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	NS
W-21-7	<1.70	<1.70	NS	<3.39	NS	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	NS
W-22-3	<1.67	<1.67	NS	<3.33	NS	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	NS
W-22-7	<1.68	<1.68	NS	<3.38	NS	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	NS
W-23-3	<1.70	<1.70	NS	<3.40	NS	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	NS
W-23-7	<1.80	<1.80	NS	<3.59	NS	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	NS
W-24-3	<1.62	<1.62	NS	<3.23	NS	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	NS
W-24-7	<1.68	<1.68	NS	<3.35	NS	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	NS

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019

**Notes:**

VOCs = Volatile organic compounds

MTBE = Methyl tert-butyl ether

TMB = Trimethylbenzene

Sample concentrations reported in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ )

Environmental Screening Levels (ESLs) for Soil published by the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Future High-Density Residential Use screening level

J Detected compound qualified as estimate

B Contamination found in associated Method Blank

b See lab case narrative; related to high response rate in calibration standards

Sample results less than the reporting limit and within 5times the associated method blank

U concentrations as adjusted for dilution were qualified as non-detect (U) - ERM Qualifier

(3) Results may not be representative, sample obtained from portion of boring where air-knife was used for utility clearance

<sup>a</sup>For continued use of site as parking lot, native soils will not be available for exposure due to hardscape (asphalt). These impediments to exposure require planned land use covenant and soils management plan.

As asphalt cannot preclude infiltration, minimum of ESLs for non-drinking water infiltration presented.

<sup>b</sup>For redevelopment as high-density residential, native soils will not be available for exposure due to hardscape (asphalt and structures). These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, minimum of ESLs for non-drinking water infiltration presented. While construction workers will be present, soils management plan and health and safety plan will control these exposures.

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Vinyl Chloride	1,1-Dichloro-ethene	Bromochloro-methane	1,2-Dichloro-ethane	Trichloro-ethene	Bromo-dichloro-methane	Dibromo-methane	Dibromo-chloro-methane	Bromo-form		
<b>Leaching to Non-Drinking</b>	<b>1.5</b>	<b>310</b>	--	<b>31</b>	<b>85</b>	<b>16</b>	<b>1.9</b>	<b>11,000</b>	<b>1,000</b>		
<b>Phase II Site Assessment</b>											
MW-1-9	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8		
MW-2-4-5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
MW-3-6	<210	<210	<210	<210	<210	<210	<210	<210	<210		
MW-4-7	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4		
MW-4-11	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5		
MW-5-3	<300	<300	<300	<300	<300	<300	<300	<300	<300		
MW-5-9	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5		
MW-6-5	<240	<240	<240	<240	<240	<240	<240	<240	<240		
MW-6-12	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7		
MW-7-11-12	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7		
MW-7-4	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5		
MW-7-8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4		
MW-8-4-5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
MW-8-9	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4		
MW-8-11.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5		
MW-9-4	<490	<490	<490	<490	<490	<490	<490	<490	<490		
MW-9-7	<190	<190	<190	<190	<190	<190	<190	<190	<190		
MW-9-9-10	<b>2.6</b>	J	<b>0.3</b>	J	<b>6.3</b>	<b>990</b>	<b>0.5</b>	<b>27</b>	<b>75</b>	<b>130</b>	<b>930</b>
HPK-SB-01-1	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-01-3	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-01-07	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-01-10.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-02-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-02-4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-02-09	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-02-13	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-2.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-3	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-8	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-11	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-03-14.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-04-1	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-04-4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-04-9.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-04-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-04-15.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-05-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-05-5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-05-8.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-05-12.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-05-14.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-06-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-06-4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-06-7	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-06-11	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-06-13.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-07-1	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-07-5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-07-6	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-07-9	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-07-11.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-08-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-09-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-09-5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-09-8.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		
HPK-SB-09-11.5	NS	NS	NS	NS	NS	NS	NS	NS	NS		

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Vinyl Chloride	1,1-Dichloro-ethene	Bromo-chloro-methane	1,2-Dichloro-ethane	Trichloro-ethene	Bromo-dichloro-methane	Dibromo-methane	Dibromo-chloro-methane	Bromo-form
<b>Leaching to Non-Drinking</b>	<b>1.5</b>	<b>310</b>	--	<b>31</b>	<b>85</b>	<b>16</b>	<b>1.9</b>	<b>11,000</b>	<b>1,000</b>
HPK-SB-10-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-8	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-10-10.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-4.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-9	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-11-14.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-17.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
HPK-SB-12-20	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>Draft Site Assessment Re</b>									
W-2-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-2-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-5-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-5-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-2	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-6-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-7-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-8-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-9-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-9-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-10-7	NS	NS	NS	NS	NS	NS	NS	NS	NS

**Table 2**  
**Summary of Analytical Results for VOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Vinyl Chloride	1,1-Dichloro-ethene	Bromochloro-methane	1,2-Dichloro-ethane	Trichloro-ethene	Bromo-dichloro-methane	Dibromo-methane	Dibromo-chloro-methane	Bromo-form
<b>Leaching to Non-Drinking</b>	<b>1.5</b>	<b>310</b>	--	<b>31</b>	<b>85</b>	<b>16</b>	<b>1.9</b>	<b>11,000</b>	<b>1,000</b>
W-11-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-11-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-12-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-13-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-13-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-14-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-15-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-15-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-16-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-16-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-17-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-17-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-4	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-18-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-19-10	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-20-1	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-20-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-21-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-21-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-22-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-22-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-23-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-23-7	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-24-3	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-24-7	NS	NS	NS	NS	NS	NS	NS	NS	NS

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191*. August.

**Notes:**

VOCs = Volatile organic compounds

MTBE = Methyl tert-butyl ether

TMB = Trimethylbenzene

Sample concentrations reported in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ )

Environmental Screening Levels (ESLs) for Soil published by the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Future High-Density Residential Use screening level

J Detected compound qualified as estimate

B Contamination found in associated Method Blank

b See lab case narrative; related to high response rate in calibration standards

U Sample results less than the reporting limit and within 5times the associated method blank

(3) concentrations as adjusted for dilution were qualified as non-detect (U) - ERM Qualifier

(3) Results may not be representative, sample obtained from portion of boring where air-knife was used for utility clearance

<sup>a</sup>For continued use of site as parking lot, native soils will not be available for exposure due to hardscape (asphalt). These impediments to exposure require planned land use covenant and soils management plan.

As asphalt cannot preclude infiltration, minimum of ESLs for non-drinking water infiltration presented.

<sup>b</sup>For redevelopment as high-density residential, native soils will not be available for exposure due to hardscape (asphalt and structures). These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, minimum of ESLs for non-drinking water infiltration presented. While construction workers will be present, soils management plan and health and safety plan will control these exposures.

**Table 3**  
**Summary of Analytical Results for SVOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	2-Methylnaphthalene	Fluorene	Phenanthrene	Pyrene	bis(2-Ethylhexyl) phthalate	Acenaphthene	Anthracene	Benzo(a)anthracene	Chrysene	Fluoranthene	Naphthalene
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg)</b>													
MW-1-9	02/09/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-2-4-5	02/10/21	Soil	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300
MW-3-6	02/09/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-4-7	02/09/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-4-11	02/09/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-5-3	02/08/21	Soil	250	J	810	J	420	J	<1,300	<1,300	<1,300	<1,300	<1,300
MW-5-9	02/08/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-6-5	02/08/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-6-12	02/08/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-7-4	02/10/21	Soil	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300	<1,300
MW-7-8	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-7-11-12	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-8-4-5	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-8-9	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-8-11.5	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-9-4	02/09/21	Soil	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300	<6,300
MW-9-7	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-9-9-10	02/10/21	Soil	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
HPK-SB-02-0.5	12/19/19	Soil	<6,700	<6,700	<6,700	<6,700	<34,000	NS	NS	NS	NS	NS	NS
HPK-SB-03-2.5	12/20/19	Soil	<20,000	<20,000	<20,000	<20,000	<100,000	NS	NS	NS	NS	NS	NS
HPK-SB-03-3	12/20/19	Soil	<20,000	<20,000	<20,000	<20,000	<100,000	NS	NS	NS	NS	NS	NS
HPK-SB-03-5	12/20/19	Soil	3,500	J	3,200	J	6,300	J	<20,000	<99,000	NS	NS	NS
HPK-SB-05-0.5	12/20/19	Soil	4,300	J	<20,000	6,800	J	<20,000	<100,000	NS	NS	NS	NS
HPK-SB-05-5	12/20/19	Soil	<20,000	<20,000	<20,000	<20,000	<99,000	NS	NS	NS	NS	NS	NS
HPK-SB-06-0.5	12/19/19	Soil	<20,000	<20,000	<20,000	<20,000	<99,000	NS	NS	NS	NS	NS	NS
HPK-SB-07-1	12/30/19	Soil	<3,400	<3,400	<3,400	<3,400	<17,000	NS	NS	NS	NS	NS	NS
HPK-SB-07-5	12/30/19	Soil	110	J	300	J	580	J	500	J	<3,300	NS	NS
HPK-SB-08-0.5	12/20/19	Soil	<20,000	<20,000	<20,000	<20,000	<99,000	NS	NS	NS	NS	NS	NS
HPK-SB-10-1	12/20/19	Soil	<20,000	<20,000	<20,000	<20,000	<99,000	NS	NS	NS	NS	NS	NS
HPK-SB-11-4.5	12/30/19	Soil	<670	<670	<670	<670	230	J	NS	NS	NS	NS	NS
HPK-SB-12-1	12/30/19	Soil	<680	<680	<680	<680	<3,400	NS	NS	NS	NS	NS	NS
HPK-SB-12-5	12/30/19	Soil	<6,600	<6,600	7,100	<6,600	<33,000	NS	NS	NS	NS	NS	NS
<b>Hayward Park Caltrain Station (West Environmental 2019)</b>													
W-2-1	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-2-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-3-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-3-3	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-3-10	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-4-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-4-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-5-1	05/23/16	Soil	<16,500	<16,500	<16,500	<16,500	NS	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500
W-5-3	05/23/16	Soil	<330	<330	358	<330	NS	<330	<330	<330	<330	<330	<330
W-6-1	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-6-2	05/23/16	Soil	<16,500	<16,500	<16,500	<16,500	NS	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500
W-6-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-7-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-7-3	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-7-10	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-8-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330					

**Table 3**  
**Summary of Analytical Results for SVOCs in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	2-Methylnaphthalene	Fluorene	Phenanthrene	Pyrene	bis(2-Ethylhexyl) phthalate	Acenaphthene	Anthracene	Benzo(a)anthracene	Chrysene	Fluoranthene	Naphthalene
<b>Leaching to Non-Drinking Water Soil ESLs (µg/kg)</b>													
W-12-1	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-12-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-12-10	05/23/16	Soil	<330	<b>1,090</b>	<b>1,960</b>	<330	NS	<330	<330	<330	<330	<330	<330
W-13-1	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-13-3	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-14-1	05/23/16	Soil	<1,650	<1,650	<b>3,430</b>	<b>3,770</b>	NS	<1,650	<b>2,160</b>	<1,650	<1,650	<b>2,910</b>	<1,650
W-14-7	05/23/16	Soil	<b>16,100</b>	<b>5,930</b>	<b>8,190</b>	<b>5,680</b>	NS	<1,650	<1,650	<b>2,610</b>	<b>2,390</b>	<1,650	<b>4,410</b>
W-14-10	05/23/16	Soil	<b>14,500</b>	<b>8,420</b>	<b>9,330</b>	<b>9,860</b>	NS	<1,650	<b>2,160</b>	<b>5,040</b>	<b>4,050</b>	<1,650	<b>4,000</b>
W-15-1	05/23/16	Soil	<16,500	<16,500	<16,500	<16,500	NS	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500
W-15-3	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-16-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-16-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-17-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-17-3	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-18-1	05/23/16	Soil	<1,650	<1,650	<1,650	<1,650	NS	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650
W-18-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-19-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-19-3	05/23/16	Soil	<330	<330	<b>551</b>	<330	NS	<b>507</b>	<330	<330	<330	<330	<330
W-19-10	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-20-1	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330
W-20-7	05/23/16	Soil	<330	<330	<330	<330	NS	<330	<330	<330	<330	<330	<330

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191.* August.

**Notes:**

SVOCs = Semivolatile organic compounds

Sample concentrations reported in micrograms per kilogram (µg/kg)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

Environmental Screening Levels (ESLs) for Soil published by the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Leaching to Non-Drinking Water screening level

J Detected compound qualified as estimate

For continued use of site as parking lot, native soils will not be available for exposure due to hardscape (asphalt). These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented.

For redevelopment as high-density residential, native soils will not be available for exposure due to hardscape (asphalt and structures). These impediments to exposure require planned land use covenant and soils management plan. As asphalt cannot preclude infiltration, ESLs for non-drinking water infiltration are presented. While construction workers will be present, soils management plan and health and safety plan will control these exposures.

**Table 4**  
**Summary of Analytical Results for Metals in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Sample Depth (feet bgs)	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
				0.31	--	--	1900	--	380	--	--	64,000	--	--
MW-4-7	02/09/21	Soil	7	--	--	--	--	--	8.6	--	--	--	--	--
MW-4-11			11	--	--	--	--	--	6.1	--	--	--	--	--
MW-5-3	02/08/21	Soil	3	--	--	--	--	--	10	--	--	--	--	--
MW-5-9			9	--	--	--	--	--	6.2	--	--	--	--	--
MW-8-9	02/10/21	Soil	9	--	--	--	--	--	5.6	--	--	--	--	--
MW-8-11.5			12	--	--	--	--	--	7.3	--	--	--	--	--
<b>Screening Value Commercial Use Direct Contact (mg/kg)</b>				0.31	--	--	1900	--	380	--	--	64,000	--	--
<b>Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)</b>														
W-2	05/23/16	Soil	1	<2.50	--	--	--	--	19.4	--	--	--	--	--
			3	3.2	--	--	--	--	6.65	--	--	--	--	--
			7	2.9	283	33	13.7	15.5	6.95	<0.100	<2.50	31.8	40.5	26.7
			10	<2.50	--	--	--	--	4.12	--	--	--	--	--
W-3	05/23/16	Soil	1	<2.50	270	5	5.95	<2.50	<2.50	<0.100	<2.50	<2.50	36.2	84.5
			3	3.6	--	--	--	--	26.1	--	--	--	--	--
			7	<2.50	--	--	--	--	8.43	--	--	--	--	--
			10	2.7	--	--	--	--	7.69	--	--	--	--	--
W-4	05/26/16	Soil	1	<2.50	--	--	--	--	2.52	--	--	--	--	--
			3	5.0	--	--	--	--	30.5	--	--	--	--	--
			7	<2.50	--	--	--	--	4.65	--	--	--	--	--
			10	8.0	170	87	32.3	26.6	14.2	<0.250	<2.50	70.7	82.9	46.8
W-5	05/23/16	Soil	1	4.9	--	--	--	--	29.1	--	--	--	--	--
			3	10.1	67.8	26	12.6	46.7	15.3	0.178	<2.50	40.7	29.8	82.2
			7	2.6	--	--	--	--	8.12	--	--	--	--	--
			10	4.1	--	--	--	--	9.11	--	--	--	--	--
W-6	05/23/16	Soil	1	<2.50	--	--	--	--	<2.50	--	--	--	--	--
			3	12.2	--	--	--	--	40.9	--	--	--	--	--
			7	5.4	--	--	--	--	14.5	--	--	--	--	--
			10	4.3	--	--	--	--	12.5	--	--	--	--	--
W-7	05/26/15	Soil	1	<2.50	--	--	--	--	<2.50	--	--	--	--	--
			3	2.5	--	--	--	--	116	--	--	--	--	--
			7	4.0	143	32	11.1	16.7	9.13	<0.250	<2.50	30.3	40.9	33.4
			10	<2.50	--	--	--	--	4.47	--	--	--	--	--
W-8	05/23/16	Soil	1	<2.50	--	--	--	--	2.83	--	--	--	--	--
			3	<2.50	--	--	--	--	35.7	--	--	--	--	--
			7	3.1	--	--	--	--	9.01	--	--	--	--	--
			10	6.0	--	--	--	--	12.4	--	--	--	--	--
W-9	05/24/16	Soil	1	5.0	223	37	12.1	31.2	19.1	0.11	<2.50	41.4	43.1	71.8
			3	4.1	--	--	--	--	11.7	--	--	--	--	--
			7	2.5	--	--	--	--	8.31	--	--	--	--	--
			10	2.6	--	--	--	--	6.37	--	--	--	--	--
W-10	05/26/16	Soil	1	<2.50	--	--	--	--	16.9	--	--	--	--	--
			3	4.6	--	--	--	--	4.19	--	--	--	--	--
			7	<2.50	--	--	--	--	6.65	--	--	--	--	--
			10	5.0	148	46	18.4	17.4	10	<0.250	<2.50	47.9	50.7	36.2
W-11	05/26/16	Soil	1	3.7	--	--	--	--	40	--	--	--	--	--
			3	7.9	219	67	14.7	69.6	200	<0.250	<2.50	104	36.6	188
			7	8.9	--	--	--	--	228	--	--	--	--	--
			10	<2.50	--	--	--	--	3.82	--	--	--	--	--
W-12	05/25/16	Soil	1	4.7	--	--	--	--	50.7	--	--	--	--	--
			3	4.0	--	--	--	--	144	--	--	--	--	--
			7	3.2	105	22	8.03	16.2	7.76	<0.100	<2.50	18.6	32.8	22.9
			10	6.2	--	--	--	--	14.8	--	--	--	--	--

**Table 4**  
**Summary of Analytical Results for Metals in Soil**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	Sample Depth (feet bgs)	Arsenic	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
				<b>0.31</b>	--	--	<b>1900</b>	--	<b>380</b>	--	--	<b>64,000</b>	--	--
W-13	05/24/16	Soil	1	3.0	--	--	--	--	22.6	--	--	--	--	--
			3	2.7	--	--	--	--	16.5	--	--	--	--	--
			7	3.7	--	--	--	--	7.9	--	--	--	--	--
			10	3.9	--	--	--	--	8.24	--	--	--	--	--
W-14	05/25/16	Soil	1	6.3	--	--	--	--	49.6	--	--	--	--	--
			3	5.3	--	--	--	--	41.3	--	--	--	--	--
			7	5.7	--	--	--	--	49.2	--	--	--	--	--
			10	5.2	182.00	28	6.45	18.3	125	0.556	<2.50	44.6	32.9	59.4
W-15	05/24/16	Soil	1	<2.50	--	--	--	--	6.52	--	--	--	--	--
			3	4.1	--	--	--	--	64.2	--	--	--	--	--
			7	3.5	249.00	30	9.77	15.6	7.56	<0.100	<2.50	28.4	43.3	26.4
			10	<2.50	--	--	--	--	4.73	--	--	--	--	--
W-16	05/23/16	Soil	1	<2.50	243.00	5.2	5.08	<2.50	<2.50	<0.100	<2.50	<2.50	32.7	71.5
			3	8.5	--	--	--	--	279	--	--	--	--	--
			7	3.9	--	--	--	--	7.95	--	--	--	--	--
			10	3.1	--	--	--	--	5.24	--	--	--	--	--
W-17	05/25/16	Soil	1	<2.50	--	--	--	--	15.6	--	--	--	--	--
			3	11.5	--	--	--	--	531	--	--	--	--	--
			7	<2.50	--	--	--	--	2640	--	--	--	--	--
			10	<2.50	107.00	34.10	2.68	9.66	5.36	<0.100	<2.50	26.1	26.4	63.2
W-18	05/26/16	Soil	1	2.6	--	--	--	--	37.4	--	--	--	--	--
			3	4.5	114.00	25.0	10.4	17.9	23.1	<0.250	<2.50	29.5	32	48.4
			7	<2.50	--	--	--	--	5.08	--	--	--	--	--
			10	3.2	170.00	37.1	30.4	16.4	7.27	<0.250	<2.50	47.9	38.2	31.7
W-19	05/26/16	Soil	1	<2.50	--	--	--	--	18.5	--	--	--	--	--
			3	3.5	--	--	--	--	17.7	--	--	--	--	--
			7	2.7	--	--	--	--	5.75	--	--	--	--	--
			10	3.1	130.00	30	10.2	14.6	7.68	<0.250	<2.50	33.5	35.3	26.2
W-20	05/24/16	Soil	1	12.7	--	--	--	--	106	--	--	--	--	--
			3	3.8	--	--	--	--	35.8	--	--	--	--	--
			7	<2.50	--	--	--	--	7.16	--	--	--	--	--
			10	3.4	--	--	--	--	7.01	--	--	--	--	--

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191.* August.

**Notes:**

bgs = Below ground surface

Sample concentrations reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

Environmental Screening Levels (ESLs) for Soil Vapor published in the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Commercial Use Direct Contact screening level

J Detected compound qualified as estimate

**Table 5**  
**Summary of Analytical Results for VOCs in Groundwater**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Date	Matrix	MTBE	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	1,2,4-TMB	1,3,5-TMB	N-propyl benzene	N-Butyl benzene	PCE	1,2-DCA	CM	CA	4-Isopropyl toluene	Bromomethane	Naphthalene
<b>Screening Value Future High-Density Residential Use (Podium) (µg/L)</b>			1,800	1.8	400	15	1,600	1,600	1,040*	733*	10,400*	--	2.8	9.8	1,100	160	--	73	20
<b>Non-Drinking Water (Odor/Nuisance) ESLs (µg/L)</b>			1,800	20,000	400	300	5,300	5,300	--	--	--	--	3,000	200,000	--	160	--	--	210
<b>Select Lower of the ESL</b>			1,800	1.8	400	15	1,600	1,600	1,040	733	10,400	2.8	9.8	1,100	160	--	73	20	
MW-1	2/26/2021	Groundwater	<1.0	<1.0	<5.0	<5.0	<10	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-2	2/26/2021	Groundwater	<1.0	<1.0	<5.0	<5.0	<10	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-3	2/26/2021	Groundwater	<1.0	<1.0	<5.0	<5.0	<10	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-4	2/26/2021	Groundwater	<1.0	<1.0	<5.0	<5.0	<10	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-5	2/26/2021	Groundwater	<10	<10	<50	<50	<100	<50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-6	2/26/2021	Groundwater	<5.0	<5.0	<25	<25	<50	<25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-7	2/26/2021	Groundwater	<1.0	<1.0	<5.0	<5.0	<10	<5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-8	2/26/2021	Groundwater	<2.0	<2.0	<10	<10	<20	<10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-9	2/26/2021	Groundwater	<250	<250	<1,300	<1,300	<2,500	<1,300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
<b>Phase II Site Assessment Report, Hayward Park Caltrain Station (ERM, 2020)</b>																			
HPK-SB-02-GW	01/03/20	Groundwater	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
HPK-SB-04-GW	01/03/20	Groundwater	<0.5	(2)	0.2	J (2)	0.4	J (2)	0.5	(2)	2.3	(2)	1.3	(2)	NS	NS	NS	NS	
HPK-SB-04-GW (DUP-1)	01/03/20	Groundwater	0.2	J	0.2	J (2)	0.5	J (2)	0.6	(2)	2.5	(2)	1.3	(2)	NS	NS	NS	NS	
HPK-SB-10-GW	01/03/20	Groundwater	<0.5	0.1	J (2)	<0.5	(2)	<0.5	(2)	<0.5	(2)	NS	NS	NS	NS	NS	NS	NS	
HPK-SB-12-GW	01/03/20	Groundwater	0.2	J	2.3	0.4	J	1.5	0.2	J	0.3	J	NS	NS	NS	NS	NS	NS	
<b>Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)</b>																			
W-3	05/24/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
W-6	05/24/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	7.81	2.65	<0.500	3.08	<1.00	
W-9	05/25/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	
W-12	05/25/16	Groundwater	NS	2.69	0.59	2.29	1.01	NS	<0.500	0.62	0.5	<0.500	4.76	<0.500	<0.500	<0.500	<0.500	9.87	
W-14	05/25/16	Groundwater	NS	4.62	1.60	1.39	3.63	NS	1.78	0.77	1.54	0.63	<0.500	<0.500	<0.500	<0.500	0.54	<0.500	
W-15	05/25/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	
W-17	05/25/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	
W-21	05/25/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	
W-22	05/25/16	Groundwater	NS	<50.0	<50.0	<50.0	<50.0	NS	<50.0	<50.0	<50.0	<50.0	5,750	<50.0	<50.0	<50.0	<50.0	<100	
W-23	05/25/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	2.89	<0.500	<0.500	<0.500	<0.500	<1.00	
W-24	05/24/16	Groundwater	NS	<0.500	<0.500	<0.500	<0.500	NS	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191.* August.

**Notes:**

MTBE = Methyl tert-butyl ether

TMB = Trimethylbenzene

PCE = Tetrachloroethene

DCA = Dichloroethane

CM = Chloromethane

CA = Chloroethane

Sample concentrations reported in micrograms per liter (µg/L)

Environmental Screening Levels (ESLs) for Groundwater published by the San Francisco Bay Regional Water Quality Control Board (Rev. 2, 2019)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Future High-Density Residential Use screening level

J Detected compound qualified as estimate

(2) Results potentially not representative; laboratory reported headspace in sample

\*USEPA Vapor Intrusion Screening Levels (VISL; 2020)

Ground floor contains only parking and commercial offices. Podium construction nominalizes migration of first floor air to upper floors. Minimum ESLs for non-drinking water and commercial groundwater vapor intrusion presented, or commercial air VISL (USEPA, 2020), where ESL is not established.

**Table 6****Well Construction Details****Caltrain Hayward Park Station****Peninsula Corridor Joint Powers Board****San Mateo, California**

<b>Location ID</b>	<b>Total Depth (ft bgs)</b>	<b>Casing Elevation</b>	<b>Borehole Diameter (in.)</b>	<b>Well Diameter (in.)</b>	<b>Screen Interval (ft bgs)</b>	<b>Slot Size (in.)</b>	<b>Sand Interval (ft bgs)</b>	<b>Bentonite Interval (ft bgs)</b>
MW-1	10	11.32	8	2	3 - 10	0.010	2 - 10	1 - 2
MW-2	10	11.15	8	2	3 - 10	0.010	2 - 10	1 - 2
MW-3	10	10.76	8	2	3 - 10	0.010	2 - 10	1 - 2
MW-4	12	12.23	8	2	3 - 12	0.010	2 - 12	1 - 2
MW-5	10	10.53	8	2	3 - 10	0.010	2 - 10	1 - 2
MW-6	13	10.16	8	2	3 - 12	0.010	2 - 13	1 - 2
MW-7	12	9.69	8	2	3 - 12	0.010	2 - 12	1 - 2
MW-8	12	10.38	8	2	3 - 12	0.010	2 - 12	1 - 2
MW-9	10	10.44	8	2	3 - 10	0.010	2 - 10	1 - 2

**Notes:**

ft bgs = feet below ground surface

in. = inches

Sand size is #2/12

Bentonite chips hydrated for minimum of 30 minutes prior to permanent seal

Portland Type II-V cement used as permanent seal from ground surface to 1 ft bgs

**Table 7**  
**Groundwater Elevation Data**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Location ID	Date	Casing Elevation (msl)	Depth to Water (feet below TOC)	Groundwater Elevation (msl)
MW-1	2/26/2021	11.32	7.67	3.65
MW-2	2/26/2021	11.15	6.55	4.60
MW-3	2/26/2021	10.76	6.81	3.95
MW-4	2/26/2021	12.23	7.76	4.47
MW-5	2/26/2021	10.53	3.80	6.73
MW-6	2/26/2021	10.16	7.44	2.72
MW-7	2/26/2021	9.69	7.79	1.90
MW-8	2/26/2021	10.38	4.08	6.30
MW-9	2/26/2021	10.44	6.70	3.74

**Notes:**

ft bgs = feet below ground surface

in. = inches

TOC = top of casing

msl = mean sea level

**Table 8**  
**Summary of Analytical Results for VOCs in Soil Vapor**  
**Caltrain Hayward Park Station**  
**Peninsula Corridor Joint Powers Board**  
**San Mateo, California**

Sample ID	Sample Depth (feet bgs)	Sample Date	Matrix	PCE	Benzene	Toluene	Ethyl benzene	Xylenes	1,2,4-TMB*	1,3-DCB*
<b>Screening Value Future High-Density Residential Use (Podium) (<math>\mu\text{g}/\text{m}^3</math>)</b>				<b>67</b>	<b>14</b>	<b>44,000</b>	<b>160</b>	<b>15,000</b>	<b>8,670</b>	<b>29,330</b>
<i>Draft Site Assessment Report, Hayward Park Caltrain Station (West Environmental 2019)</i>										
W-2	3.5	05/23/16	Soil Vapor	<6.78	<b>3.67</b>	<b>24</b>	<4.34	<b>6.95</b>	<b>6.49</b>	<b>6.19</b>
W-5	3.5	05/23/16	Soil Vapor	<6.78	<b>7.28</b>	<b>21</b>	<4.34	<b>15.5</b>	<b>7.23</b>	<6.01
W-8	3.5	05/24/16	Soil Vapor	<6.78	<b>7.70</b>	<b>46.5</b>	<4.34	<4.34	<4.92	<b>7.58</b>
W-13	3.5	05/24/16	Soil Vapor	<b>10.3</b>	<b>4.66</b>	<b>6.26</b>	<4.34	<4.34	<4.92	<6.01
W-16	3	05/25/16	Soil Vapor	<6.78	<b>9.81</b>	<b>11.5</b>	<4.34	<4.34	<4.92	<b>8.66</b>
W-20	3.5	05/24/16	Soil Vapor	<6.78	<b>6.49</b>	<b>11</b>	<4.34	<4.34	<4.92	<b>7.94</b>

**References:**

West Environmental Services and Technology, Inc. (West Environmental). 2019. *Draft Site Assessment Report, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191*. August.

**Notes:**

bgs = Below ground surface

Sample concentrations reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

Environmental Screening Levels (ESLs) for Soil Vapor published in the San Francisco Bay Regional Water Quality Control Board (Rev 2., 2019)

Regional Screening Levels (RSLs) for Commercial Air published in the United States Environmental Protection Agency (2020)

**Bold blue** values indicate concentrations detected above the laboratory reporting limit

<0.5 Compound not detected at or above the laboratory reporting limit

# Indicates a concentration detected above the Future High-Density Residential Use screening level

J Detected compound qualified as estimate

\*Commercial air RSL/0.03 (default attenuation factor)

Ground floor contains only parking and commercial offices. Podium construction nominalizes migration of first floor air to upper floors. Commercial vapor intrusion ESL, or commercial air RSL/0.03 (default attenuation factor), where ESL is not established.

## APPENDIX A      PERMITS

ORDINANCE: 04023



SAN MATEO COUNTY HEALTH  
**ENVIRONMENTAL  
HEALTH SERVICES**

**PERMIT** 21-0308

P/E: 2010 MONITORING WELLS - INSTALLATION/DESTRUCTION

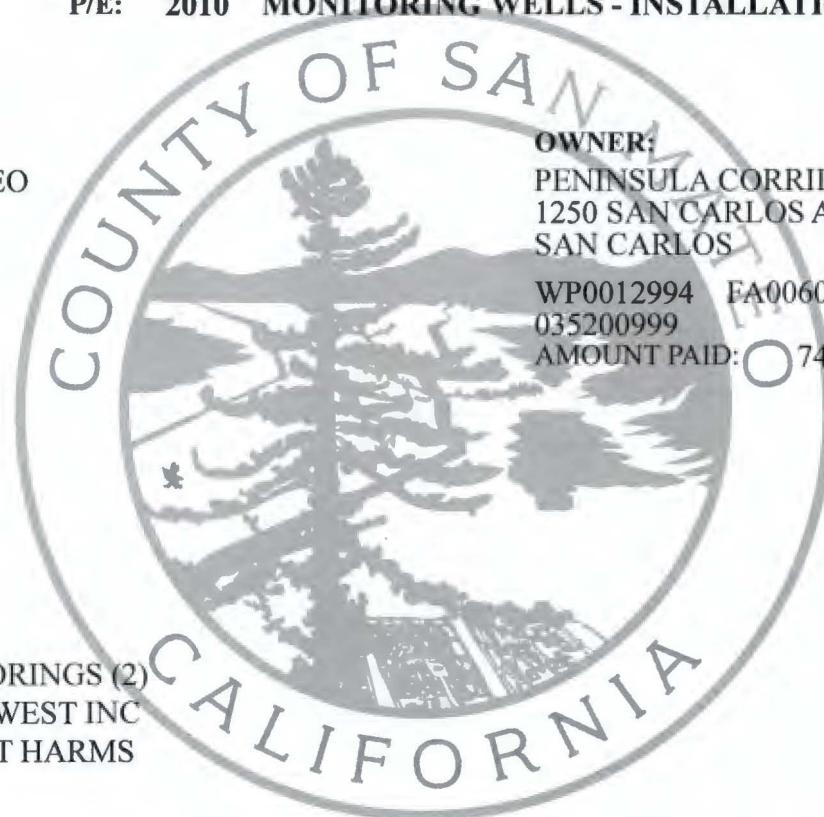
**FACILITY:**  
401 CONCAR DR, SAN MATEO

**CONTRACTOR:**  
PENECORE DRILLING

**TERMS & CONDITIONS:**

CONSTRUCT SOIL BORINGS (2)  
CONSULTANT: ERM-WEST INC  
PROJECT MGR: CLINT HARMS

**OWNER:**  
PENINSULA CORRIDOR JOINT POWER  
1250 SAN CARLOS AVE  
SAN CARLOS  
WP0012994 FA0060199  
035200999  
AMOUNT PAID:  747.00



KIAN ATKINSON

---

ENVIRONMENTAL HEALTH SPECIALIST

**EXPIRATION DATE:** 6/8/2021

**THIS CERTIFICATE IS NONTRANSFERABLE AND MUST BE POSTED ON-SITE IN A CONSPICUOUS PLACE.**



SAN MATEO COUNTY  
ENVIRONMENTAL  
HEALTH SERVICES

PAID

+494-  
mail ck #186404 KA

Environmental Health Services  
Groundwater Protection Program  
2000 Alameda de las Pulgas, Suite #100  
San Mateo, CA 94403  
Phone: (650) 372-6200 | Fax: (650) 372-8244  
smchealth.org/gpp

PAID

\$ 747.00

CC USA

RECEIVED

## SUBSURFACE DRILLING PERMIT APPLICATION

Allow three (3) full working days for processing a complete permit application which includes payment (one permit per parcel). Drilling start date & time must be scheduled with County staff at (650) 464-0047 or [drilling@smcgov.org](mailto:drilling@smcgov.org) at least 2 full working days (i.e. 48 hours) in advance. Visit [smchealth.org/ehefees](http://smchealth.org/ehefees) for Groundwater Protection Program Fees

PURPOSE OF APPLICATION  Groundwater Monitoring/Vapor Well Installation  Construct Soil Borings (variance request if to be left open >24 hrs)  
 Groundwater Monitoring/Vapor Well Destruction Extension of Permit # \_\_\_\_\_

No. of Wells 5

No. of Borings 2

Well/Boring Names TBD

PURPOSE OF DRILLING  Environmental LEAD  County GPP (permit approval is not to be considered work plan approval)  
 Geotechnical AGENCY  RWQCB/DTSC/USEPA (Provide approval letter)  None (i.e. voluntary)

### SITE / DRILLING INFORMATION

Agency Case # 119191/RO2243 Assessor's Parcel # (required) 035-200-999 (one per permit)

Drilling Location Address: 401 Concar Drive City: San Mateo Zip: 94402

To Be Constructed In:  Public Property  Private Property  Refuse

Maximum Proposed Depth (wells/borings) 15 (feet) Drilling Method: Hollow Stem Auger

Boring Diameter: 8 inches Casing Diameter: 2 inches Filter Pack Interval: 1' to 12' Screen Interval: 3' to 12'

Destruction Method:  Pressure Grouting (provide well construction logs and grout calcs)

(6 gallons water max/94 lb cement, up to 5% bentonite)  Overdrilling (guide rods for total depth prior to starting required)

### WELL/BORING OWNER (Well/boring owner name or contact person should match signature)

Name: Peninsula Corridor Joint Powers Board

Contact Person: Stephen Chao

Address: 1250 San Carlos Avenue

City, State, Zip: San Carlos, CA 94070

Telephone: 650-508-6301

Email: [chaos@samtrans.com](mailto:chaos@samtrans.com)

It is my responsibility to notify the County of any known changes in the purpose of this well/boring from that which is indicated on this application, to submit indication of annual usage of wells to the County, and to maintain the well in good condition. (Letter signed by well/boring owner/contact person, containing above language and attesting to knowledge of all permit requirements and conditions, may be substituted for signature.)

Well/Boring Owner's/Contact Person's Signature: *Stephen Chao*

Date: 1/29/2021

### PROPERTY OWNER (Name as appears on assessor's roles should match signature)

Name: Peninsula Corridor Joint Powers Board

Contact Person: Stephen Chao

Address: 1250 San Carlos Avenue

City, State, Zip: San Carlos, CA 94070

Telephone: 650-508-6301

Email: [chaos@samtrans.com](mailto:chaos@samtrans.com)

I understand that a well/boring is being installed on my property. I agree to notify the County and Well Owner of any known damage or future access issues to the well (Letter signed by property owner, containing above language, or encroachment permit may be substituted for signature)

Property Owner's Signature: *Stephen Chao*

Date: 1/29/2021

### DRILLING COMPANY

Drilling Company: Penecore Drilling

Contact Person: Xavier Green

Address: 220 N. East Street

City, State, Zip: Woodland, CA 95776

Telephone: 530-661-3600

Email: [xavier@penecore.com](mailto:xavier@penecore.com)

C57 Drillers License # 906899

I certify that the well/boring will be constructed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards, and that the license listed above is considered current and active by the Contractors State License Board.

Driller's Signature: *Xavier Green*

Date: 1/29/2021

### CONSULTANT COMPANY

Consultant Company: ERM-West, Inc.

Project Manager: Clint Harms

Address: 980 9th Street, Suite 750

City, State, Zip: Sacramento, CA 95814

Telephone: 916-999-8923

Email: [clint.harms@erm.com](mailto:clint.harms@erm.com)

Field Contact & Cell # (if known): Alex Martinez 408-701-7002

I certify that this application is correct to the best of my knowledge and the well/boring will be constructed/destroyed in compliance with the conditions of this permit (see reverse), the San Mateo County Well Ordinance, and the State Water Well Standards. I understand that I am responsible for General Conditions E, F, K, and L of this permit and if I indicated the purpose of drilling is geotechnical, then no one will use the boring to collect any samples for environmental analyses. If there is a change in Responsible Professional, I will notify San Mateo County GPP staff.

Responsible Professional's Name (Please print legibly): Chimi Yi

Responsible Professional's Signature: *Chimi Yi*

Date: 1.29.21

California Professional Geologist (PG) No. 8951

or Civil Engineer (PE) No. \_\_\_\_\_

REV. 09/2018

FAG0199

# SUBSURFACE DRILLING PERMIT APPLICATION

## REQUIREMENTS:

An accurate and correct map **must** be submitted with the application and include the following: north arrow, existing and historic site features, existing and proposed well/boring locations with ID's to scale, property lines and any other pertinent information. A work plan describing the drilling and construction/destruction methodology may be requested by County staff. A complete application with appropriate fees must be submitted 3 working days in advance of drilling and notification of start date and time must be provided at least 2 working days prior to drilling. The permit is subject to both General and Special Conditions stated below. A copy of the approved Subsurface Drilling Permit **must** be available on site while work related to the permit is being performed. Drilling may begin at the notified date and time whether County staff is present or not.

## GENERAL CONDITIONS:

- A. Field notification **must** be provided to GPP drilling inspection staff at least 2 full working days prior to the start of drilling. GPP Caseworker also must be notified if site is associated with a remedial action case.
- B. Well and boring construction and destruction under this permit are subject to the Standards for the Construction of Wells in San Mateo County, County Groundwater Protection Program (GPP) Guidelines, Policies & Procedures, the State Water Well Standards, and any instructions by a Health Department representative.
- C. Well/Boring Owner, Driller, and Responsible Professional assume responsibility for all activities and uses under the permit, including compliance with Workmen's Compensation Laws, and indemnify, defend and save the County of San Mateo, its officers, agents and employees, free and harmless from any and all expense, cost, or liability in connection with or resulting from work or stopped-work associated with the permit, including, but not limited to, property damage, personal injury, wrongful death, and loss of income.
- D. All borings **must** be properly destroyed (grouted/sealed) within 24 hours of drilling, unless special conditions are approved beforehand in writing as part of this permit, and must be continuously protected and stabilized.
- E. Analytical results of all soil, vapor, and groundwater samples collected during the execution of drilling under this permit **must** be submitted to County GPP staff by the Responsible Professional within 60 days of sample collection. If contamination is discovered during drilling, verbal notification to County GPP by the Responsible Professional is required within 72 hours of discovery. Proper storage, labeling & disposal of investigation-derived residual wastes are the responsibility of the consultant unless stated otherwise contractually.
- F. Boring logs, well construction details, and finalized as-built location map for all borings/ wells (except geotechnical borings) signed by a Responsible Professional, **must** be submitted to County GPP by the Responsible Professional within 60 days of drilling/construction/destruction. DWR Form 188 must be filed with the State per water code 13752.
- G. Permit is valid only for the purpose specified herein. No change in purpose or required procedures, as described on this permit application, in the associated workplan, or in the special conditions below, will be allowed except upon written permission from the County. Construction aspects can be changed based on conditions encountered in the field.
- H. **Permit is valid for one mobilization** associated with originally permitted boring/well locations only, including contingency locations, and is automatically canceled if not exercised, or if an extension is not applied for and granted within 120 days of the original permit issuance date. Failure to notify staff of cancellation or delay in start time will result in the Consultant being billed an Inspection Cancellation fee if GPP staff attempted to perform an inspection. Fees are listed at [smchealth.org/ehfees](http://smchealth.org/ehfees)
- I. Wells installed under this permit may not be used for domestic, municipal, agricultural, or irrigation water supply.
- J. All work performed **must** conform to Business and Profession Codes and State Water Well Standards.
- K. Top-of-casing elevation of all wells **must** be surveyed to the nearest 0.01-foot relative to Mean Sea Level or NAVD88 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate. Geotechnical wells are exempt from this requirement if a written variance from GPP is obtained prior to drilling.
- L. Latitude and longitude of all wells **must** be surveyed with sub-meter accuracy relative to NAD83 and submitted to County GPP within 60 days of drilling, and to State GeoTracker as appropriate.
- M. Violation of any requirement or general or special permit condition may result in an order by GPP staff to cease work under this permit, correct the violation, potentially re-permit the work as a new mobilization, and potential actions may be taken against the Well Owner, Property Owner, or Responsible Professional by GPP.

## SPECIAL CONDITIONS:

(agency use only)

For Agency Use Only:

County Approval:

ICRA

FA #

Date:

2/5/2021

# SUBSURFACE DRILLING PERMIT APPLICATION

## PERMIT APPLICATION INSTRUCTIONS AND FEES

A subsurface drilling permit for borings and wells is required if groundwater is anticipated to be encountered or if drilling extends to 10 feet or deeper. Sub-slab and vapor wells shallower than 10 feet do not require a permit. Should groundwater be encountered shallower than 10 feet unexpectedly, then contact San Mateo County Health System Groundwater Protection Program (GPP) immediately and a permit application will be required retroactively. GPP is the permitting agency for all subsurface drilling for environmental and geotechnical purposes within San Mateo County except in the City of Daly City. All drilling in the City of Daly City is permitted by the City of Daly City Water and Wastewater Department at (650) 991-8200 with appropriate notification to GPP for GPP lead sites. San Mateo County Health System Land Use Program (LUP) reviews all water well permit applications ([smchealth.org/environ/forms](http://smchealth.org/environ/forms)) for public supply, domestic, agricultural, cathodic protection, exploratory, and geothermal heat exchange well construction and destruction and permit applications for all reconnaissance, investigation, and excavation work strictly for land use purposes. Please contact the LUP at (650) 372-6200 to discuss permitting, notification, and drilling requirements.

A 120-day extension may be granted for permits which have not been used during the original 120-day time frame. Submit another Subsurface Drilling Permit Application and payment for the permit extension fee at 50% of the fee for the type of drilling. Extension must be requested prior to the original permit expiring. If there are several wells and borings over several contiguous assessor's parcels and public right-of-ways, then discuss the fee with the County inspector at (650) 464-0047 or [drilling@smcgov.org](mailto:drilling@smcgov.org). The County inspector may charge only one fee for borings and wells constructed across contiguous assessor's parcels and public right-of-ways. However, this is dependent on how much the County inspector believes will need to be inspected in the field and how much review time of required submittals will be needed.

### Section 1: Purpose of Application

At least one of the four boxes must be selected; however, multiple boxes may be selected as long as all of the wells and borings are on the same assessor's parcel or public right-of-way (see Section 4). A **boring** under this permit application is defined as a constructed hole lasting less than 24 hours before being properly destroyed. After 24 hours, the constructed hole is considered a **well** under this permit application which needs to be constructed appropriately unless special conditions are approved as part of the permit. If Permit Extension is selected, then write in the permit number of the permit to be extended. List the number of wells and borings anticipated to be drilled and what they will be named. This number may change in the field based on conditions encountered.

### Section 2: Purpose of Drilling

**At least one of the two boxes must be selected;** however, both boxes may be selected as long as both purposes of drilling are to be conducted on the same assessor's parcel or public right-of-way (see Section 4). Geotechnical Drilling may also be conducted under San Mateo County's Annual Geotechnical Drilling Permit in which consulting companies pay an annual fee to perform this type of drilling an unlimited amount of times for 365 days after obtaining the Annual Geotechnical Drilling Permit. Fees are listed at [smchealth.org/ehfees](http://smchealth.org/ehfees) Please note, a Notification Form (not available on website) similar to this Subsurface Drilling Permit Application must be completely filled out and submitted at least 2 business days (48 hours) prior to drilling under the Annual Geotechnical Drilling Permit.

### Section 3: Lead Agency

**One of the three boxes must be selected.** The County Groundwater Protection Program would be selected only for investigations of known contaminated sites that the County is the lead agency. For drilling required by the Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), or the United States Environmental Protection Agency (USEPA), please include a copy of their approval letter. **None** would refer to investigations required by the County CUPA (Hazardous Materials Program), County Land Use or Solid Waste Programs, County or City Planning or Building Departments or voluntary investigations for due diligence or property transactions.

### Section 4: Drilling Information

**All applicable spaces must be filled in.** **Agency Case #** refers to the lead agency's case number, if overseen by an agency, for the project under which the investigation is being conducted. **Assessor's parcel number** is the 9-digit number corresponding to the specific private property drilling is proposed to be conducted on (can be found under Secured Property Taxes at [sanmateocountytaxcollector.org](http://sanmateocountytaxcollector.org) or [here](#)). Each permit **must** include only one assessor's parcel number. If the drilling is to be conducted only in public right-of-ways, then the assessor's parcel number space should be filled in with NA for not applicable. If drilling is to occur on both a private property and a contiguous public right-of-way, then two permits (one for the private property and one for the public right-of-way) must be filled out. **Address, City, and Zip** refer to the location of the specific property drilling is proposed to be conducted on. The Address for a public right-of-way would simply be the name of the specific section of the public right-of-way (ie. 100 block of Main Street). **To be Constructed in** must have one box selected. Again, this differentiates between a public right-of-way and a private property. **Refuse** is a special land use designation which needs to be indicated on the permit application.

# SUBSURFACE DRILLING PERMIT APPLICATION

## PERMIT APPLICATION INSTRUCTIONS AND FEES (CONTINUED)

### Section 4: Drilling Information (continued)

The rest of this section is self-explanatory, may change in the field based on conditions encountered, and must be filled in except **Destruction Method** for borings only. Schematics may be submitted instead of filling in the well construction details, particularly if wells will be constructed differently from each other.

**Destruction Method** requires the use of a maximum of 6 gallons of water per 94 pounds of cement. This measurement (for both water and cement) must be able to be demonstrated in the field upon request from the inspector (such as using a 5-gallon bucket for measuring the water and using entire bags of cement). For **pressure grouting**, the well construction log and grout calculations must be submitted. The sand pack may not be more than 3 feet above the top of the screened interval, the screened interval may not be longer than 25 feet, and the bottom of the original boring may not be more than 2 feet deeper than the bottom of the constructed well. The total depth of the well and the fact that there are no obstructions in the well must be verified in the field. Type I/II cement grout must be tremied into the well, followed by application of 25 psi pressure maintained for 5 minutes. If the well does not meet pressure grouting criteria, it must be destroyed by drilling out to the total depth of the original boring. For **overdrilling**, the well casing and all annular material must be removed using a guide rod for the entire depth of the well inserted prior to drilling, and the boring tremie grouted to the surface using Type I/II cement grout. A general observation is that grouting borings using a  $\frac{3}{4}$  inch PVC pipe, typically used to collect grab groundwater samples in borings, does not work with a screened section. Free falling grout is only allowed if the boring is dry, or if water is present in less than 10% of the boring, and less than 30 feet deep. Grout calculations must be provided with application.

### Section 5: Well/Boring Owner

The **name** of the entity owning the wells and borings must be listed along with their contact person (if different from the name of the well/boring owner), address, telephone number, and email address. The **contact person** must be directly associated with or an agent of the entity owning the wells and borings such as a property manager, real estate manager, contractor, or lawyer but not the environmental consultant listed on the permit application in Section 8. A **telephone** number and an **email** address must be provided to allow the inspector to contact the well/boring owner to verify information if necessary. By providing an email address, the well/ boring owner will receive an electronic copy of the permit. The permit application must be **signed** and **dated** by either the entity listed as the owner of the wells and borings or the contact person. **Signatures (Sections 5 through 8)** do not need to be original; however, one copy of the permit application must contain all of the information besides the signatures in a legible format. ALL SIGNATURES REQUIRED (SECTIONS 5 THROUGH 8) DO NOT NEED TO BE ON THE SAME COPY OF THE PERMIT APPLICATION.

### Section 6: Property Owner

The **name** of the entity owning the property must be listed and needs to match the name listed with the County Assessor for this property. The **contact person** must be directly associated with or an agent of the entity owning the property such as a property manager, real estate manager, contractor, or lawyer but not the environmental consultant listed on the permit application in Section 8. A **telephone** number and an **email** address must be provided to allow the inspector to contact the property owner to verify information if necessary. By providing an email address, the property owner will receive an electronic copy of the permit. The permit application must be signed and dated by the entity listed as the property owner only.

**AGENTS CANNOT SIGN FOR THE PROPERTY OWNER.** For public rights-of-way, a copy of the encroachment permit can be substituted for the property owner signature. The City of San Mateo, among others, will not issue an encroachment permit until the subsurface drilling permit is issued, but the City of San Mateo will issue a letter of intent to issue an encroachment permit which is acceptable as a substitute for the property owner signature in City of San Mateo rights-of-way.

### Section 7: Drilling Company

The **name** of the company proposed to drill the wells and borings must be listed along with the drilling company **contact person, address, telephone number, and email address**. In addition, the **driller's C57 license number** must be provided. By providing an email address, the drilling company will receive an electronic copy of the permit. The permit application must be signed and dated by the driller's contact person. If the drilling company changes, then a new subsurface drilling permit application should be filled out completely except for Sections 5, 6, and 8.

### Section 8: Consulting Company

The **name** of the company overseeing the proposed drilling of the wells and borings must be listed along with the **project manager, address, telephone number, and email address**. The responsible professional overseeing the work must **print** their name legibly, **sign** their name and date, and provide either their **California Professional Geologist or Civil Engineering** number. Field contact name and number, if known, are optional but beneficial for all parties involved.

**LEGEND**

- ▲ Boring Location - ERM 2019
- Boring Location - West 2016
- ◆ Boring Location - Station Park Green
- Sample Location - Vail Burner & Oil Company Excavation Samples
- Steel Storage Tank, Sanborn 1953 to 1969
- Asphalt Mixing Plant: various oil tanks (Sanborn 1953 to 1961)
- Previous Oil Tank / Oil Pad, Sanborn 1953 to 1961
- Cement with Hydraulic Oil, Sanborn 1953 to 1969
- Potential ground stain, Aerial Photo 1943 to 1956
- - - Former Spur Track, Sanborn and Aerial Photo 1943 to 1968



**Figure 1**  
*Historic Site Features and  
Previous Assessment Locations  
Hayward Park Caltrain Station  
San Mateo, California*

**APPENDIX B      FIELD NOTES**



# DAILY FIELD RECORD

Page 1 of 2

Project and Task Number:	0520-B18	Date:	2/8/2021
Project Name:	Caltrain ITPK	Weather:	Sunny
Location:	San Mateo	Field Activity:	Borehole Clearance,
Recorded By:	Alex Martinez		drilling, well install

Personnel	Company	Time In	Time Out
Alex Martinez	ERM	0700	1445
	Penecon	0700	"
Clint Harms	ERM	0945	1500

Time (24 HR)	Description of Work Performed
0700	ERM / Penecon arrive onsite, conduct safety tailgate.
0730	Completed safety tailgate
0740	Crews began setting up equipment, setting up @ location directly adjacent to the building, outside the fence. Across from former soil boring location ITPK-38-4, Will be Mw-6.
0800	Began hand auger following concrete curing
0820	Completed borehole clearance to 5ft. bgs. Will via air to clear larger boreholes. Drill crew completed curing of asphalt @ Mw-5 to the north.
0915	Began hand auger @ Mw-6.
0945	Clint Harms arrives onsite. Crew completed borehole clearance and began drilling. Air knife crew set up @ Mw-5 for clearance.
1010	Began clearance activities and drillers completed drilling. Contacted team member to determine well construction details for next two locations.
1045	Drill crew begin <sup>stem</sup> hollow augering.
1100	Air knife crew set up @ Mw-3 for clearance.
1215	Mw-3 cleared to 5 ft. bgs. It should be noted that water was present in boreholes for Mw-3 and Mw-5.
1225	Completed setting well @ Mw-6.
1230	Break for lunch.



 ERM DAILY FIELD RECORD

Page 7 of 7



# DAILY FIELD RECORD

Page 1 of 2

Project and Task Number:	0520818	Date:	2/9/21
Project Name:	Caltrain HPK	Weather:	Cloudy
Location:	San Mateo, CA	Field Activity:	Borehole Clearance, Well install
Recorded By:	Alex Martinez		

Personnel	Company	Time In	Time Out
Alex Martinez	ERM	0700	
Clint Harms	Penecore	0800	1445
		0700	

Time (24 HR)	Description of Work Performed
0700	Arrive onsite. Conduct safety brief.
0720	Drilling crew set up @ MW-3 for installation activities. Air vac crew set up @ MW-4 for borehole clearance.
0820	Completed drilling to depth. Began well construction. Air vac crew down to depth and continuing to clean out borehole.
0935	Crew takes break, so
1000	Crew returns. Drillers set up @ MW-1. Air vac crew sets up @ MW-9 for Borehole clearance.
1200	Air vac crew completes clearance @ MW-9. It should be noted that concrete was discovered approximately 2 ft. 6 in. Used jackhammer to break concrete/debris, approx. 1.5 ft thick.
1230	Crew break for Lunch.
1300	Crew returns from lunch. Air vac crew to jackhammer concrete discovered below grade @ MW-8. Drill crew to ret well @ MW-4
1400	GPRS arrives onsite to clear additional well install location.
1500	GPRS completed clearance and offsite. Penecore continues to drill and Borehole clearance. Penecore crew member begins setting well boxes. MW-8 has concrete below grade. Crew using jackhammer and rig to break apart concrete.
1530	Enthalpy carrier picked up samples.
1555	Drill crew broke through concrete and reached soil @ 3 ft. bgl. Will finish hand auger and drilling the next day.



## DAILY FIELD RECORD

Page 2 of 2



# ERM DAILY FIELD RECORD

Page 1 of 1

Project and Task Number:	0520815	Date:	2/10/21
Project Name:	Caltrain HPK	Weather:	Sunny
Location:	Seas Matco	Field Activity:	Borehole clearance, well in stall.
Recorded By:	Alex Martinez		

Personnel	Company	Time In	Time Out
Alex Martinez	ERM	0700	1630
Clint Harms	↓	0800	1115
John Cavanaugh	↓	1215	1320
	Penecore	0700	1630

Time (24 HR)	Description of Work Performed
0700	Arrived onsite.
0720	Conducted safety tailgate w/ team members
0740	Set up @ Mw-8 to complete clearance.
0800	Borehole cleared out for drilling. Air vac crew set up @ Mw-7
0835	Concrete discovered @ Mw-7 at 2.5 feet. Will move on to Mw-2 to clear. Drill rig will be needed to break the concrete.
0935	Drilling/installation completed @ Mw-8. Drill crew sets up @ Mw-7 to break concrete w/ rods.
1000	Penecore breaks through concrete.
1010	Crew sets up @ Mw-9 for drilling/install.
1025	Completed drilling and set up for installation
1030	Air vac cleared Mw-2. Crew also cleared Mw-7.
1215	J. Caravanagh arrives onsite to discuss scope of repair.
1320	Crew breaks for lunch. J. Caravanagh off site.
1355	Drill crew sets up to complete drilling @ Mw-7.
1420	No recovery in drilling core @ Mw-7. Will set well @ 10 ft-bsl.
1515	Well installation complete. Begin cleanup.
1630	Completed work and offsite.



## DAILY FIELD RECORD

Page \_\_\_\_\_ of \_\_\_\_\_

Time (24 HR)	Description of Work Performed	
No. of Drums	Description of Contents	
10	Soil Cuttings	Northern Parking area
3	Purge & Decon Water	"



# PeneCore™ DRILLING

220 N. East Street • Woodland, CA 95776  
Office: 530-661-3600 • www.PeneCore.com

Date: 02-08-2021

Project Address: 401 Concor Dr. San Mateo, CA

Project #

Equipment # Rig 120 and Airknife all borings

Client: ERMM - San Mateo

Field Rep: Alex Martinez

Client Project #

## Daily Field Log

Start	End	
4:30	7:00	Mob to Job site
7:00	7:30	Safety meeting and set up
7:30		Start 3 Borings Concreting to 4'
		3 Borings Airknife clear to 5'
		DPT 3 Borings to 12' for soil sampling and
		Drill. 3 Borings For Install 3 2" Wells to 12'
		3:30 screen 3'-12' #2/12 sand
3:30	4:00	Grout and install 3 wells Boxes and clean up
4:00	5:00	Pack up and mob to Hotel
12:00	12:30	Lunch.

### Total Hours:

Total DPT Borings:	3	Total Footage:	36	Rig Operator:	Miguel M.	# Hrs:
Total Auger Borings:	3	Total Footage:	37	Tech 1:		# Hrs:
Hand Auger Borings:		Total Footage:		Tech 2:	Armando L.	# Hrs:
Wells Installed:		Total Footage:		Tech 3:	Sergio O	# Hrs:
Wells Abandoned:		Total Footage:		Tech 4:	Pedro UrVina	# Hrs:

### Consumables Used

PVC Riser:	/	Diameter:	2	Schedule:	80	Qty 5' Sections:	3	Qty 10' Sections:	
PVC Screen: .010	/	Diameter:	2	Schedule:	80	Qty 5' Sections:	6	Qty 10' Sections:	
PVC Screen: .020		Diameter:		Schedule:		Qty 5' Sections:		Qty 10' Sections:	

Cement: 3

Concrete: 3

Asphalt: X

Sand: 21

Size: 2/12

Bentonite: X

Chips: 2

Crumbles: X

Powder: X

Drums: 3

Well Box: 3 Size: 8"

DT22 Liners: 6

DT32 Liners: X

MC Liners: X

Expendable Tips: X

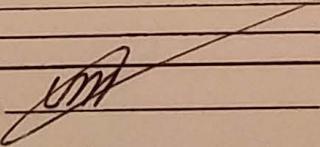
Tubing: X

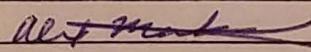
Others: X

Concrete Coring: 3 to 4"

### Rental Equipment:

### Comments & Additional Consumables:

PeneCore Representative: 

Client Representative: 


**PeneCore™**  
**DRILLING**

 220 N. East Street • Woodland, CA 95776  
 Office: 530-661-3600 • www.PeneCore.com

Date: 08-09-2021

Project Address: 401 Concar Dr, San Mateo, CA

Project #

Equipment # Rig 120 and AirKnife all Borings

Client: ENR - San Mateo

Field Rep: Alex Martinez

Client Project #

Daily Field Log

Start	End	Activity
6:30	7:00	Mob to Job site
7:00	7:30	Safety meeting and set up
7:30		3 Concrete coring to 4'
		3 Borings Airknife for clear to 5'
		DPT 3 Borings to 10' for soil sampling and
		Drill 3 Borings and install 3 2" wells to 10'
		3:30 screen 3'-10' # 2/12 sand
3:30	4:30	Grout and install 3 wells Boxes
4:30	5:00	Clean up and pack up
5:00	5:30	Mob to Hotel
12:00	12:30	Lunch.

## Total Hours:

Total DPT Borings: 3	Total Footage: 30	Rig Operator: Miguel M.	# Hrs:
Total Auger Borings: 3	Total Footage: 30	Tech 1:	# Hrs:
Hand Auger Borings:	Total Footage:	Tech 2: Armando L.	# Hrs:
Wells Installed:	Total Footage:	Tech 3: Sergio O.	# Hrs:
Wells Abandoned:	Total Footage:	Tech 4: <input checked="" type="checkbox"/>	# Hrs:

## Consumables Used

PVC Riser: <input checked="" type="checkbox"/>	Diameter: 2"	Schedule: 80	Qty 5' Sections: 3	Qty 10' Sections:
PVC Screen: .010 <input checked="" type="checkbox"/>	Diameter: 2"	Schedule: 80	Qty 5' Sections: 6	Qty 10' Sections:
PVC Screen: .020 <input checked="" type="checkbox"/>	Diameter:	Schedule:	Qty 5' Sections:	Qty 10' Sections:

Cement: 3

Drums: 3

Concrete: 3

Well Box: 3 Size: 8"

Asphalt: X

DT22 Liners: 6

Sand: 15

DT32 Liners: X

Size: 2/12

MC Liners: X

Bentonite: X

Chips: 2

Crumbles: X Powder: X

Expendable Tips: X

Concrete Coring: 3 to 4"

Tubing: X

Others: X

## Rental Equipment:

## Comments &amp; Additional Consumables:

Client Representative: Alex MartinezPenecore Representative: JPM



220 N. East Street • Woodland, CA 95776  
Office: 530-661-3600 • www.PeneCore.com

Date: 02-10-2021

Project Address: 401 Concar Dr, San Mateo, CA.

Project #

Equipment # Rig 120 and Airknife all Boring

Client: ER M - San Mateo

Field Rep: Alex Martinez

Client Project #

#### Daily Field Log

Start	End	
6:30	7:00	Mob to Job site
7:00	7:30	Safety meeting and set up
7:30		3 Concrete coring to 4"
		3 Boring Airknife for clear to 5'
		DPT 3 Boring to 10' and 12' for soil sampling
		Drill 3 Boring to and Install 3 2" wells to 10'-12"
4:00		Screm 3'-12' # 2/12 sand
4:00	4:45	Grout and Install 3 wells Boxes
4:45	5:15	Clean up and pack up
5:15		Mob to Hotel

#### Total Hours:

Total DPT Borings:	3	Total Footage:	30	Rig Operator:	Miguel M.	# Hrs:
Total Auger Borings:	3	Total Footage:	36	Tech 1:	Armando L.	# Hrs:
Hand Auger Borings:		Total Footage:		Tech 2:	Sergio O	# Hrs:
Wells Installed:		Total Footage:		Tech 3:		# Hrs:
Wells Abandoned:		Total Footage:		Tech 4:		# Hrs:

#### Consumables Used

PVC Riser:	✓	Diameter:	2"	Schedule:	80	Qty 5' Sections:	3	Qty 10' Sections:	
PVC Screen: .010	✓	Diameter:	2"	Schedule:	80	Qty 5' Sections:	6	Qty 10' Sections:	
PVC Screen: .020		Diameter:		Schedule:		Qty 5' Sections:		Qty 10' Sections:	

Cement: 3

Concrete: 3

Asphalt: X

Sand: 20

Size: 2/12

Bentonite:

Chips:

Crumbles: X

Powder: X

Drums: 7

Well Box: 3 Size: 8"

DT22 Liners: 6

DT32 Liners: X

MC Liners: X

Expendable Tips: X

Tubing: X

Others: X

Concrete Coring: 3 to 4"

#### Rental Equipment:

Comments & Additional Consumables:

PeneCore Representative:

Client Representative:



# DAILY FIELD RECORD

Page 1 of 2

Project and Task Number:	0520818.04.01	Date:	2/23/21
Project Name:	Caltrain HPIC	Weather:	Sunny
Location:	San Mateo, CA	Field Activity:	Well Dpl.
Recorded By:	Alex Martinez		

Personnel	Company	Time In	Time Out
Alex Martinez	ERM	0740	1630
	Pencore	0700	1630

Time (24 HR)	Description of Work Performed
0740	Arrive onsite. Conducted safety tailgate.
0800	Set up @ Mw-5. Will begin with surging well for approximately 15 minutes
0855	Set up @ Mw-3 after purging Mw-5 dry. The following is the process for dry wells:
	* Move onto next location and return at the end of the day following development attempts @ all site wells. This will allow for sufficient recharge to occur.*
0910	Began purging Mw-3 w/bailer.
0943	Stopped purging to allow recharge. Moved on to Mw-2
1000	Began purging.
1017	Stopped purging as well is nearly dry.
1020	Set up @ Mw-4
1023	Began surging
1038	Began purging.
1100	Set up @ Mw-6
1140	Set up @ Mw-7 to begin surging
1200	Break for lunch. Will pump afterward. Recharge is excellent (~1 ft / 2 min.)
1235	Began pumping Mw-7
1330	Completed development of Mw-7
1335	Set up @ Mw-9
1340	Began surging.



## DAILY FIELD RECORD

Page 2 of 2

Time (24 HR)	Description of Work Performed
1415	Stopped @ MW-9 following dry purge.
1418	Began surging @ MW-8
1450	Purged dry
1500	Set up @ MW-1
1502	Began surge.
1510	Purged dry. Will move back to wells started in the morning.
1515	Set up @ MW-5
	Purged dry
	Set up @ MW-3
1600	Purged dry. Began cleanup.
1620	Completed work and offsite.

No. of Drums	Description of Contents	Location



## DAILY FIELD RECORD

Page 1 of \_\_\_\_\_

Project and Task Number:	0520818, 04-01	Date:	2/24/21
Project Name:	Alex Martinez	Weather:	Sunny
Location:	Jan Mater, CA	Field Activity:	Well Dpt
Recorded By:	Alex Martinez		

Personnel	Company	Time In	Time Out
Alex Martinez	ERM	0700	1430
	Pencore	~700	1430
	Calvada	0800	1130

Time (24 HR)	Description of Work Performed
0700	Arrived onsite and conducted safety tailgate.
0710	Set up @ MW-5 and begin pumping. Will move onto next location after well becomes dry. Will indicate if well is completed.
0740	Set up @ MW-3
0755	Calvada arrives onsite. Tailgate and discussed where locations are present
0820	Set up @ MW-4
0848	Set up @ MW-6
0920	Set up @ MW-8.
1030	Completed development. Turbidity never dropped below 300 NTUs, but pumped 14 gallons (11.3 required for 10 casing volumes). Set up @ MW-9
1100	Set up @ MW-1 and MW-2
1135	Set up @ MW-5 for more parameters.
1150	Set up @ MW-3 for more parameters.
1205	Break for lunch. Wrapped up development for MW-3 and MW-5. Despite not dropping turbidity, parameters were relatively stable and 10 casing volumes removed from each well. MW-9 also had 10 casing volumes removed, but will let rework to collect additional parameters.
1240	Set up @ MW-4
	Set up @ MW-9
	Set up @ MW-6
1340	Set up @ MW-2



# DAILY FIELD RECORD

Page \_\_\_\_\_ of \_\_\_\_\_

Time (24 HR)	Description of Work Performed	
1400	Set up e MWL	
1405	Well immediately went dry after attempting to purge to complete development. Recharge is ~ 1 ft / 15-20 min. Made note on field sheets. Other locations that could not achieve < 100 NTUs had stable parameters and completion of 10 caging volumes. Crew began cleanup.	
1430	Completed well and -ffsits.	
No. of Drums	Description of Contents	Location
3	Water	





# ERM

## Daily Field Report



Environmental  
Resources  
Management  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
(925) 946-0455

Project Name: Caltrain Hayward Park  
 Site Address: 401 Concar Dr.  
 City, State: San Mateo  
 Field Person: D. Messmann  
 Activities: Groundwater sampling

Date: 2.26.21  
 Project #: 0520818  
 PM/PIC: Clint Harms

Weather: clear, sunny  
 Temp: 45°F Baro: 10 Rainfall: 0

### Site Visitors

Name	Onsite	Offsite	Purpose
Amanda	ERM		

Time	Summarize Field Activities
0625	Arrive onsite
	Wait for ice & DJ water
0650	Safety Tailgate - vehicle traffic, public interaction / RR preservative in bottleware, hand injuries
	Site walk to open & gauge wells
0900	Troubleshoot turbidity at Alex - two separate pieces of equipment but only 1 piping pump. Sample MW-09. Problem alleviated. changed display settings on Horiba screen.
1000	Set up @ MW-08. Sample time 1045.
1100	Set up @ MW-07. Sample time 1140
1215	Offsite to use restroom
1230	Setup @ MW-05. Sample time 1300
1321	Setup @ MW-07. Sample at 1345
1405	Pump purge water
1410	Set up @ MW-04. Sample time 1435
1500	Offsite to use restroom & get fresh ice
1532	Set up @ MW-03. Sample time 1600
1620	Set up @ MW-02. Sample time 1650
1715	Set up @ MW-01. Sample time 1735
	- Unable to stabilize turbidity readings, spoke w/ Alex to get approval to gather sample. Water table low & recharge slow
1810	Offsite to Entropy, Berkeley.

1925 Samples dropped in after hours box. Lab contact notified.



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-01		Start Purge Time:	1719				
Sampling Date:	2.26.21		Stop Purge Time:	1732				
Field Person:	A. Messmann		Purge Rate (lpm):	0.19 LPM				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.5 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1735				
Well Material:	PVC		End Sampling Time:	1749				
Depth to Water (ft):	7.67		Sampling Rate (lpm):	0.19 LPM				
Depth to Bottom (ft) <sup>5</sup> :	10.02		Sample Description:	low flow barged @ D710 Depth: 7.85				
Well Volume (gal):	—							
Well Condition:	Good							
Pump Type:	Pari		Sample Filtered?	Field filter and preserve from (6020) only <input checked="" type="checkbox"/> Am				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Top Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1722	17.59	0.002	6.25	7.05	240	8.60	394	clear / yellow;
1725	17.50	15.4	0.0	6.73	6	8.51	0.0	tubing lowered to
1728	17.75	15.6	0.0	6.73	-15	8.45	318	reach water-table;
1731	19.80	15.4	0.0	6.84	-9	8.29	68.2	purge rate increased due to slow recharge/ lack of available water.
								Tubing currently @ apx 8.5' and TD is 10'.
								Unable to stabilize turbidity. sample taken, no odor or sheen.
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

(1) - Field parameter measurements to be recorded every 3 to 5 minutes.

(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purgung rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample @ 1735



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-02		Start Purge Time:	1625				
Sampling Date:	2.26.21		Stop Purge Time:	1648				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	SLC COC		Purge Volume (gal):	~ 0.6 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1650				
Well Material:	PVC		End Sampling Time:	1705				
Depth to Water (ft):	6.55		Sampling Rate (lpm):	0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.90		Sample Description:	Low flow Ganged at 0715 Depth 6.80				
Well Volume (gal):								
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve Iron (6020) only				
Tubing Material:	44" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.5 <sup>1</sup> (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1629	20.67	2.59	0.0	7.29	238	6.55	3.3	clear/yellow; pump speed reduced to
1632	20.49	3.17	3.51	7.36	243	6.78	3.0	lowest setting, NO odor or sheen observed
1635	20.35	3.21	2.86	7.40	242	6.88	3.3	
1638	20.11	3.25	2.37	7.44	242	7.10	3.8	
1641	19.65	2.97	0.89	7.42	242	7.14	5.0	
1644	19.04	3.23	0.30	7.33	243	7.14	4.8	
1647	18.73	3.25	0.00	7.30	243	7.14	4.7	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%

- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1650



**LOW-FLOW GROUNDWATER SAMPLING FORM**  
**Caltrain Hayward Park**  
**401 Concar Dr**  
**San Mateo, CA**

Well ID:	MW-03		Start Purge Time:	1538				
Sampling Date:	2.26.21		Stop Purge Time:	1557				
Field Person:	A.Messmann		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.75 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1600				
Well Material:	PVC		End Sampling Time:	1612				
Depth to Water (ft):	6.81		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.98		Sample Description:	Low flow Gauged at 0718 Depth: 7.13				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Plastic		Sample Filtered?	Field filter and preserve iron (6020) only (PM)				
Tubing Material:	'4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1539	17.81	1.51	0.08	7.89	203	6.31	7.0	clear/yellow; pump
1542	18.04	1.84	4.95	7.48	214	6.99	5.2	lowered to slowest
1545	17.99	1.79	6.20	7.48	214	7.14	5.0	speed. no odor or
1548	18.01	1.79	5.31	7.44	215	7.15	5.3	shallow observed.
1551	18.09	1.80	6.17	7.45	214	7.15	5.7	yellow hue
1553	18.21	1.82	6.43	7.46	214	7.15	5.5	
1556	18.27	1.83	6.32	7.45	214	7.14	5.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.33 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1600



### LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-03		Start Purge Time:	1538				
Sampling Date:	2.26.21		Stop Purge Time:	1557				
Field Person:	A.MESSMANN		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	Sel COC		Purge Volume (gal):	$\sim 0.75$ gal				
Well Diameter (in):	2"		Begin Sampling Time:	1600				
Well Material:	PVC		End Sampling Time:	1612				
Depth to Water (ft):	6.81		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.98		Sample Description:	Low flow Ganged at 0718 Depth: 7', 13'				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Plastic		Sample Filtered?	Field filter and preserve iron (6020) only (Plastic)				
Tubing Material:	'4" LDPE		If Yes, Filter Type:	0.45 µm				
Imp Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1539	17.81	1.51	0.08	7.89	203	6.81	7.0	clear/yellow j/pump
1542	18.04	1.84	4.95	7.48	214	6.99	5.2	lowered to slower
1545	17.99	1.79	6.20	7.43	214	7.14	5.0	speed. no odor or
1548	18.01	1.79	5.31	7.44	215	7.15	5.3	sheen observed.
1551	18.09	1.80	6.17	7.45	214	7.15	5.3	yellow hue
1553	18.21	1.82	6.43	7.46	214	7.15	5.5	
1556	18.27	1.83	6.32	7.45	214	7.14	5.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1600



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-04		Start Purge Time:	1415				
Sampling Date:	02.26.21		Stop Purge Time:	1432				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~ 0.6 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1435				
Well Material:	PVC		End Sampling Time:	1450				
Depth to Water (ft):	7.76		Sampling Rate (lpm):	0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	11.93		Sample Description:	Low-flow Gauged at 0721 Depth 7.71				
Well Volume (gal):	✓							
Well Condition:	Good							
Pump Type:	Peri							
Tubing Material:	1/4" LDPE		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/> AFM				
Imp Intake Depth (ft):	7.5' (middle of well screen)		If Yes, Filter Type:	0.45 um				
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1416	18.01	5.30	1.67	8.03	18	7.80	0.9	clear; peri pump at lowest speed setting;
1419	18.46	5.34	0.86	7.97	104	7.81	20.7	yellow hue; no odor or sheen
1422	18.38	5.37	7.10	7.93	134	7.96	16.4	observed
1425	18.28	5.40	6.37	7.89	151	8.14	13.6	
1428	18.11	5.44	5.92	7.85	158	8.19	8.1	
1431	17.82	5.49	5.97	7.85	156	8.25	0.8	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1435



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-05		Start Purge Time:	1240				
Sampling Date:	A-Messmann		Stop Purge Time:	1259				
Field Person:	226-21		Purge Rate (lpm):	0.18 Lpm				
Laboratory Analyses:	SPL COC		Purge Volume (gal):	~ 0.75 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1300				
Well Material:	PVC		End Sampling Time:	1313				
Depth to Water (ft):	3.80		Sampling Rate (lpm):	<del>~0.18</del> 0.18 Lpm				
Depth to Bottom (ft) <sup>5</sup> :			Sample Description:	Low-flow Gauged at 0725 Depth 3'.85				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Plastic pump		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6'		(middle of well screen)					
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1244	23.17	10.9	0.0	7.79	95	3.88	42.5	clear; pump at lowest speed setting
1247	22.85	12.3	6.11	7.79	47	4.07	41.8	yellow hue; no odor or sheen
1250	22.48	12.5	0.42	7.80	10	4.20	41.8	odor or sheen
1253	22.03	12.5	0.13	7.82	-12	4.38	41.0	
1255	21.88	12.4	0.0	7.82	-20	4.59	40.7	
1258	21.64	12.7	0.0	7.82	-25	4.67	41.7	↓
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1300



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-06		Start Purge Time:	1117				
Sampling Date:	2.26.21		Stop Purge Time:	1135				
Field Person:	A. Messmann		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~ 0.75 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1140				
Well Material:	PVC		End Sampling Time:	1208				
Depth to Water (ft):	7.44		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	11.90		Sample Description:	Low-flow Gauged at 0734 Depth 07.90				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Drip pump		Sample Filtered?	Field filter and preserve iron (6020) only (AM)				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	7.5'		(middle of well screen)					
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1119	15.50	23.7	0.0	7.05	188	7.74	11.4	Clear; had to increase pump speed due to unit turning off.
1122	16.02	37.6	5.50	7.11	183	7.91	8.6	
1125	16.53	37.6	4.44	7.08	188	8.25	8.6	
1128	16.96	38.6	3.54	6.96	191	8.29	8.2	Pump at lowest speed, unable to reduce drawdown. No odor or shear observed. Yellow hue also observed
1131	17.39	37.9	3.34	6.79	194	8.35	8.9	
1134	17.65	38.3	3.0	6.99	195	8.52	9.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.  
(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1140



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-07		Start Purge Time:	1327				
Sampling Date:	2.26.21		Stop Purge Time:	1344				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.5 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1345				
Well Material:	PVC		End Sampling Time:	1358				
Depth to Water (ft):	7.79		Sampling Rate (lpm):	<del>0.54</del> 0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	2.03		Sample Description:	Low-flow Ganged at 0728 Depth 7'54				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45-um				
Imp Intake Depth (ft):	7.5" (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1330	19.59	43.7	0.75	6.25	71	7.82	15.8	clear/yellow;
1333	19.56	57.4	0.41	6.07	52	7.94	16.7	no odor or sheen
1336	19.53	58.0	0.19	6.19	46	7.96	16.7	observed
1339	19.43	58.4	0.09	6.22	45	7.96	16.6	
1341	19.38	58.4	0.03	6.23	44	7.98	16.0	
1344	19.36	58.3	0.01	6.23	45	8.09	15.4	↓
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1345



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-09	Start Purge Time:	1018					
Sampling Date:	2.26.21	Stop Purge Time:	1042					
Field Person:	A. Messmann	Purge Rate (lpm):	0.14 lpm					
Laboratory Analyses:	SLL CEC	Purge Volume (gal):	~ 0.5 gal					
Well Diameter (in):	2 <sup>1</sup> / <sub>2</sub>	Begin Sampling Time:	1045					
Well Material:	81C	End Sampling Time:	1058					
Depth to Water (ft):	4.08	Sampling Rate (lpm):	0.14 lpm					
Depth to Bottom (ft) <sup>5</sup> :	11.94	Sample Description:	low-flow Gauged at 0742 Depth 4'.08					
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Peri pump	Sample Filtered?	Field filter and preserve iron (6020) only (pm)					
Tubing Material:	1/4" LPPE	If Yes, Filter Type:	0.45 um					
Imp Intake Depth (ft):	7.5 <sup>1</sup>	(middle of well screen)						
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1022	14.78	2.22	0.0	7.11	111	4.14	4.6	Clear; pump at lowest speed;
1025	14.84	2.53	8.91	7.17	85	4.35	6.6	no odor or shear observed. yellow hue
1028	14.93	2.54	5.16	7.18	71	4.49	10.4	
1031	15.00	2.53	3.18	7.18	68	4.62	10.6	
1034	15.00	2.54	0.0	7.20	56	4.80	13.1	
1037	15.03	2.55	0.0	7.20	49	4.94	14.5	
1041	15.04	2.56	0.0	7.20	41	5.10	14.7	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample Time 1045



### LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-09		Start Purge Time:	0845				
Sampling Date:	2-25-21		Stop Purge Time:	0920				
Field Person:	A. Messmann		Purge Rate (lpm):	140 ml/min / 0.14 L/min				
Laboratory Analyses:	See COC		Purge Volume (gal):	0.5 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	0925				
Well Material:	PVC		End Sampling Time:	0955				
Depth to Water (ft):	6.70		Sampling Rate (lpm):	same as above				
Depth to Bottom (ft) <sup>5</sup> :	9.94		Sample Description:	low flow Gauged at 0737 Depth 06.72				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.51 (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
0848	11.99	6.15	0.0	6.79	66	6.70		clear; Pump at lowest setting; Diesel odor observed; no sheen in water.
0851	12.61	6.14	0.0	6.54	55	6.95		
0854	12.73	6.13	0.0	6.52	53	6.98		
0905	14.04	6.5.70	0.0	6.48	61	7.00		
0908	13.93	5.84	0.0	6.47	55	7.02		
0911	14.29	5.79	0.0	6.48	39	7.06		
0914	14.21	5.78	0.0	6.51	39	7.08		Turbidity measured on separate unit. Reading is at time of sampling.
0917	13.99	5.47	0.0	6.59	37	7.10	360	Sampling. ↳ Issue resolved. will be able to gather turbidity on future well locations
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

(1) - Field parameter measurements to be recorded every 3 to 5 minutes.

(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample Time 0925

## APPENDIX C      MONITORING WELL LOGS



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-1

Project Number: 0520818

Date Started: 2/9/2021

Project Name: HPK Caltrain

Date Completed: 2/9/2021

Location: San Mateo

Total Depth: 10 feet bgs

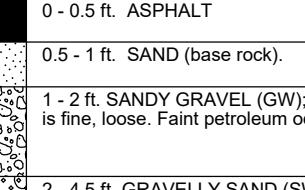
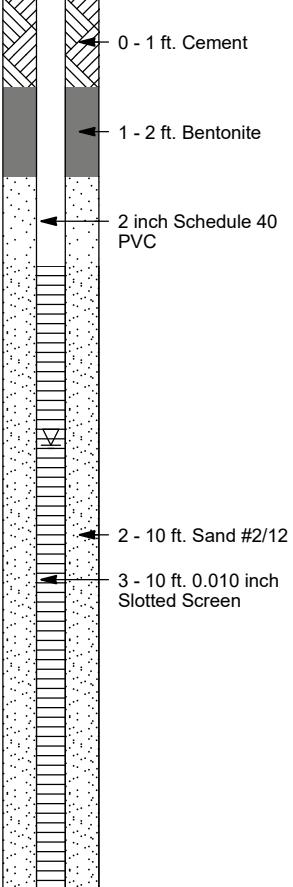
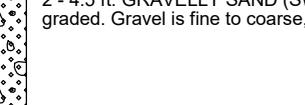
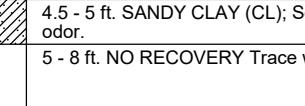
Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1		5.2	GW		0 - 0.5 ft. ASPHALT 0.5 - 1 ft. SAND (base rock). 1 - 2 ft. SANDY GRAVEL (GW); medium dens, well graded, slightly damp, sub rounded, sand is fine, loose. Faint petroleum odor.	
2		24.8			2 - 4.5 ft. GRAVELLY SAND (SW); Medium dense, fine, slightly damp, petroleum odor, well graded. Gravel is fine to coarse, sub rounded. Scattered brick fragments.	
3		32.0	SW			
4		4.5				
5		1.6	CL		4.5 - 5 ft. SANDY CLAY (CL); Soft, medium-high plasticity, damp, dark brown, faint petroleum odor.	
6					5 - 8 ft. NO RECOVERY Trace water present at 5 ft.	
7						
8		0.4			8 - 9.5 ft. CLAY (CL); Same as above, no sand. Grades to light brown at 9 ft.	
9		0.5	CL			
10		0.3	CL		9.5 - 10 ft. SANDY CLAY (CL); Light brown, firm, high plasticity, damp.	
					Total Depth - 10 feet bgs	
11						
12						
13						
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## **LOG OF MONITORING WELL: MW-2**

Project Number: 0520818  
Project Name: HPK Caltrain  
Location: San Mateo  
Contractor: Penecore  
Drilling Method: Hollow Stem Aug  
Logged By: A. Martinez

Date Started: 2/10/2021  
Date Completed: 2/10/2021  
Total Depth: 10 feet bgs  
Borehole Diameter: 8"

## Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1	0.2				0 - 0.50 ft. ASPHALT 0.5 - 1 ft. SAND (base rock).	
2	0.2				1 - 4.5 ft. CLAYEY SAND (SW); Moist, dense, coarse, well graded. Trace gravel. Clay is dark brown, soft. Water at 3.5 ft.	
3	0.1		SW			
4	0.5		CL		4.5 - 5 ft. SANDY CLAY (CL); Dark brown, firm, damp, medium to high plasticity. Sand is fine to coarse. 5 - 10 ft. NO RECOVERY.	
5	0.5					
6						
7						
8						
9						
10					Total Depth - 10 feet bgs	
11						
12						
13						
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-3

Project Number: 0520818

Date Started: 2/9/2021

Project Name: HPK Caltrain

Date Completed: 2/9/2021

Location: San Mateo

Total Depth: 10 feet bgs

Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1	20.1				0 - 0.5 ft. ASPHALT	
					0.5 - 1 ft. SAND (base rock).	
2	4.8		SP		1 - 2 ft. SILTY SAND (SP); Loose, poorly graded, slightly damp, fine.	
3	3.1		CL			
4	2.9		CL		2 - 4 ft. CLAY (CL); Soft, moist, medium to high plasticity, dark brown. Mild petroleum odor.	
5	3.3		CL		4 - 5.5 ft. SANDY CLAY (CL); Same as above, sand is very fine. Moderate petroleum odor. Very moist at 5 ft. bgs.	
6	2.4		CL		5.5 - 9.5 ft. CLAY (CL); Soft to firm, high plasticity, grayish brown, damp. Mottling from 7 - 9 ft. Petroleum odor.	
7	0.6		CL			
8	0.7					
9	0.3					
10	0.5		SP		9.5 - 10 ft. CLAYEY SAND (SP); Medium dense, fine, poorly graded, damp. Clay is soft, brown.	
					Total Depth - 10 feet bgs	
11						
12						
13						
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-4

Project Number: 0520818

Date Started: 2/9/2021

Project Name: HPK Caltrain

Date Completed: 2/9/2021

Location: San Mateo

Total Depth: 12 feet bgs

Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1	0.3				0 - 0.5 ft. ASPHALT	
					0.5 - 1 ft. SAND (base rock).	
1	0.8		CL		1 - 1.5 ft. SANDY CLAY (CL); Light gray, soft, high plasticity, moist. Sand is coarse. Brick fragments present.	
2	0.5		SW		1.5 - 3.5 ft. GRAVELLY SAND (SW); Medium dense, well graded, damp, reddish brown, fine to coarse. Gravel is coarse, sub rounded.	
3	0.3		CL		3.5 - 4.5 ft. SILTY CLAY (CL); Light yellow brown, soft to firm, medium plasticity, damp, trace angular gravels.	
4	0.7		CL		4.5 - 5 ft. CLAY (CL); Dark brown, soft, moist, high plasticity, trace sand. Water present at 5 ft. bgs.	
5					5 - 6.5 ft. NO RECOVERY	
6						
7	0.1		CL		6.5 - 9.5 ft. CLAY (CL); Same as above. Grades to brown at 8 ft.	
8	0.2					
9	0.2					
10	0.4		CL		9.5 - 10 ft. SANDY CLAY (CL); Soft, brown, low plasticity, slightly damp.	
11	0.4		CL		10 - 11.5 ft. CLAY (CL); Firm to stiff, slightly damp, high plasticity, light brown.	
12	0.1		SP		11.5 - 12 ft. CLAYEY SAND (SP); Medium dense, very moist, fine, poorly graded. Clay is soft and brown.	
					Total Depth - 12 feet bgs	
13						
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-5

Project Number: 0520818

Date Started: 2/8/2021

Project Name: HPK Caltrain

Date Completed: 2/8/2021

Location: San Mateo

Total Depth: 10 feet bgs

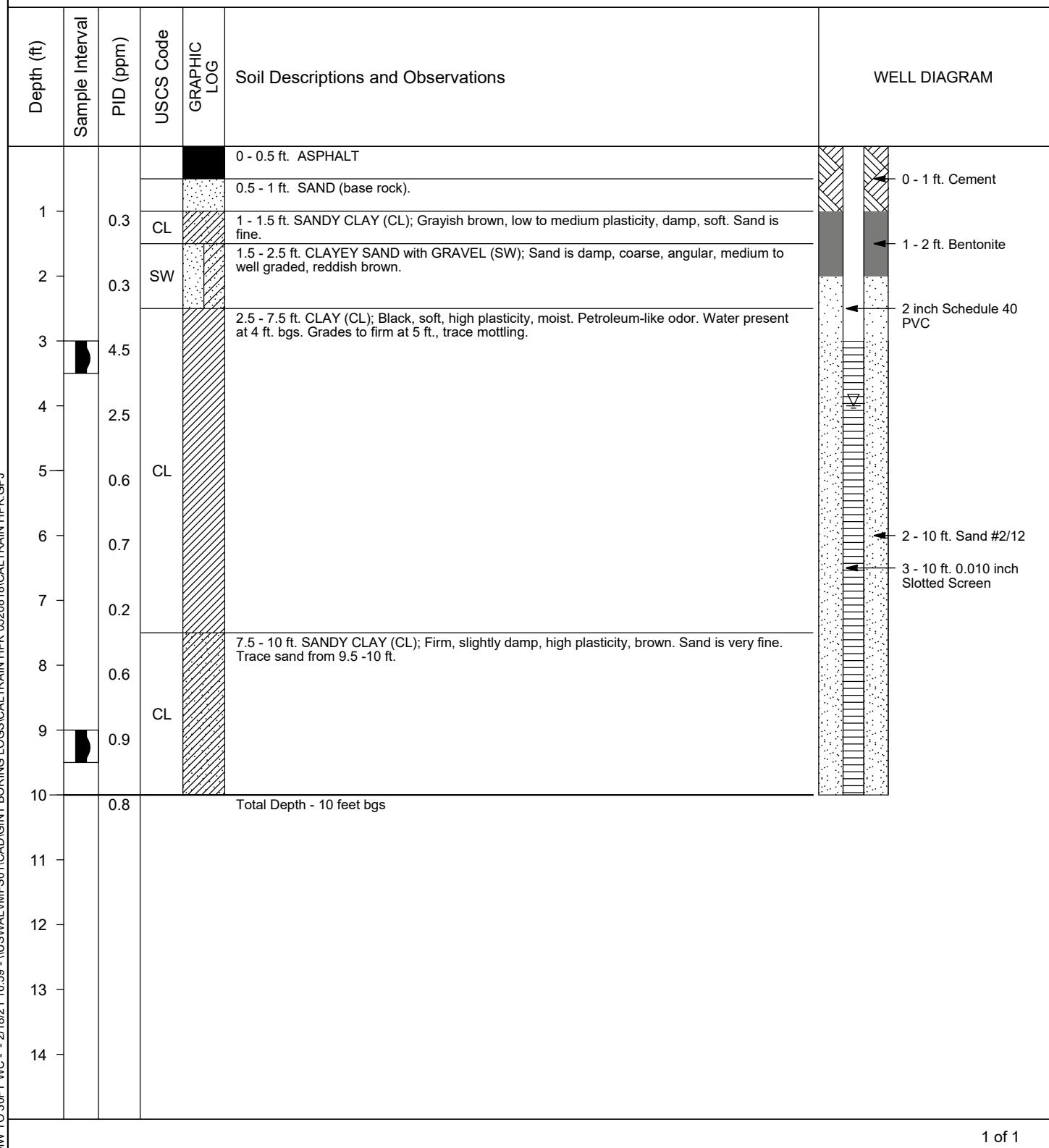
Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:





**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-6

Project Number: 0520818

Date Started: 2/8/2021

Project Name: HPK Caltrain

Date Completed: 2/8/2021

Location: San Mateo

Total Depth: 13 feet bgs

Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1	0.0	0.0			0 - 0.5 ft. ASPHALT	
					0.5 - 1 ft. SAND (base rock). Loose, damp, fine.	
1	0.0	CL			1 - 1.5 ft. SANDY CLAY (CL); Soft, low plasticity, damp, brown. Grades to high plasticity at 1.5 ft.	
2	0.0	SP			1.5 - 3 ft. CLAYEY SAND with GRAVEL (SP); Reddish brown, damp, coarse, angular, poorly graded and dense. Clay is soft, moist, low plasticity.	
3	0.0	CL			3 - 3.5 ft. CLAY (CL); White (possibly synthetic), soft, moist, medium plasticity.	
4	0.1				3.5 - 9.5 ft. CLAY (CL); Dark grayish brown, firm, high plasticity, damp to moist. Wood fragments/organic material from 4 - 5 ft. Mottling at 6 ft. Grades to light brown at 7 ft. Mottling and trace sand present.	
5	1.3					
6	0.1		CL			
7	0.0					
8	0.2					
9	0.0					
10	0.3		CL		9.5 - 11.5 ft. SANDY CLAY (CL); Light brown, slightly damp, firm, medium plasticity, mottling. Sand is fine. Sand increase from 10 - 11.5 ft.	
11	0.4					
12	0.6		SP		11.5 - 12 ft. CLAYEY SAND (SP); Fine, poorly graded, moist, dense. Clay is moist, soft, low plasticity, light brown.	
			CL		12 - 12.5 ft. SANDY CLAY (CL); Same as above.	
			CL		12.5 - 13 ft. SANDY CLAY (CL); Same as above.	
13	0.0				Total Depth - 13 feet bgs	
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-7

Project Number: 0520818

Date Started: 2/10/2021

Project Name: HPK Caltrain

Date Completed: 2/10/2021

Location: San Mateo

Total Depth: 12 feet bgs

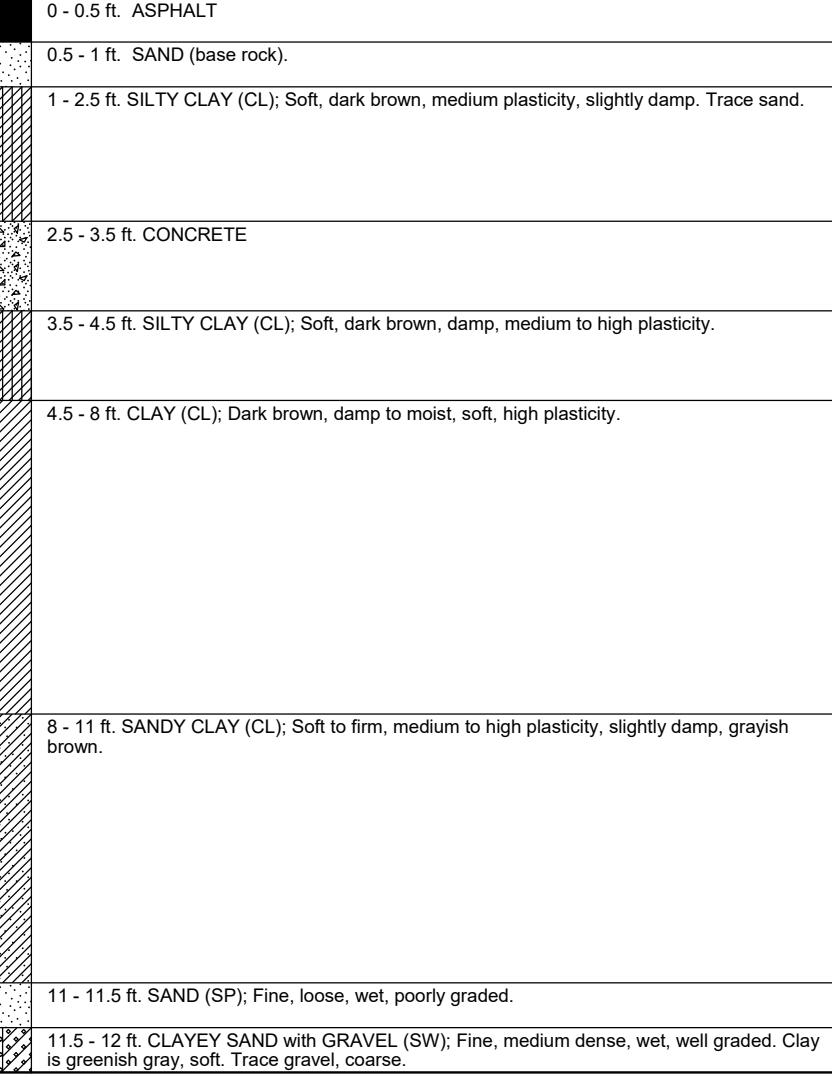
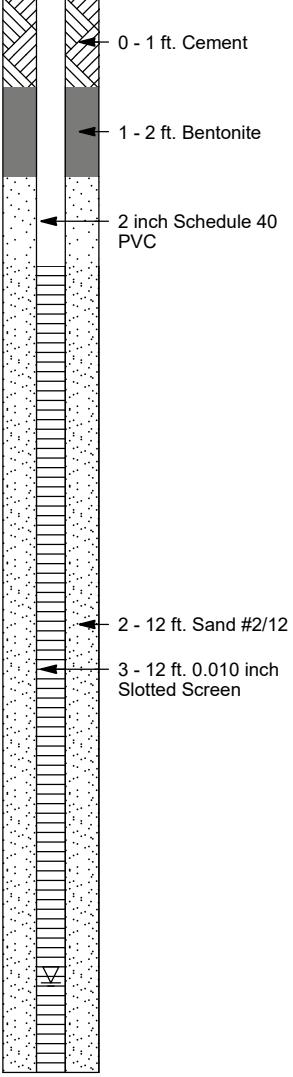
Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1	0.9	0.6	CL		0 - 0.5 ft. ASPHALT 0.5 - 1 ft. SAND (base rock). 1 - 2.5 ft. SILTY CLAY (CL); Soft, dark brown, medium plasticity, slightly damp. Trace sand. 2.5 - 3.5 ft. CONCRETE 3.5 - 4.5 ft. SILTY CLAY (CL); Soft, dark brown, damp, medium to high plasticity. 4.5 - 8 ft. CLAY (CL); Dark brown, damp to moist, soft, high plasticity.	
2	0.6	0.3	CL		8 - 11 ft. SANDY CLAY (CL); Soft to firm, medium to high plasticity, slightly damp, grayish brown.	
3	0.4	0.8	CL		11 - 11.5 ft. SAND (SP); Fine, loose, wet, poorly graded.	
4	0.6	1.3	SW		11.5 - 12 ft. CLAYEY SAND with GRAVEL (SW); Fine, medium dense, wet, well graded. Clay is greenish gray, soft. Trace gravel, coarse. Total Depth - 12 feet bgs	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						



**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-8

Project Number: 0520818

Date Started: 2/10/2021

Project Name: HPK Caltrain

Date Completed: 2/10/2021

Location: San Mateo

Total Depth: 12 feet bgs

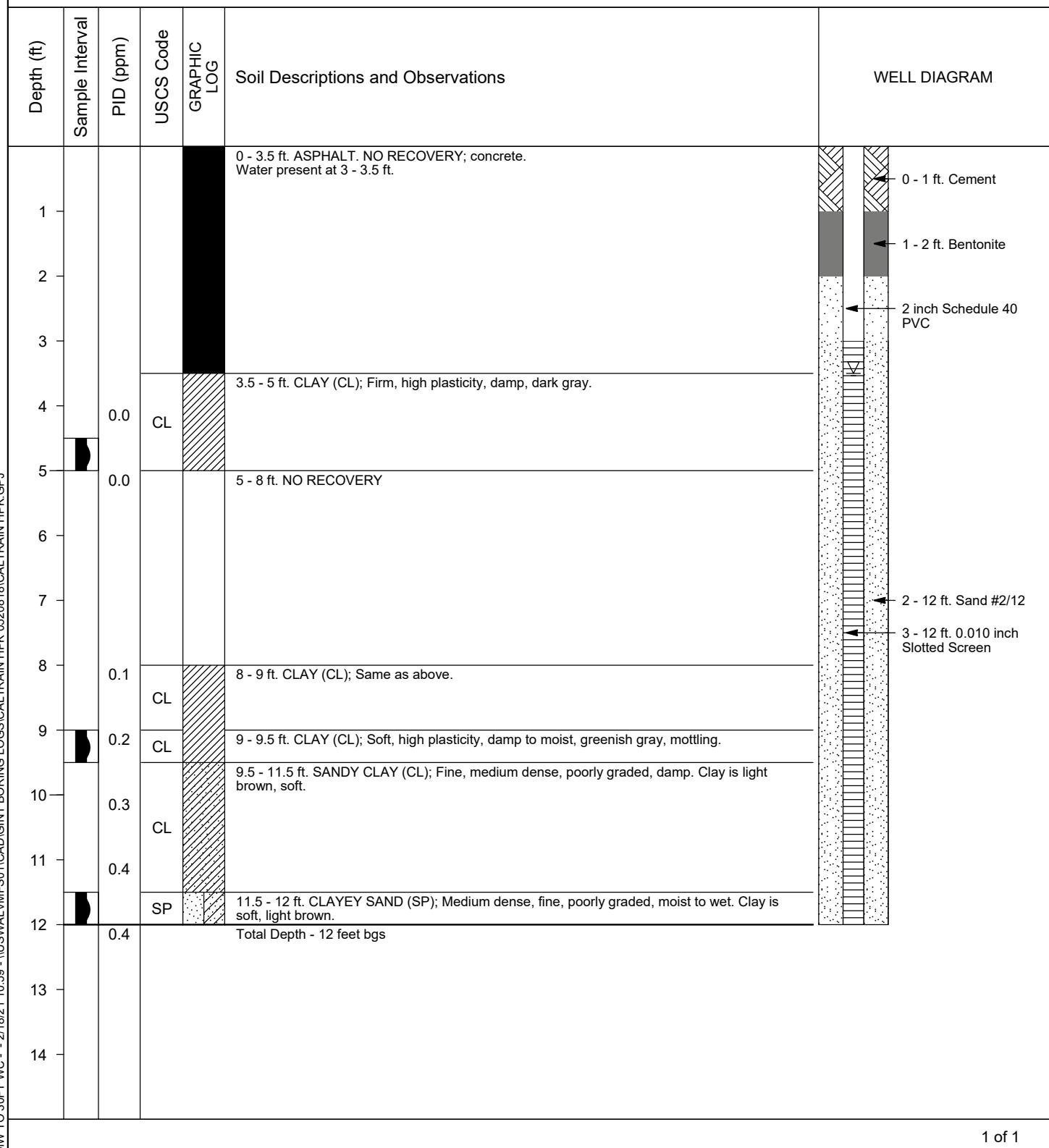
Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:





**ERM**  
1277 Treat Blvd., Suite 500  
Walnut Creek, CA 94597  
Phone: (925) 946-0455  
Fax: (925) 946-9968

## LOG OF MONITORING WELL: MW-9

Project Number: 0520818

Date Started: 2/10/2021

Project Name: HPK Caltrain

Date Completed: 2/10/2021

Location: San Mateo

Total Depth: 10 feet bgs

Contractor: Penecore

Borehole Diameter: 8"

Drilling Method: Hollow Stem Auger

Logged By: A. Martinez

Notes:

Depth (ft)	Sample Interval	PID (ppm)	USCS Code	GRAPHIC LOG	Soil Descriptions and Observations	WELL DIAGRAM
1					0 - 0.5 ft. ASPHALT	
					0.5 - 1 ft. SAND (base rock).	
					1 - 1.5 ft. CONCRETE	
					1.5 - 2.5 ft. CONCRETE/Debris.	
2						
3		5.9	CL		2.5 - 5 ft. CLAY (CL); Grayish brown/black, soft, high plasticity, moist. Strong petroleum odor. Water at 3 ft. bgs. Visible sheen and wood fragments (rail tie?) Grades to firm at 4.5 ft.	
4	29.7					
5	6.0				5 - 9 ft. CLAY (CL); Firm, greenish gray, mottling, slightly damp, high plasticity.	
6	0.4					
7	1.5		CL			
8	1.6					
9	13.2		CL		9 - 9.5 ft. SANDY CLAY (CL); Firm, low to medium plasticity, slightly damp, light brown. Odor present from 9 - 10 ft.; synthetic.	
10	23.7		SP		9.5 - 10 ft. CLAYEY SAND (SP); Medium dense, poorly graded, fine, moist.	
					Total Depth - 10 feet bgs	
11						
12						
13						
14						

**APPENDIX D      LABORATORY ANALYTICAL REPORTS**



Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

[enthalpy.com](http://enthalpy.com)

Lab Job Number: 440568  
Report Level: II  
Report Date: 03/17/2021

**Analytical Report prepared for:**

Ian Hull  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Project: 0520818 - Caltrain HPK

*Authorized for release by:*

A handwritten signature in black ink that appears to read "Richard Villafania".

Richard Villafania, Project Manager  
[richard.villafania@enthalpy.com](mailto:richard.villafania@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member



## Sample Summary

---

Ian Hull	Lab Job #:	440568
ERM	Project No:	0520818
1277 Treat Blvd.	Location:	Caltrain HPK
Suite 500	Date Received:	02/08/21
Walnut Creek, CA 94597		

---

Sample ID	Lab ID	Collected	Matrix
MW-5-3	440568-001	02/08/21 11:45	Soil
MW-5-9	440568-002	02/08/21 13:55	Soil
MW-6-5	440568-003	02/08/21 10:35	Soil
MW-6-12	440568-004	02/08/21 10:45	Soil

## Case Narrative

ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
Ian Hull

Lab Job Number: 440568  
Project No: 0520818  
Location: Caltrain HPK  
Date Received: 02/08/21

This data package contains sample and QC results for four soil samples, requested for the above referenced project on 02/08/21. The samples were received cold and intact.

### **TPH-Extractables by GC (EPA 8015M):**

No analytical problems were encountered.

### **Volatile Organics by GC/MS (EPA 8260B):**

High response was observed for bromomethane in the CCV analyzed 02/11/21 08:26; affected data was qualified with "b". High response was observed for bromomethane in the CCV analyzed 02/11/21 20:28; this analyte was not detected at or above the RL in the associated sample, and affected data was qualified with "b". High response was observed for bromomethane in the CCV analyzed 02/12/21 07:37; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". TPH gasoline was detected between the MDL and the RL in the method blank for batch 261247; this analyte was not detected in samples at or above the RL. Bromomethane, chloromethane, and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261247; these analytes were not detected in samples at or above the RL. TPH gasoline was detected between the MDL and the RL in the method blank for batch 261322. Bromomethane and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327; these analytes were either not detected in the sample at or above the RL, or detected at a level at least 10 times that of the blank. Bromomethane, chloromethane, and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327; these analytes were either not detected in the sample at or above the RL, or detected at a level at least 10 times that of the blank. MW-5-3 (lab # 440568-001) and MW-6-5 (lab # 440568-003) were diluted due to high hydrocarbons. No other analytical problems were encountered.

### **Semivolatile Organics by GC/MS (EPA 8270C):**

High response was observed for pentachlorophenol in the CCV analyzed 02/11/21 09:33; affected data was qualified with "b". MW-5-3 (lab # 440568-001) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.

### **Metals (EPA 6010B):**

No analytical problems were encountered.

## **CHAIN OF CUSTODY**



# ENTHALPY ANALYTICAL

## Formerly Curtis & Tompkins Labs

2323 Fifth Street  
Berkeley, CA 94710.

Phone (510) 486-0900  
Fax (510) 486-0532

Project No: 0520813

Sampler: Alex Martinez

Project Name: Caltrain HPK

Report To: Clint Harms & Ian Hull

Project P. O. No:

Company: ELM

EDD Format: Report Level  II  III  IV

Telephone: 408-791-7052

Turnaround Time:  RUSH

Standard

Turnaround Time:  RUSH       Standard      Email: clint.harms@pm.com

**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 440568  
Date Received: 2/8/21Client: ERM

Project: \_\_\_\_\_

**Section 2: Shipping info (if applicable)**Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASamples received in a cooler?  Yes, how many? \_\_\_\_\_  No (skip Section 3 below)If no cooler Sample Temp (°C): \_\_\_\_\_ using IR Gun #  B, or  C Samples received on ice directly from the field. Cooling process had begunIf in cooler, Date Opened 2/8/21 By (print) MAG (sign) MAG**Section 3:****Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used:  Wet,  Blue/Gel,  None Temperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_, or IR Gun #  B  C

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

Were custody papers dry, filled out properly, and the project identifiable

Were Method 5035 sampling containers present?

If YES, what time were they transferred to freezer?

Did all bottles arrive unbroken/unopened?

Are there any missing / extra samples?

Are samples in the appropriate containers for indicated tests?

Are sample labels present, in good condition and complete?

Does the container count match the COC?

Do the sample labels agree with custody papers?

Was sufficient amount of sample sent for tests requested?

Did you change the hold time in LIMS for unpreserved VOAs?

Did you change the hold time in LIMS for preserved terracores?

Are bubbles &gt; 6mm present in VOA samples?

Was the client contacted concerning this sample delivery?

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)

Did you check preservatives for all bottles for each sample?

Did you document your preservative check?

pH strip lot# \_\_\_\_\_ pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> lot# _____	added to samples _____	on/at _____
<input type="checkbox"/> HCl lot# _____	added to samples _____	on/at _____
<input type="checkbox"/> HNO <sub>3</sub> lot# _____	added to samples _____	on/at _____
<input type="checkbox"/> NaOH lot# _____	added to samples _____	on/at _____

**Section 6:**

Explanations/Comments: \_\_\_\_\_

Date Logged in 2/8/21By (print) MAG for ZLB (sign) MAGDate Labeled 2/9/21By (print) MAG (sign) MAG



# ENTHALPY ANALYTICAL

## SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: ERM  
Date Received: 2/10/21

Project:

Sampler's Name Present:  Yes  No**Section 2**

Sample(s) received in a cooler?  Yes, How many? 1  No (skip section 2) Sample Temp (°C) \_\_\_\_\_  
(No Cooler) \_\_\_\_\_

Sample Temp (°C), One from each cooler: #1: 1.2 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: \_\_\_\_\_

**Section 3**

Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam  
 Paper  None  Other \_\_\_\_\_

Cooler Temp (°C): #1: -0.7 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

**Section 4**

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?		✓	
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)		✓	
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

**Section 5 Explanations/Comments****Section 6**

For discrepancies, how was the Project Manager notified?  Verbal PM Initials: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Email (email sent to/on): \_\_\_\_\_ / \_\_\_\_\_

Project Manager's response:

Completed By: Chris Curr Date: 2/10/21

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.  
931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209  
[www.enthalpy.com/socal](http://www.enthalpy.com/socal)

Sample Acceptance Checklist – Rev 4, 8/8/2017



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL  
JOHN GOYETTE  
2323 5TH STREET  
BERKELEY, CA 94710

Tracking #: 552208547

CPS



**Ship To**  
ENTHALPY ANALYTICAL (ORG)  
SAMPLE RECEIVING  
931 W BARKLEY AVE.  
ORANGE, CA 92868

1.2 | -0.7

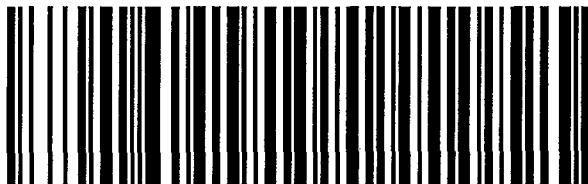
**ORANGE**

**COD:** \$0.00  
**Weight:** 0 lb(s)  
**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

**S92868A**



36191319

**ORC CA927-CI1**

Print Date: 2/9/2021 4:47 PM

Package 4 of 5

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to, limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

## Richard Villafania

---

**From:** Alex Martinez <Alex.Martinez@erm.com> on behalf of Alex Martinez  
**Sent:** Monday, February 22, 2021 10:08 AM  
**To:** richard.villafania@enthalpy.com  
**Cc:** Clint Harms; Ian Hull  
**Subject:** RE: 0520818 Caltrain HPK - Enthalpy Data (440568)

Hi Richard,

Regarding this laboratory data package, can you have the report re-run with different sample ID names? Below is the requested change for new sample IDs:

HPK-S-MW-5-3 to **MW-5-3**

HPK-S-MW-5-9 to **MW-5-9**

HPK-S-MW-6-5 to **MW-6-5**

HPK-S-MW-6-12 to **MW-6-12**

I have crossed out the preceding naming for each location on the original copy of the COC (attached). Will this suffice for the update to be made.

Let me know if you need additional information.

Thanks you, Richard.

**Alex Martinez**

Senior Consultant, Geology  
+1-408-701-7002

---

**From:** Richard Villafania <richard.villafania@enthalpy.com>

**Sent:** Wednesday, February 17, 2021 4:10 PM

**To:** Alex Martinez <Alex.Martinez@erm.com>

**Subject:** 0520818 Caltrain HPK - Enthalpy Data (440568)

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Alex,

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

Please find attached the following files:

- PDF Deliverable
- EQuIS EFWEDD EDD (440568\_equis\_efwedd\_ermw.zip)

Email was also sent to: [Clint.Harms@erm.com](mailto:Clint.Harms@erm.com), [Ian.Hull@erm.com](mailto:Ian.Hull@erm.com), [Richard.Villafania@enthalpy.com](mailto:Richard.Villafania@enthalpy.com), [edd@erm.com](mailto:edd@erm.com)

# CHAIN OF CUSTODY



Formerly Curtis & Tompkins Labs

2323 Fifth Street  
Berkeley, CA 94710

Project No: 0520818

Project Name: Caltrain HPK

Project P. O. No:

EDD Format: Report Level  II  III  IV

Turnaround Time:  RUSH

Phone (510) 486-0900

Fax (510) 486-0532

Sampler: Alex Martinez

Report To: Clint Harms & Ian Hull

Company: ERM

Telephone: 408-701-7002

Email: clint.harms@erm.com | ian.hull@erm.com

C&T LOGIN # \_\_\_\_\_

Page 1 of 1

Chain of Custody # \_\_\_\_\_

Lab No.	Sample ID.	SAMPLING		MATRIX		# of Containers	CHEMICAL PRESERVATIVE					
		Date Collected	Time Collected	Water	Solid		HCl	H2SO4	HNO3	NaOH	EDTA	None
	HPK-S MW-5-3	2/8/2021	1145	X		6			4	1	1	
	HPK-S MW-5-9		1355	X								
	HPK-S MW-6-5		1035	X								
	HPK-S MW-6-12		1045	X								

Notes:	SAMPLE RECEIPT	RELINQUISHED BY:				RECEIVED BY:			
		Alex Martinez / <u>Alex Martinez</u>	DATE: 2/8/21	TIME: 1439	Randy Hudson / <u>Randy Hudson</u>	DATE: 02/08/21	TIME: 14:39		
	<input type="checkbox"/> Intact	DATE:	TIME:		DATE:	TIME:			
	<input type="checkbox"/> Cold								
	<input type="checkbox"/> On Ice								
	<input type="checkbox"/> Ambient								

## **Richard Villafania**

---

**From:** Alex Martinez <Alex.Martinez@erm.com> on behalf of Alex Martinez  
**Sent:** Wednesday, March 3, 2021 4:18 PM  
**To:** Richard Villafania  
**Cc:** Clint Harms; Ian Hull; Chimi Yi  
**Subject:** Caltrain HPK Additional Analysis to Run - Request

Hi Richard,

I wanted to check in with you to see if there is remaining soil for the Caltrain HPK that can be analyzed for additional analysis, particularly, Lead. Is there enough soil left in the following samples to analyze for lead:

- MW-4-7 – Lab Report 440642
- MW-4-11
- MW-5-3 – Lab Report 440568
- MW-5-9
- MW-8-9 – Lab report 440717
- MW-8-11.5

Let me know if the above samples can be run.

Thanks, Richard.

**Alex Martinez**  
Senior Consultant, Geology  
*Pronouns: he/him/his*

**ERM**  
1277 Treat Boulevard, Suite 500 | Walnut Creek, California | 94597  
T +1-925-482-3311 | M +1-408-701-7002  
E [alex.martinez@erm.com](mailto:alex.martinez@erm.com) | W [www.erm.com](http://www.erm.com)



---

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately at (925) 946-0455 and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: <http://www.erm.com>. To find out how ERM manages personal data, please review our [Privacy Policy](#)



## Analysis Results for 440568

Ian Hull  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Lab Job #: 440568  
Project No: 0520818  
Location: Caltrain HPK  
Date Received: 02/08/21

Sample ID: MW-5-3      Lab ID: 440568-001      Collected: 02/08/21 11:45  
Matrix: Soil

440568-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B										
Prep Method: EPA 3050B										
Lead	10		mg/Kg	1.0	0.84	1	262652	03/05/21	03/08/21	SBW
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	730		mg/Kg	10	0.62	1	261396	02/13/21	02/13/21	MES
ORO C28-C44	250		mg/Kg	20	0.62	1	261396	02/13/21	02/13/21	MES
<b>Surrogates</b>		<b>Limits</b>								
n-Triacontane	116%		%REC	70-130		1	261396	02/13/21	02/13/21	MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	44,000		ug/Kg	6,000	480	60	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	300	43	60	261327	02/12/21	02/12/21	LXR
Chloromethane	41	B,J	ug/Kg	300	35	60	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	300	44	60	261327	02/12/21	02/12/21	LXR
Bromomethane	150	B,J,b	ug/Kg	300	52	60	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	300	81	60	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	300	10	60	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	6,000	3,000	60	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	300	44	60	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	300	24	60	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	300	110	60	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	300	51	60	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	300	30	60	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	300	29	60	261327	02/12/21	02/12/21	LXR
2-Butanone	220	J	ug/Kg	6,000	190	60	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	300	57	60	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	300	20	60	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	300	21	60	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	300	26	60	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	300	26	60	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	300	36	60	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	300	29	60	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	300	25	60	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	300	38	60	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440568

440568-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,2-Dichloropropane	ND		ug/Kg	300	33	60	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	300	30	60	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	300	33	60	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	300	110	60	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	300	36	60	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	300	45	60	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	300	33	60	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
Tetrachloroethene	ND		ug/Kg	300	40	60	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	300	36	60	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	300	36	60	261327	02/12/21	02/12/21	LXR
Ethylbenzene	94	J	ug/Kg	300	32	60	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	600	71	60	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	300	36	60	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	300	33	60	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	300	42	60	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	300	43	60	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	300	31	60	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	300	44	60	261327	02/12/21	02/12/21	LXR
Propylbenzene	56	J	ug/Kg	300	43	60	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	300	46	60	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	300	57	60	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	300	48	60	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	300	55	60	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	300	50	60	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	300	54	60	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	300	50	60	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	300	64	60	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	300	51	60	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	300	62	60	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	300	65	60	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	300	52	60	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	300	74	60	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	300	65	60	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	300	74	60	261327	02/12/21	02/12/21	LXR
Naphthalene	150	J	ug/Kg	300	51	60	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	300	60	60	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	98%		%REC	70-145		60	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	100%		%REC	70-145		60	261327	02/12/21	02/12/21	LXR
Toluene-d8	99%		%REC	70-145		60	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	90%		%REC	70-145		60	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440568

440568-001 Analyte		Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8270C											
Prep Method: EPA 3546											
Carbazole	ND	ug/Kg	1,300	250	5	261090	02/10/21	02/11/21	DJL		
1-Methylnaphthalene	ND	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL		
Pyridine	ND	ug/Kg	1,300	170	5	261090	02/10/21	02/11/21	DJL		
N-Nitrosodimethylamine	ND	ug/Kg	1,300	110	5	261090	02/10/21	02/11/21	DJL		
Phenol	ND	ug/Kg	1,300	250	5	261090	02/10/21	02/11/21	DJL		
Aniline	ND	ug/Kg	1,300	180	5	261090	02/10/21	02/11/21	DJL		
bis(2-Chloroethyl)ether	ND	ug/Kg	6,000	290	5	261090	02/10/21	02/11/21	DJL		
2-Chlorophenol	ND	ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL		
1,3-Dichlorobenzene	ND	ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL		
1,4-Dichlorobenzene	ND	ug/Kg	1,300	160	5	261090	02/10/21	02/11/21	DJL		
Benzyl alcohol	ND	ug/Kg	1,300	1,200	5	261090	02/10/21	02/11/21	DJL		
1,2-Dichlorobenzene	ND	ug/Kg	1,300	220	5	261090	02/10/21	02/11/21	DJL		
2-Methylphenol	ND	ug/Kg	1,300	530	5	261090	02/10/21	02/11/21	DJL		
bis(2-Chloroisopropyl) ether	ND	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL		
3-,4-Methylphenol	ND	ug/Kg	2,000	300	5	261090	02/10/21	02/11/21	DJL		
N-Nitroso-di-n-propylamine	ND	ug/Kg	1,300	240	5	261090	02/10/21	02/11/21	DJL		
Hexachloroethane	ND	ug/Kg	1,300	210	5	261090	02/10/21	02/11/21	DJL		
Nitrobenzene	ND	ug/Kg	6,000	180	5	261090	02/10/21	02/11/21	DJL		
Isophorone	ND	ug/Kg	1,300	210	5	261090	02/10/21	02/11/21	DJL		
2-Nitrophenol	ND	ug/Kg	1,300	190	5	261090	02/10/21	02/11/21	DJL		
2,4-Dimethylphenol	ND	ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL		
Benzoic acid	ND	ug/Kg	6,000	680	5	261090	02/10/21	02/11/21	DJL		
bis(2-Chloroethoxy)methane	ND	ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL		
2,4-Dichlorophenol	ND	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL		
1,2,4-Trichlorobenzene	ND	ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL		
Naphthalene	ND	ug/Kg	1,300	220	5	261090	02/10/21	02/11/21	DJL		
4-Chloroaniline	ND	ug/Kg	1,300	290	5	261090	02/10/21	02/11/21	DJL		
Hexachlorobutadiene	ND	ug/Kg	1,300	180	5	261090	02/10/21	02/11/21	DJL		
4-Chloro-3-methylphenol	ND	ug/Kg	1,300	300	5	261090	02/10/21	02/11/21	DJL		
2-Methylnaphthalene	<b>250</b>	J	ug/Kg	1,300	180	5	261090	02/10/21	02/11/21	DJL	
Hexachlorocyclopentadiene	ND	ug/Kg	6,000	100	5	261090	02/10/21	02/11/21	DJL		
2,4,6-Trichlorophenol	ND	ug/Kg	1,300	160	5	261090	02/10/21	02/11/21	DJL		
2,4,5-Trichlorophenol	ND	ug/Kg	1,300	190	5	261090	02/10/21	02/11/21	DJL		
2-Chloronaphthalene	ND	ug/Kg	1,300	250	5	261090	02/10/21	02/11/21	DJL		
2-Nitroaniline	ND	ug/Kg	1,300	280	5	261090	02/10/21	02/11/21	DJL		
Dimethylphthalate	ND	ug/Kg	1,300	270	5	261090	02/10/21	02/11/21	DJL		
Acenaphthylene	ND	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL		
2,6-Dinitrotoluene	ND	ug/Kg	1,300	210	5	261090	02/10/21	02/11/21	DJL		
3-Nitroaniline	ND	ug/Kg	1,300	270	5	261090	02/10/21	02/11/21	DJL		
Acenaphthene	ND	ug/Kg	1,300	220	5	261090	02/10/21	02/11/21	DJL		
2,4-Dinitrophenol	ND	ug/Kg	6,000	260	5	261090	02/10/21	02/11/21	DJL		
4-Nitrophenol	ND	ug/Kg	1,300	830	5	261090	02/10/21	02/11/21	DJL		
Dibenzofuran	ND	ug/Kg	1,300	240	5	261090	02/10/21	02/11/21	DJL		
2,4-Dinitrotoluene	ND	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL		

## Analysis Results for 440568

440568-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Diethylphthalate	ND		ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL
Fluorene	810	J	ug/Kg	1,300	240	5	261090	02/10/21	02/11/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	1,300	220	5	261090	02/10/21	02/11/21	DJL
4-Nitroaniline	ND		ug/Kg	1,300	420	5	261090	02/10/21	02/11/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	1,300	180	5	261090	02/10/21	02/11/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	1,300	270	5	261090	02/10/21	02/11/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	1,300	280	5	261090	02/10/21	02/11/21	DJL
Hexachlorobenzene	ND		ug/Kg	1,300	220	5	261090	02/10/21	02/11/21	DJL
Pentachlorophenol	ND		ug/Kg	6,000	240	5	261090	02/10/21	02/11/21	DJL
Phanthrene	420	J	ug/Kg	1,300	230	5	261090	02/10/21	02/11/21	DJL
Anthracene	ND		ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL
Di-n-butylphthalate	ND		ug/Kg	1,300	290	5	261090	02/10/21	02/11/21	DJL
Fluoranthene	ND		ug/Kg	1,300	250	5	261090	02/10/21	02/11/21	DJL
Benzidine	ND		ug/Kg	6,000	1,000	5	261090	02/10/21	02/11/21	DJL
Pyrene	ND		ug/Kg	1,300	270	5	261090	02/10/21	02/11/21	DJL
Butylbenzylphthalate	ND		ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	6,000	800	5	261090	02/10/21	02/11/21	DJL
Benzo(a)anthracene	ND		ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL
Chrysene	ND		ug/Kg	1,300	210	5	261090	02/10/21	02/11/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	1,300	360	5	261090	02/10/21	02/11/21	DJL
Di-n-octylphthalate	ND		ug/Kg	1,300	290	5	261090	02/10/21	02/11/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	1,300	260	5	261090	02/10/21	02/11/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	1,300	200	5	261090	02/10/21	02/11/21	DJL
Benzo(a)pyrene	ND		ug/Kg	1,300	170	5	261090	02/10/21	02/11/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	1,300	430	5	261090	02/10/21	02/11/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	1,300	140	5	261090	02/10/21	02/11/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	1,300	210	5	261090	02/10/21	02/11/21	DJL
<b>Surrogates</b>		<b>Limits</b>								
2-Fluorophenol	71%	%REC	29-120		5	261090	02/10/21	02/11/21	DJL	
Phenol-d6	68%	%REC	30-120		5	261090	02/10/21	02/11/21	DJL	
2,4,6-Tribromophenol	53%	%REC	32-120		5	261090	02/10/21	02/11/21	DJL	
Nitrobenzene-d5	50%	%REC	33-120		5	261090	02/10/21	02/11/21	DJL	
2-Fluorobiphenyl	57%	%REC	39-120		5	261090	02/10/21	02/11/21	DJL	
Terphenyl-d14	58%	%REC	44-125		5	261090	02/10/21	02/11/21	DJL	

## Analysis Results for 440568

Sample ID: MW-5-9	Lab ID: 440568-002	Collected: 02/08/21 13:55
	Matrix: Soil	

440568-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B										
Prep Method: EPA 3050B										
Lead	6.2		mg/Kg	0.97	0.82	0.97	262652	03/05/21	03/08/21	SBW
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	1.7	J	mg/Kg	10	0.62	1	261396	02/13/21	02/13/21	MES
ORO C28-C44	4.9	J	mg/Kg	20	0.62	1	261396	02/13/21	02/13/21	MES
<b>Surrogates</b>										
n-Triacontane	121%		%REC	70-130			1	261396	02/13/21	02/13/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	30	B,J	ug/Kg	69	4.5	0.69	261247	02/11/21	02/11/21	LYZ
Freon 12	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Chloromethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Vinyl Chloride	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Bromomethane	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Chloroethane	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Trichlorofluoromethane	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Acetone	ND		ug/Kg	69	35	0.69	261247	02/11/21	02/11/21	LYZ
Freon 113	ND		ug/Kg	3.5	0.5	0.69	261247	02/11/21	02/11/21	LYZ
1,1-Dichloroethene	ND		ug/Kg	3.5	0.1	0.69	261247	02/11/21	02/11/21	LYZ
Methylene Chloride	ND		ug/Kg	3.5	0.5	0.69	261247	02/11/21	02/11/21	LYZ
MTBE	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
trans-1,2-Dichloroethene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,1-Dichloroethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
2-Butanone	2.9	J	ug/Kg	69	2.2	0.69	261247	02/11/21	02/11/21	LYZ
cis-1,2-Dichloroethene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
2,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
Chloroform	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Bromochloromethane	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,1,1-Trichloroethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,1-Dichloropropene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Carbon Tetrachloride	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dichloroethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Benzene	ND		ug/Kg	3.5	0.1	0.69	261247	02/11/21	02/11/21	LYZ
Trichloroethene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
Bromodichloromethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Dibromomethane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
4-Methyl-2-Pentanone	ND		ug/Kg	3.5	1.3	0.69	261247	02/11/21	02/11/21	LYZ
cis-1,3-Dichloropropene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Toluene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ

## Analysis Results for 440568

440568-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
trans-1,3-Dichloropropene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,1,2-Trichloroethane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
1,3-Dichloropropane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Tetrachloroethene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
Dibromochloromethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dibromoethane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
Chlorobenzene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Ethylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
m,p-Xylenes	ND		ug/Kg	6.9	0.6	0.69	261247	02/11/21	02/11/21	LYZ
o-Xylene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
Styrene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Bromoform	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Isopropylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,2,3-Trichloropropane	ND		ug/Kg	3.5	0.5	0.69	261247	02/11/21	02/11/21	LYZ
Propylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
Bromobenzene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,3,5-Trimethylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
2-Chlorotoluene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
4-Chlorotoluene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
tert-Butylbenzene	ND		ug/Kg	3.5	0.2	0.69	261247	02/11/21	02/11/21	LYZ
1,2,4-Trimethylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
sec-Butylbenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
para-Isopropyl Toluene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
1,3-Dichlorobenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
1,4-Dichlorobenzene	ND		ug/Kg	3.5	0.3	0.69	261247	02/11/21	02/11/21	LYZ
n-Butylbenzene	ND		ug/Kg	3.5	0.5	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dichlorobenzene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
1,2,4-Trichlorobenzene	ND		ug/Kg	3.5	0.6	0.69	261247	02/11/21	02/11/21	LYZ
Hexachlorobutadiene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
Naphthalene	ND		ug/Kg	3.5	0.6	0.69	261247	02/11/21	02/11/21	LYZ
1,2,3-Trichlorobenzene	ND		ug/Kg	3.5	0.4	0.69	261247	02/11/21	02/11/21	LYZ
<b>Surrogates</b>										
<b>Limits</b>										
Dibromofluoromethane	100%		%REC	70-145	0.9	0.69	261247	02/11/21	02/11/21	LYZ
1,2-Dichloroethane-d4	105%		%REC	70-145		0.69	261247	02/11/21	02/11/21	LYZ
Toluene-d8	98%		%REC	70-145		0.69	261247	02/11/21	02/11/21	LYZ
Bromofluorobenzene	93%		%REC	70-145	1.0	0.69	261247	02/11/21	02/11/21	LYZ

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261090	02/10/21	02/11/21	DJL
Phenol	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Aniline	ND		ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	1	261090	02/10/21	02/11/21	DJL
2-Chlorophenol	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261090	02/10/21	02/11/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261090	02/10/21	02/11/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261090	02/10/21	02/11/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261090	02/10/21	02/11/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261090	02/10/21	02/11/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261090	02/10/21	02/11/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261090	02/10/21	02/11/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261090	02/10/21	02/11/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261090	02/10/21	02/11/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261090	02/10/21	02/11/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261090	02/10/21	02/11/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261090	02/10/21	02/11/21	DJL
Phenanthrene	ND		ug/Kg	250	47	1	261090	02/10/21	02/11/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261090	02/10/21	02/11/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261090	02/10/21	02/11/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261090	02/10/21	02/11/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261090	02/10/21	02/11/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261090	02/10/21	02/11/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261090	02/10/21	02/11/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	71%		%REC	29-120		1	261090	02/10/21	02/11/21	DJL
Phenol-d6	69%		%REC	30-120		1	261090	02/10/21	02/11/21	DJL
2,4,6-Tribromophenol	49%		%REC	32-120		1	261090	02/10/21	02/11/21	DJL
Nitrobenzene-d5	58%		%REC	33-120		1	261090	02/10/21	02/11/21	DJL
2-Fluorobiphenyl	49%		%REC	39-120		1	261090	02/10/21	02/11/21	DJL
Terphenyl-d14	48%		%REC	44-125		1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

Sample ID: MW-6-5	Lab ID: 440568-003	Collected: 02/08/21 10:35
Matrix: Soil		

440568-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	1.9	J	mg/Kg	10	0.62	1	261396	02/13/21	02/13/21	MES
ORO C28-C44	4.9	J	mg/Kg	20	0.62	1	261396	02/13/21	02/13/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	119%		%REC	70-130			1	261396	02/13/21	02/13/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	17,000	B	ug/Kg	4,800	380	48	261322	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	240	35	48	261322	02/12/21	02/12/21	LXR
Chloromethane	44	J	ug/Kg	240	28	48	261322	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	240	36	48	261322	02/12/21	02/12/21	LXR
Bromomethane	82	J,b	ug/Kg	240	42	48	261322	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	240	65	48	261322	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	240	8.2	48	261322	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	4,800	2,400	48	261322	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	240	36	48	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	240	19	48	261322	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	240	88	48	261322	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	240	41	48	261322	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	240	24	48	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	240	23	48	261322	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	4,800	150	48	261322	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	240	46	48	261322	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	240	16	48	261322	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	240	17	48	261322	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	240	21	48	261322	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	240	21	48	261322	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	240	29	48	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	240	23	48	261322	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	240	20	48	261322	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	240	31	48	261322	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	240	27	48	261322	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	240	24	48	261322	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	240	27	48	261322	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	240	91	48	261322	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	240	29	48	261322	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	240	37	48	261322	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	240	27	48	261322	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR

## Analysis Results for 440568

440568-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	240	33	48	261322	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	240	29	48	261322	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	240	29	48	261322	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	240	26	48	261322	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	480	58	48	261322	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	240	29	48	261322	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	240	27	48	261322	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	240	34	48	261322	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	240	35	48	261322	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	240	25	48	261322	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	240	36	48	261322	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	240	35	48	261322	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	240	38	48	261322	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	240	46	48	261322	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	240	38	48	261322	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	240	44	48	261322	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	240	40	48	261322	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	240	43	48	261322	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	240	40	48	261322	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	240	52	48	261322	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	240	41	48	261322	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	240	50	48	261322	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	240	53	48	261322	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	240	42	48	261322	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	240	60	48	261322	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	240	53	48	261322	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	240	60	48	261322	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	240	41	48	261322	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	240	48	48	261322	02/12/21	02/12/21	LXR
<b>Surrogates</b>							<b>Limits</b>			
Dibromofluoromethane	93%	%REC	70-145		48	261322	02/12/21	02/12/21	LXR	
1,2-Dichloroethane-d4	100%	%REC	70-145		48	261322	02/12/21	02/12/21	LXR	
Toluene-d8	99%	%REC	70-145		48	261322	02/12/21	02/12/21	LXR	
Bromofluorobenzene	95%	%REC	70-145		48	261322	02/12/21	02/12/21	LXR	

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261090	02/10/21	02/11/21	DJL
Phenol	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
Aniline	ND	ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261090	02/10/21	02/11/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261090	02/10/21	02/11/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261090	02/10/21	02/11/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261090	02/10/21	02/11/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261090	02/10/21	02/11/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261090	02/10/21	02/11/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261090	02/10/21	02/11/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261090	02/10/21	02/11/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261090	02/10/21	02/11/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261090	02/10/21	02/11/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261090	02/10/21	02/11/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261090	02/10/21	02/11/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261090	02/10/21	02/11/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261090	02/10/21	02/11/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261090	02/10/21	02/11/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261090	02/10/21	02/11/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261090	02/10/21	02/11/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261090	02/10/21	02/11/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261090	02/10/21	02/11/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
Surrogates	Limits									
2-Fluorophenol	91%	%REC	29-120			1	261090	02/10/21	02/11/21	DJL
Phenol-d6	87%	%REC	30-120			1	261090	02/10/21	02/11/21	DJL
2,4,6-Tribromophenol	77%	%REC	32-120			1	261090	02/10/21	02/11/21	DJL
Nitrobenzene-d5	73%	%REC	33-120			1	261090	02/10/21	02/11/21	DJL
2-Fluorobiphenyl	70%	%REC	39-120			1	261090	02/10/21	02/11/21	DJL
Terphenyl-d14	66%	%REC	44-125			1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

<b>Sample ID:</b> MW-6-12	<b>Lab ID:</b> 440568-004	<b>Collected:</b> 02/08/21 10:45
		<b>Matrix:</b> Soil

440568-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	1.8	J	mg/Kg	10	0.62	1	261396	02/13/21	02/13/21	MES
ORO C28-C44	5.1	J	mg/Kg	20	0.62	1	261396	02/13/21	02/13/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	120%		%REC	70-130			1	261396	02/13/21	02/13/21
										MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	33	B,J	ug/Kg	74	4.7	0.74	261247	02/11/21	02/11/21	LYZ
Freon 12	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Chloromethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Vinyl Chloride	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Bromomethane	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Chloroethane	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Trichlorofluoromethane	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Acetone	ND		ug/Kg	74	37	0.74	261247	02/11/21	02/11/21	LYZ
Freon 113	ND		ug/Kg	3.7	0.5	0.74	261247	02/11/21	02/11/21	LYZ
1,1-Dichloroethene	ND		ug/Kg	3.7	0.1	0.74	261247	02/11/21	02/11/21	LYZ
Methylene Chloride	ND		ug/Kg	3.7	0.5	0.74	261247	02/11/21	02/11/21	LYZ
MTBE	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
trans-1,2-Dichloroethene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,1-Dichloroethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
2-Butanone	ND		ug/Kg	74	2.4	0.74	261247	02/11/21	02/11/21	LYZ
cis-1,2-Dichloroethene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
2,2-Dichloropropane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Chloroform	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Bromochloromethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,1,1-Trichloroethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,1-Dichloropropene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Carbon Tetrachloride	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dichloroethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Benzene	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Trichloroethene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dichloropropane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Bromodichloromethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Dibromomethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
4-Methyl-2-Pentanone	ND		ug/Kg	3.7	1.4	0.74	261247	02/11/21	02/11/21	LYZ
cis-1,3-Dichloropropene	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Toluene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
trans-1,3-Dichloropropene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,1,2-Trichloroethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
1,3-Dichloropropane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ

## Analysis Results for 440568

440568-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Dibromochloromethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dibromoethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Chlorobenzene	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Ethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
m,p-Xylenes	ND		ug/Kg	7.4	0.6	0.74	261247	02/11/21	02/11/21	LYZ
o-Xylene	ND		ug/Kg	3.7	0.2	0.74	261247	02/11/21	02/11/21	LYZ
Styrene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Bromoform	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Isopropylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,2,3-Trichloropropane	ND		ug/Kg	3.7	0.5	0.74	261247	02/11/21	02/11/21	LYZ
Propylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
Bromobenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,3,5-Trimethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
2-Chlorotoluene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
4-Chlorotoluene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
tert-Butylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,2,4-Trimethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
sec-Butylbenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
para-Isopropyl Toluene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
1,3-Dichlorobenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
1,4-Dichlorobenzene	ND		ug/Kg	3.7	0.3	0.74	261247	02/11/21	02/11/21	LYZ
n-Butylbenzene	ND		ug/Kg	3.7	0.5	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dichlorobenzene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.7	0.5	0.74	261247	02/11/21	02/11/21	LYZ
1,2,4-Trichlorobenzene	ND		ug/Kg	3.7	0.7	0.74	261247	02/11/21	02/11/21	LYZ
Hexachlorobutadiene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
Naphthalene	ND		ug/Kg	3.7	0.6	0.74	261247	02/11/21	02/11/21	LYZ
1,2,3-Trichlorobenzene	ND		ug/Kg	3.7	0.4	0.74	261247	02/11/21	02/11/21	LYZ
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	108%		%REC	70-145	1.0	0.74	261247	02/11/21	02/11/21	LYZ
1,2-Dichloroethane-d4	109%		%REC	70-145		0.74	261247	02/11/21	02/11/21	LYZ
Toluene-d8	98%		%REC	70-145		0.74	261247	02/11/21	02/11/21	LYZ
Bromofluorobenzene	94%		%REC	70-145	1.1	0.74	261247	02/11/21	02/11/21	LYZ

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261090	02/10/21	02/11/21	DJL
Phenol	ND	ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
Aniline	ND	ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261090	02/10/21	02/11/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261090	02/10/21	02/11/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261090	02/10/21	02/11/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261090	02/10/21	02/11/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261090	02/10/21	02/11/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261090	02/10/21	02/11/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261090	02/10/21	02/11/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261090	02/10/21	02/11/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261090	02/10/21	02/11/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261090	02/10/21	02/11/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261090	02/10/21	02/11/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261090	02/10/21	02/11/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261090	02/10/21	02/11/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261090	02/10/21	02/11/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261090	02/10/21	02/11/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261090	02/10/21	02/11/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261090	02/10/21	02/11/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261090	02/10/21	02/11/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261090	02/10/21	02/11/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261090	02/10/21	02/11/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261090	02/10/21	02/11/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261090	02/10/21	02/11/21	DJL

## Analysis Results for 440568

440568-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261090	02/10/21	02/11/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261090	02/10/21	02/11/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261090	02/10/21	02/11/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261090	02/10/21	02/11/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261090	02/10/21	02/11/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261090	02/10/21	02/11/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261090	02/10/21	02/11/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261090	02/10/21	02/11/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261090	02/10/21	02/11/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261090	02/10/21	02/11/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261090	02/10/21	02/11/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261090	02/10/21	02/11/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261090	02/10/21	02/11/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261090	02/10/21	02/11/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261090	02/10/21	02/11/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	96%		%REC	29-120		1	261090	02/10/21	02/11/21	DJL
Phenol-d6	87%		%REC	30-120		1	261090	02/10/21	02/11/21	DJL
2,4,6-Tribromophenol	64%		%REC	32-120		1	261090	02/10/21	02/11/21	DJL
Nitrobenzene-d5	77%		%REC	33-120		1	261090	02/10/21	02/11/21	DJL
2-Fluorobiphenyl	64%		%REC	39-120		1	261090	02/10/21	02/11/21	DJL
Terphenyl-d14	60%		%REC	44-125		1	261090	02/10/21	02/11/21	DJL

B Contamination found in associated Method Blank

J Estimated value

ND Not Detected

b See narrative

## Batch QC

Type: Blank	Lab ID: QC908108			Batch: 261090			
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546			
<b>QC908108 Analyte</b>							
QC908108 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Carbazole	ND		ug/Kg	250	49	02/09/21	02/11/21
1-Methylnaphthalene	ND		ug/Kg	250	46	02/09/21	02/11/21
Pyridine	ND		ug/Kg	250	34	02/09/21	02/11/21
N-Nitrosodimethylamine	ND		ug/Kg	250	23	02/09/21	02/11/21
Phenol	ND		ug/Kg	250	49	02/09/21	02/11/21
Aniline	ND		ug/Kg	250	36	02/09/21	02/11/21
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	02/09/21	02/11/21
2-Chlorophenol	ND		ug/Kg	250	40	02/09/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	250	52	02/09/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	250	32	02/09/21	02/11/21
Benzyl alcohol	ND		ug/Kg	250	250	02/09/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	250	45	02/09/21	02/11/21
2-Methylphenol	ND		ug/Kg	250	110	02/09/21	02/11/21
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	02/09/21	02/11/21
3-,4-Methylphenol	ND		ug/Kg	400	60	02/09/21	02/11/21
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	02/09/21	02/11/21
Hexachloroethane	ND		ug/Kg	250	42	02/09/21	02/11/21
Nitrobenzene	ND		ug/Kg	1,200	36	02/09/21	02/11/21
Isophorone	ND		ug/Kg	250	41	02/09/21	02/11/21
2-Nitrophenol	ND		ug/Kg	250	38	02/09/21	02/11/21
2,4-Dimethylphenol	ND		ug/Kg	250	40	02/09/21	02/11/21
Benzoic acid	ND		ug/Kg	1,200	140	02/09/21	02/11/21
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	02/09/21	02/11/21
2,4-Dichlorophenol	ND		ug/Kg	250	46	02/09/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	02/09/21	02/11/21
Naphthalene	ND		ug/Kg	250	44	02/09/21	02/11/21
4-Chloroaniline	ND		ug/Kg	250	59	02/09/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	250	36	02/09/21	02/11/21
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	02/09/21	02/11/21
2-Methylnaphthalene	ND		ug/Kg	250	37	02/09/21	02/11/21
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	02/09/21	02/11/21
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	02/09/21	02/11/21
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	02/09/21	02/11/21
2-Chloronaphthalene	ND		ug/Kg	250	51	02/09/21	02/11/21
2-Nitroaniline	ND		ug/Kg	250	57	02/09/21	02/11/21
Dimethylphthalate	ND		ug/Kg	250	53	02/09/21	02/11/21
Acenaphthylene	ND		ug/Kg	250	46	02/09/21	02/11/21
2,6-Dinitrotoluene	ND		ug/Kg	250	42	02/09/21	02/11/21
3-Nitroaniline	ND		ug/Kg	250	53	02/09/21	02/11/21
Acenaphthene	ND		ug/Kg	250	44	02/09/21	02/11/21
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	02/09/21	02/11/21
4-Nitrophenol	ND		ug/Kg	250	170	02/09/21	02/11/21

### Batch QC

QC908108 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Dibenzofuran	ND		ug/Kg	250	49	02/09/21	02/11/21
2,4-Dinitrotoluene	ND		ug/Kg	250	46	02/09/21	02/11/21
Diethylphthalate	ND		ug/Kg	250	51	02/09/21	02/11/21
Fluorene	ND		ug/Kg	250	49	02/09/21	02/11/21
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	02/09/21	02/11/21
4-Nitroaniline	ND		ug/Kg	250	84	02/09/21	02/11/21
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	02/09/21	02/11/21
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	02/09/21	02/11/21
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	02/09/21	02/11/21
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	02/09/21	02/11/21
Hexachlorobenzene	ND		ug/Kg	250	43	02/09/21	02/11/21
Pentachlorophenol	ND		ug/Kg	1,200	48	02/09/21	02/11/21
Phenanthrene	ND		ug/Kg	250	47	02/09/21	02/11/21
Anthracene	ND		ug/Kg	250	40	02/09/21	02/11/21
Di-n-butylphthalate	ND		ug/Kg	250	59	02/09/21	02/11/21
Fluoranthene	ND		ug/Kg	250	50	02/09/21	02/11/21
Benzidine	ND		ug/Kg	1,200	200	02/09/21	02/11/21
Pyrene	ND		ug/Kg	250	55	02/09/21	02/11/21
Butylbenzylphthalate	ND		ug/Kg	250	53	02/09/21	02/11/21
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	02/09/21	02/11/21
Benzo(a)anthracene	ND		ug/Kg	250	40	02/09/21	02/11/21
Chrysene	ND		ug/Kg	250	42	02/09/21	02/11/21
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	02/09/21	02/11/21
Di-n-octylphthalate	ND		ug/Kg	250	59	02/09/21	02/11/21
Benzo(b)fluoranthene	ND		ug/Kg	250	52	02/09/21	02/11/21
Benzo(k)fluoranthene	ND		ug/Kg	250	40	02/09/21	02/11/21
Benzo(a)pyrene	ND		ug/Kg	250	33	02/09/21	02/11/21
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	02/09/21	02/11/21
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	02/09/21	02/11/21
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	02/09/21	02/11/21
<b>Surrogates</b>		<b>Limits</b>					
2-Fluorophenol	101%		%REC	29-120		02/09/21	02/11/21
Phenol-d6	97%		%REC	30-120		02/09/21	02/11/21
2,4,6-Tribromophenol	99%		%REC	32-120		02/09/21	02/11/21
Nitrobenzene-d5	89%		%REC	33-120		02/09/21	02/11/21
2-Fluorobiphenyl	84%		%REC	39-120		02/09/21	02/11/21
Terphenyl-d14	107%		%REC	44-125		02/09/21	02/11/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC908109			Batch: 261090		
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546		
QC908109 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	2,024	2000	ug/Kg	101%		42-120
2-Chlorophenol	2,022	2000	ug/Kg	101%		41-120
1,4-Dichlorobenzene	1,690	2000	ug/Kg	84%		36-120
3-,4-Methylphenol	2,017	2000	ug/Kg	101%		42-120
N-Nitroso-di-n-propylamine	1,895	2000	ug/Kg	95%		43-121
2,4-Dimethylphenol	1,940	2000	ug/Kg	97%		25-120
1,2,4-Trichlorobenzene	1,777	2000	ug/Kg	89%		38-120
4-Chloro-3-methylphenol	1,893	2000	ug/Kg	95%		40-125
2,4,5-Trichlorophenol	1,953	2000	ug/Kg	98%		40-124
Acenaphthene	1,831	2000	ug/Kg	92%		35-126
4-Nitrophenol	1,785	2000	ug/Kg	89%		24-128
2,4-Dinitrotoluene	1,856	2000	ug/Kg	93%		40-131
Pentachlorophenol	1,695	2000	ug/Kg	85%	b	35-120
Pyrene	2,009	2000	ug/Kg	100%		37-135
Chrysene	1,903	2000	ug/Kg	95%		38-132
Benzo(b)fluoranthene	1,947	2000	ug/Kg	97%		38-135
<b>Surrogates</b>						
2-Fluorophenol	2,088	2000	ug/Kg	104%		29-120
Phenol-d6	2,179	2000	ug/Kg	109%		30-120
2,4,6-Tribromophenol	2,240	2000	ug/Kg	112%		32-120
Nitrobenzene-d5	2,044	2000	ug/Kg	102%		33-120
2-Fluorobiphenyl	1,711	2000	ug/Kg	86%		39-120
Terphenyl-d14	2,029	2000	ug/Kg	101%		44-125

## Batch QC

Type: Matrix Spike	Lab ID: QC908110	Batch: 261090
Matrix (Source ID): Soil (440515-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908110 Analyte	Result	Source Sample		Recovery	Qual	Limits	DF
		Result	Spiked				
Phenol	1,554	ND	2000	ug/Kg	78%	37-120	1
2-Chlorophenol	1,617	ND	2000	ug/Kg	81%	33-120	1
1,4-Dichlorobenzene	1,422	ND	2000	ug/Kg	71%	32-120	1
3,-4-Methylphenol	1,382	ND	2000	ug/Kg	69%	37-120	1
N-Nitroso-di-n-propylamine	1,608	ND	2000	ug/Kg	80%	32-120	1
2,4-Dimethylphenol	1,089	ND	2000	ug/Kg	54%	32-120	1
1,2,4-Trichlorobenzene	1,480	ND	2000	ug/Kg	74%	33-120	1
4-Chloro-3-methylphenol	1,355	ND	2000	ug/Kg	68%	41-121	1
2,4,5-Trichlorophenol	1,509	ND	2000	ug/Kg	75%	40-120	1
Acenaphthene	1,562	ND	2000	ug/Kg	78%	37-120	1
4-Nitrophenol	1,509	ND	2000	ug/Kg	75%	20-141	1
2,4-Dinitrotoluene	1,615	ND	2000	ug/Kg	81%	33-128	1
Pentachlorophenol	1,241	ND	2000	ug/Kg	62%	b	28-132
Pyrene	1,708	ND	2000	ug/Kg	85%	39-135	1
Chrysene	1,709	ND	2000	ug/Kg	85%	37-135	1
Benzo(b)fluoranthene	1,803	ND	2000	ug/Kg	90%	34-139	1
<b>Surrogates</b>							
2-Fluorophenol	1,624		2000	ug/Kg	81%	29-120	1
Phenol-d6	1,644		2000	ug/Kg	82%	30-120	1
2,4,6-Tribromophenol	1,614		2000	ug/Kg	81%	32-120	1
Nitrobenzene-d5	1,661		2000	ug/Kg	83%	33-120	1
2-Fluorobiphenyl	1,382		2000	ug/Kg	69%	39-120	1
Terphenyl-d14	1,660		2000	ug/Kg	83%	44-125	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC908111	Batch: 261090
Matrix (Source ID): Soil (440515-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908111 Analyte	Result	Source Sample		Recovery	Qual	Limits	RPD			
		Result	Spiked				Lim	DF		
Phenol	1,458	ND	2000	ug/Kg	73%	37-120	6	49	1	
2-Chlorophenol	1,463	ND	2000	ug/Kg	73%	33-120	10	52	1	
1,4-Dichlorobenzene	1,323	ND	2000	ug/Kg	66%	32-120	7	50	1	
3,-4-Methylphenol	1,439	ND	2000	ug/Kg	72%	37-120	4	54	1	
N-Nitroso-di-n-propylamine	1,538	ND	2000	ug/Kg	77%	32-120	4	50	1	
2,4-Dimethylphenol	1,049	ND	2000	ug/Kg	52%	32-120	4	50	1	
1,2,4-Trichlorobenzene	1,414	ND	2000	ug/Kg	71%	33-120	5	50	1	
4-Chloro-3-methylphenol	1,369	ND	2000	ug/Kg	68%	41-121	1	43	1	
2,4,5-Trichlorophenol	1,525	ND	2000	ug/Kg	76%	40-120	1	47	1	
Acenaphthene	1,463	ND	2000	ug/Kg	73%	37-120	7	48	1	
4-Nitrophenol	1,377	ND	2000	ug/Kg	69%	20-141	9	30	1	
2,4-Dinitrotoluene	1,569	ND	2000	ug/Kg	78%	33-128	3	50	1	
Pentachlorophenol	1,254	ND	2000	ug/Kg	63%	b	28-132	1	30	1
Pyrene	1,819	ND	2000	ug/Kg	91%	39-135	6	41	1	
Chrysene	1,741	ND	2000	ug/Kg	87%	37-135	2	46	1	
Benzo(b)fluoranthene	1,863	ND	2000	ug/Kg	93%	34-139	3	47	1	
<b>Surrogates</b>										
2-Fluorophenol	1,620		2000	ug/Kg	81%	29-120			1	
Phenol-d6	1,546		2000	ug/Kg	77%	30-120			1	
2,4,6-Tribromophenol	1,641		2000	ug/Kg	82%	32-120			1	
Nitrobenzene-d5	1,525		2000	ug/Kg	76%	33-120			1	
2-Fluorobiphenyl	1,341		2000	ug/Kg	67%	39-120			1	
Terphenyl-d14	1,752		2000	ug/Kg	88%	44-125			1	

## Batch QC

Type: Blank	Lab ID: QC908461			Batch: 261247			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908461 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	35	J	ug/Kg	100	6.4	02/11/21	02/11/21
Freon 12	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromomethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Acetone	ND		ug/Kg	100	50	02/11/21	02/11/21
Freon 113	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
MTBE	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Butanone	ND		ug/Kg	100	3.2	02/11/21	02/11/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chloroform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Benzene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/11/21	02/11/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/11/21	02/11/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21

### Batch QC

QC908461 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	103%	%REC	70-130	1.3	02/11/21	02/11/21	
1,2-Dichloroethane-d4	101%	%REC	70-145		02/11/21	02/11/21	
Toluene-d8	99%	%REC	70-145		02/11/21	02/11/21	
Bromofluorobenzene	94%	%REC	70-145	1.5	02/11/21	02/11/21	

Type: Lab Control Sample	Lab ID: QC908462	Batch: 261247
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908462 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	45.95	50.00	ug/Kg	92%		70-131
MTBE	49.88	50.00	ug/Kg	100%		69-130
Benzene	44.73	50.00	ug/Kg	89%		70-130
Trichloroethene	45.67	50.00	ug/Kg	91%		70-130
Toluene	47.25	50.00	ug/Kg	94%		70-130
Chlorobenzene	48.67	50.00	ug/Kg	97%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	48.93	50.00	ug/Kg	98%		70-130
1,2-Dichloroethane-d4	48.31	50.00	ug/Kg	97%		70-145
Toluene-d8	51.63	50.00	ug/Kg	103%		70-145
Bromofluorobenzene	53.16	50.00	ug/Kg	106%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908463	Batch: 261247
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908463 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	45.93	50.00	ug/Kg	92%		70-131	0	33
MTBE	50.71	50.00	ug/Kg	101%		69-130	2	30
Benzene	44.93	50.00	ug/Kg	90%		70-130	0	30
Trichloroethene	45.32	50.00	ug/Kg	91%		70-130	1	30
Toluene	46.59	50.00	ug/Kg	93%		70-130	1	30
Chlorobenzene	48.75	50.00	ug/Kg	98%		70-130	0	30
<b>Surrogates</b>								
Dibromofluoromethane	49.42	50.00	ug/Kg	99%		70-130		
1,2-Dichloroethane-d4	47.99	50.00	ug/Kg	96%		70-145		
Toluene-d8	50.75	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	51.93	50.00	ug/Kg	104%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908464			Batch: 261247			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908464 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	2,300	J	ug/Kg	5,000	400	02/11/21	02/11/21
Freon 12	ND		ug/Kg	250	36	02/11/21	02/11/21
Chloromethane	80	J	ug/Kg	250	29	02/11/21	02/11/21
Vinyl Chloride	ND		ug/Kg	250	37	02/11/21	02/11/21
Bromomethane	98	J,b	ug/Kg	250	44	02/11/21	02/11/21
Chloroethane	ND		ug/Kg	250	68	02/11/21	02/11/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/11/21	02/11/21
Acetone	ND		ug/Kg	5,000	2,500	02/11/21	02/11/21
Freon 113	ND		ug/Kg	250	37	02/11/21	02/11/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/11/21	02/11/21
Methylene Chloride	ND		ug/Kg	250	91	02/11/21	02/11/21
MTBE	ND		ug/Kg	250	43	02/11/21	02/11/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/11/21	02/11/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/11/21	02/11/21
2-Butanone	ND		ug/Kg	5,000	160	02/11/21	02/11/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/11/21	02/11/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/11/21	02/11/21
Chloroform	ND		ug/Kg	250	17	02/11/21	02/11/21
Bromoform	ND		ug/Kg	250	18	02/11/21	02/11/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/11/21	02/11/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/11/21	02/11/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/11/21	02/11/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/11/21	02/11/21
Benzene	ND		ug/Kg	250	21	02/11/21	02/11/21
Trichloroethene	ND		ug/Kg	250	32	02/11/21	02/11/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/11/21	02/11/21
Bromodichloromethane	ND		ug/Kg	250	25	02/11/21	02/11/21
Dibromomethane	ND		ug/Kg	250	28	02/11/21	02/11/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/11/21	02/11/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/11/21	02/11/21
Toluene	ND		ug/Kg	250	26	02/11/21	02/11/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/11/21	02/11/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/11/21	02/11/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/11/21	02/11/21
Tetrachloroethene	ND		ug/Kg	250	34	02/11/21	02/11/21
Dibromochloromethane	ND		ug/Kg	250	30	02/11/21	02/11/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/11/21	02/11/21
Chlorobenzene	ND		ug/Kg	250	26	02/11/21	02/11/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/11/21	02/11/21
Ethylbenzene	ND		ug/Kg	250	27	02/11/21	02/11/21
m,p-Xylenes	ND		ug/Kg	500	60	02/11/21	02/11/21
o-Xylene	ND		ug/Kg	250	30	02/11/21	02/11/21

**Batch QC**

QC908464 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/11/21	02/11/21
Bromoform	ND		ug/Kg	250	35	02/11/21	02/11/21
Isopropylbenzene	ND		ug/Kg	250	36	02/11/21	02/11/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/11/21	02/11/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/11/21	02/11/21
Propylbenzene	ND		ug/Kg	250	36	02/11/21	02/11/21
Bromobenzene	ND		ug/Kg	250	39	02/11/21	02/11/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/11/21	02/11/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/11/21	02/11/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/11/21	02/11/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/11/21	02/11/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/11/21	02/11/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/11/21	02/11/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/11/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/11/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/11/21	02/11/21
n-Butylbenzene	ND		ug/Kg	250	55	02/11/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/11/21	02/11/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/11/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/11/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/11/21	02/11/21
Naphthalene	ND		ug/Kg	250	43	02/11/21	02/11/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/11/21	02/11/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	99%		%REC	70-130		02/11/21	02/11/21
1,2-Dichloroethane-d4	99%		%REC	70-145		02/11/21	02/11/21
Toluene-d8	100%		%REC	70-145		02/11/21	02/11/21
Bromofluorobenzene	94%		%REC	70-145		02/11/21	02/11/21

Type: Lab Control Sample	Lab ID: QC908465	Batch: 261247
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908465 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	522.7	500.0	ug/Kg	105%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	51.87	50.00	ug/Kg	104%		70-130
1,2-Dichloroethane-d4	48.45	50.00	ug/Kg	97%		70-145
Toluene-d8	50.93	50.00	ug/Kg	102%		70-145
Bromofluorobenzene	47.68	50.00	ug/Kg	95%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908466	Batch: 261247
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908466 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	481.2	500.0	ug/Kg	96%		70-130	8	20
<b>Surrogates</b>								
Dibromofluoromethane	49.75	50.00	ug/Kg	99%		70-130		
1,2-Dichloroethane-d4	50.48	50.00	ug/Kg	101%		70-145		
Toluene-d8	49.17	50.00	ug/Kg	98%		70-145		
Bromofluorobenzene	46.95	50.00	ug/Kg	94%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908659			Batch: 261322			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908659 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	2,000	J	ug/Kg	5,000	400	02/11/21	02/11/21
Freon 12	ND		ug/Kg	250	36	02/11/21	02/11/21
Chloromethane	ND		ug/Kg	250	29	02/11/21	02/11/21
Vinyl Chloride	ND		ug/Kg	250	37	02/11/21	02/11/21
Bromomethane	ND		ug/Kg	250	44	02/11/21	02/11/21
Chloroethane	ND		ug/Kg	250	68	02/11/21	02/11/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/11/21	02/11/21
Acetone	ND		ug/Kg	5,000	2,500	02/11/21	02/11/21
Freon 113	ND		ug/Kg	250	37	02/11/21	02/11/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/11/21	02/11/21
Methylene Chloride	ND		ug/Kg	250	91	02/11/21	02/11/21
MTBE	ND		ug/Kg	250	43	02/11/21	02/11/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/11/21	02/11/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/11/21	02/11/21
2-Butanone	ND		ug/Kg	5,000	160	02/11/21	02/11/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/11/21	02/11/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/11/21	02/11/21
Chloroform	ND		ug/Kg	250	17	02/11/21	02/11/21
Bromoform	ND		ug/Kg	250	18	02/11/21	02/11/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/11/21	02/11/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/11/21	02/11/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/11/21	02/11/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/11/21	02/11/21
Benzene	ND		ug/Kg	250	21	02/11/21	02/11/21
Trichloroethene	ND		ug/Kg	250	32	02/11/21	02/11/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/11/21	02/11/21
Bromodichloromethane	ND		ug/Kg	250	25	02/11/21	02/11/21
Dibromomethane	ND		ug/Kg	250	28	02/11/21	02/11/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/11/21	02/11/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/11/21	02/11/21
Toluene	ND		ug/Kg	250	26	02/11/21	02/11/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/11/21	02/11/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/11/21	02/11/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/11/21	02/11/21
Tetrachloroethene	ND		ug/Kg	250	34	02/11/21	02/11/21
Dibromochloromethane	ND		ug/Kg	250	30	02/11/21	02/11/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/11/21	02/11/21
Chlorobenzene	ND		ug/Kg	250	26	02/11/21	02/11/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/11/21	02/11/21
Ethylbenzene	ND		ug/Kg	250	27	02/11/21	02/11/21
m,p-Xylenes	ND		ug/Kg	500	60	02/11/21	02/11/21
o-Xylene	ND		ug/Kg	250	30	02/11/21	02/11/21

**Batch QC**

QC908659 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/11/21	02/11/21
Bromoform	ND		ug/Kg	250	35	02/11/21	02/11/21
Isopropylbenzene	ND		ug/Kg	250	36	02/11/21	02/11/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/11/21	02/11/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/11/21	02/11/21
Propylbenzene	ND		ug/Kg	250	36	02/11/21	02/11/21
Bromobenzene	ND		ug/Kg	250	39	02/11/21	02/11/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/11/21	02/11/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/11/21	02/11/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/11/21	02/11/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/11/21	02/11/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/11/21	02/11/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/11/21	02/11/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/11/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/11/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/11/21	02/11/21
n-Butylbenzene	ND		ug/Kg	250	55	02/11/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/11/21	02/11/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/11/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/11/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/11/21	02/11/21
Naphthalene	ND		ug/Kg	250	43	02/11/21	02/11/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/11/21	02/11/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	102%		%REC	70-130		02/11/21	02/11/21
1,2-Dichloroethane-d4	104%		%REC	70-145		02/11/21	02/11/21
Toluene-d8	98%		%REC	70-145		02/11/21	02/11/21
Bromofluorobenzene	95%		%REC	70-145		02/11/21	02/11/21

Type: Lab Control Sample	Lab ID: QC908660	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908660 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	54.47	50.00	ug/Kg	109%		70-131
MTBE	53.35	50.00	ug/Kg	107%		69-130
Benzene	51.60	50.00	ug/Kg	103%		70-130
Trichloroethene	54.01	50.00	ug/Kg	108%		70-130
Toluene	53.74	50.00	ug/Kg	107%		70-130
Chlorobenzene	55.19	50.00	ug/Kg	110%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.79	50.00	ug/Kg	102%		70-130
1,2-Dichloroethane-d4	49.22	50.00	ug/Kg	98%		70-145
Toluene-d8	50.46	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	53.28	50.00	ug/Kg	107%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908661	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908661 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	51.06	50.00	ug/Kg	102%		70-131	6	33
MTBE	52.29	50.00	ug/Kg	105%		69-130	2	30
Benzene	48.76	50.00	ug/Kg	98%		70-130	6	30
Trichloroethene	49.21	50.00	ug/Kg	98%		70-130	9	30
Toluene	49.32	50.00	ug/Kg	99%		70-130	9	30
Chlorobenzene	50.53	50.00	ug/Kg	101%		70-130	9	30
<b>Surrogates</b>								
Dibromofluoromethane	50.68	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	49.51	50.00	ug/Kg	99%		70-145		
Toluene-d8	50.04	50.00	ug/Kg	100%		70-145		
Bromofluorobenzene	51.75	50.00	ug/Kg	103%		70-145		

Type: Lab Control Sample	Lab ID: QC908662	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908662 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	541.0	500.0	ug/Kg	108%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.75	50.00	ug/Kg	100%		70-130
1,2-Dichloroethane-d4	50.16	50.00	ug/Kg	100%		70-145
Toluene-d8	48.14	50.00	ug/Kg	96%		70-145
Bromofluorobenzene	46.65	50.00	ug/Kg	93%		70-145

Type: Lab Control Sample Duplicate	Lab ID: QC908663	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908663 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	500.8	500.0	ug/Kg	100%		70-130	8	20
<b>Surrogates</b>								
Dibromofluoromethane	50.64	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	48.68	50.00	ug/Kg	97%		70-145		
Toluene-d8	49.68	50.00	ug/Kg	99%		70-145		
Bromofluorobenzene	46.87	50.00	ug/Kg	94%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908664	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908664 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	36	J	ug/Kg	100	6.4	02/11/21	02/11/21
Freon 12	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromomethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Acetone	ND		ug/Kg	100	50	02/11/21	02/11/21
Freon 113	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
MTBE	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Butanone	ND		ug/Kg	100	3.2	02/11/21	02/11/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chloroform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Benzene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/11/21	02/11/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/11/21	02/11/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21

### Batch QC

QC908664 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	102%	%REC	70-130	1.3	02/11/21	02/11/21	
1,2-Dichloroethane-d4	106%	%REC	70-145		02/11/21	02/11/21	
Toluene-d8	97%	%REC	70-145		02/11/21	02/11/21	
Bromofluorobenzene	92%	%REC	70-145	1.5	02/11/21	02/11/21	

## Batch QC

Type: Blank	Lab ID: QC908676			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	28	J	ug/Kg	100	6.4	02/12/21	02/12/21
Freon 12	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromomethane	0.5	J,b	ug/Kg	5.0	0.3	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Acetone	ND		ug/Kg	100	50	02/12/21	02/12/21
Freon 113	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
MTBE	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	100	3.2	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chloroform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Benzene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21

### Batch QC

QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	101%	%REC	70-130	1.3	02/12/21	02/12/21	
1,2-Dichloroethane-d4	101%	%REC	70-145		02/12/21	02/12/21	
Toluene-d8	99%	%REC	70-145		02/12/21	02/12/21	
Bromofluorobenzene	92%	%REC	70-145	1.5	02/12/21	02/12/21	

Type: Lab Control Sample	Lab ID: QC908677	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908677 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	50.71	50.00	ug/Kg	101%		70-131
MTBE	48.85	50.00	ug/Kg	98%		69-130
Benzene	48.20	50.00	ug/Kg	96%		70-130
Trichloroethene	49.41	50.00	ug/Kg	99%		70-130
Toluene	50.36	50.00	ug/Kg	101%		70-130
Chlorobenzene	51.10	50.00	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.55	50.00	ug/Kg	99%		70-130
1,2-Dichloroethane-d4	46.32	50.00	ug/Kg	93%		70-145
Toluene-d8	50.67	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	52.95	50.00	ug/Kg	106%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908678	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908678 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	47.25	50.00	ug/Kg	95%		70-131	7	33
MTBE	45.73	50.00	ug/Kg	91%		69-130	7	30
Benzene	44.88	50.00	ug/Kg	90%		70-130	7	30
Trichloroethene	46.65	50.00	ug/Kg	93%		70-130	6	30
Toluene	46.99	50.00	ug/Kg	94%		70-130	7	30
Chlorobenzene	47.31	50.00	ug/Kg	95%		70-130	8	30
<b>Surrogates</b>								
Dibromofluoromethane	49.96	50.00	ug/Kg	100%		70-130		
1,2-Dichloroethane-d4	47.26	50.00	ug/Kg	95%		70-145		
Toluene-d8	50.59	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	52.46	50.00	ug/Kg	105%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908679			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	1,500	J	ug/Kg	5,000	400	02/12/21	02/12/21
Freon 12	ND		ug/Kg	250	36	02/12/21	02/12/21
Chloromethane	71	J	ug/Kg	250	29	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	250	37	02/12/21	02/12/21
Bromomethane	100	J,b	ug/Kg	250	44	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	250	68	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/12/21	02/12/21
Acetone	ND		ug/Kg	5,000	2,500	02/12/21	02/12/21
Freon 113	ND		ug/Kg	250	37	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	250	91	02/12/21	02/12/21
MTBE	ND		ug/Kg	250	43	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	5,000	160	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/12/21	02/12/21
Chloroform	ND		ug/Kg	250	17	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	18	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
Benzene	ND		ug/Kg	250	21	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	250	32	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	250	25	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	250	28	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/12/21	02/12/21
Toluene	ND		ug/Kg	250	26	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	250	34	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	250	26	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	250	27	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	500	60	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	250	30	02/12/21	02/12/21

### Batch QC

QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	35	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	250	39	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/12/21	02/12/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	93%		%REC	70-130		02/12/21	02/12/21
1,2-Dichloroethane-d4	102%		%REC	70-145		02/12/21	02/12/21
Toluene-d8	99%		%REC	70-145		02/12/21	02/12/21
Bromofluorobenzene	90%		%REC	70-145		02/12/21	02/12/21

Type: Lab Control Sample	Lab ID: QC908680	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908680 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	510.1	500.0	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.70	50.00	ug/Kg	101%		70-130
1,2-Dichloroethane-d4	49.68	50.00	ug/Kg	99%		70-145
Toluene-d8	48.90	50.00	ug/Kg	98%		70-145
Bromofluorobenzene	46.20	50.00	ug/Kg	92%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908681	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908681 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	499.7	500.0	ug/Kg	100%		70-130	2	20
<b>Surrogates</b>								
Dibromofluoromethane	48.97	50.00	ug/Kg	98%		70-130		
1,2-Dichloroethane-d4	49.47	50.00	ug/Kg	99%		70-145		
Toluene-d8	48.26	50.00	ug/Kg	97%		70-145		
Bromofluorobenzene	46.28	50.00	ug/Kg	93%		70-145		

Type: Blank	Lab ID: QC908912	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908912 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	10	4.0	02/12/21	02/13/21
ORO C28-C44	ND		mg/Kg	20	4.0	02/12/21	02/13/21
<b>Surrogates</b>							
n-Triacontane	95%		%REC	70-130		02/12/21	02/13/21

Type: Lab Control Sample	Lab ID: QC908913	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908913 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	265.8	250.0	mg/Kg	106%		76-122
<b>Surrogates</b>						
n-Triacontane	10.04	10.00	mg/Kg	100%		70-130

Type: Matrix Spike	Lab ID: QC908914	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908914 Analyte	Result	Source Sample Result		Spiked	Units	Recovery	Qual	Limits	DF
		Sample	Result						
Diesel C10-C28	273.2	ND		250.0	mg/Kg	109%		62-126	1
<b>Surrogates</b>									
n-Triacontane	9.846			10.00	mg/Kg	98%		70-130	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC908915	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908915 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD		
								RPD	Lim	DF
Diesel C10-C28	271.5	ND	250.0	mg/Kg	109%		62-126	1	35	1
<b>Surrogates</b>										
n-Triacontane	9.836		10.00	mg/Kg	98%		70-130			1

Type: Blank	Lab ID: QC912271	Batch: 262652
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC912271 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Lead	ND		mg/Kg	1.0	0.84	03/05/21	03/08/21

Type: Lab Control Sample	Lab ID: QC912272	Batch: 262652
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC912272 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Lead	111.9	100.0	mg/Kg	112%		80-120

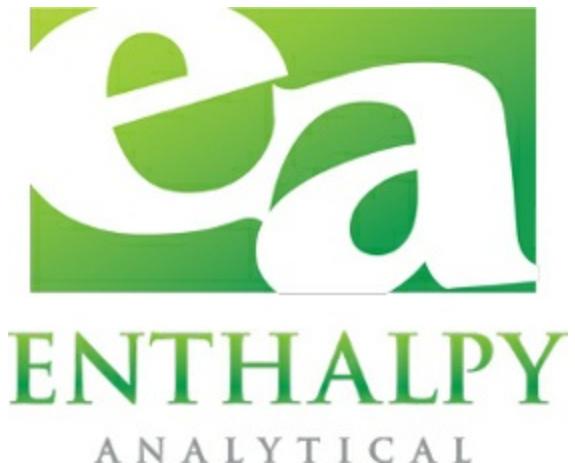
Type: Matrix Spike	Lab ID: QC912273	Batch: 262652
Matrix (Source ID): Soil (441722-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC912273 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD		
								RPD	Lim	DF
Lead	134.9	33.39	104.2	mg/Kg	97%		75-125	1		

Type: Matrix Spike Duplicate	Lab ID: QC912274	Batch: 262652
Matrix (Source ID): Soil (441722-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC912274 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD		
								RPD	Lim	DF
Lead	142.8	33.39	102.0	mg/Kg	107%		75-125	7	20	1

J Estimated value  
 ND Not Detected  
 b See narrative



Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

[enthalpy.com](http://enthalpy.com)

Lab Job Number: 440642  
Report Level: II  
Report Date: 02/18/2021

**Analytical Report prepared for:**

Ian Hull  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Project: 0520818 - Caltrain SF4K

*Authorized for release by:*

A handwritten signature in black ink that appears to read "Richard Villafania".

Richard Villafania, Project Manager  
[richard.villafania@enthalpy.com](mailto:richard.villafania@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member



## Sample Summary

---

Ian Hull	Lab Job #:	440642
ERM	Project No:	0520818
1277 Treat Blvd.	Location:	Caltrain SF4K
Suite 500	Date Received:	02/09/21
Walnut Creek, CA 94597		

---

Sample ID	Lab ID	Collected	Matrix
MW-1-9	440642-001	02/09/21 09:40	Soil
MW-3-6	440642-002	02/09/21 08:10	Soil
MW-4-7	440642-003	02/09/21 12:25	Soil
MW-4-11	440642-004	02/09/21 12:30	Soil
MW-9-4	440642-005	02/09/21 11:25	Soil

## Case Narrative

ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
Ian Hull

Lab Job Number: 440642  
Project No: 0520818  
Location: Caltrain SF4K  
Date Received: 02/09/21

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 02/09/21. The samples were received cold and intact.

### **TPH-Extractables by GC (EPA 8015M):**

DRO C10-C28 and ORO C28-C44 were detected between the MDL and the RL in the method blank for batch 261517; these analytes were either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. No other analytical problems were encountered.

### **Volatile Organics by GC/MS (EPA 8260B):**

High response was observed for bromomethane in the CCV analyzed 02/12/21 07:37; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". TPH gasoline was detected between the MDL and the RL in the method blank for batch 261322. Bromomethane and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327; these analytes were either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. Bromomethane, chloromethane, and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327; these analytes were either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. MW-3-6 (lab # 440642-002) and MW-9-4 (lab # 440642-005) were diluted due to high hydrocarbons. No other analytical problems were encountered.

### **Semivolatile Organics by GC/MS (EPA 8270C):**

High RPD was observed for many analytes in the MS/MSD of MW-1-9 (lab # 440642-001); these analytes were not detected at or above the RL in the associated samples. MW-9-4 (lab # 440642-005) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

**Environmental Resources  
Management**

**CHAIN OF CUSTODY RECORD**

440 642

**NO:** 5460

1277 Treat Boulevard, Suite 500 • Walnut Creek, CA • 94597 • (925) 946-0455 • FAX (925) 946-9968

Page 1 of 1

PROJECT #	PROJECT NAME	# OF CONTAINERS	MATRIX			REQUESTED PARAMETERS									
			SOIL	WATER	GAS	TPH-gas by 8260	TPH-diesel & motor oil by 8015	BTEX, MEBE, naphthalene by 8260	VOCs by 8260	SVOCs by 8270					
0520818	Caltrain HPK														
SAMPLER: (PRINT NAME)	(SIGNATURE)														
Alex Martinez	Alex Martinez														
RECEIVING LABORATORY															
Enthalpy Analytical															
SAMPLER I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICY (Y/N)	SAMPLING VOLUME							
MW-1-9	2/9/21	0940		X	Ternatecere	4-H <sub>2</sub> O 1-MeOH 1-Jime	Y	5-vials 1-3oz/jar	6	X		X	X	X	X
MW-3-6		0810		X						X		X	X	X	X
MW-4-7		1225		X						X		X	X	X	X
MW-4-11		1230		X						X		X	X	X	X
MW-9-4		1125		X						X		X	X	X	X
RELINQUISHED BY (SIGNATURE)			DATE	TIME	RECEIVED BY			DATE	TIME	FIELD REMARKS					
Alex Martinez			2/9/21	1530	Audrey Hudson			2/9/21	1530						
RELINQUISHED BY (SIGNATURE)			DATE	TIME	RECEIVED BY			DATE	TIME						
Audrey Hudson			2/9/21	17:05	J			2-9-21	1705						
RELINQUISHED BY (SIGNATURE)			DATE	TIME	RECEIVED BY			DATE	TIME						
J			2-10-21	1309	J			2/11/21	1200						
REMARKS ON SAMPLE RECEIPT						ERM REMARKS			SEND REPORT TO:						
<input type="checkbox"/> BOTTLE INTACT <input type="checkbox"/> CUSTODY SEALS <input type="checkbox"/> CHILLED									 Clint Harms - clint.harms@erm.com Ian Hull - ian.hull@erm.com						
<input type="checkbox"/> PRESERVED <input type="checkbox"/> SEALS INTACT <input type="checkbox"/> SEE REMARKS															

WHITE - LABORATORY COPY

CANARY - FIELD COPY

PINK - DATABASE

GOLD - PROJECT FILE

**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 4406412  
Date Received: 2-9-21Client: ERMW  
Project: \_\_\_\_\_**Section 2: Shipping info (if applicable)**Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASamples received in a cooler?  Yes, how many? 1  No (skip Section 3 below)If no cooler Sample Temp (°C): \_\_\_\_\_ using IR Gun #  B, or  C Samples received on ice directly from the field. Cooling process had begunIf in cooler: Date Opened 2-9-21 By (print) \_\_\_\_\_ (sign) \_\_\_\_\_**Section 3:** *Important: Notify PM if temperature exceeds 6°C or arrive frozen.*

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used:  Wet,  Blue/Gel,  None Temperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_ or IR Gun #  B  C

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

YES	NO	N/A
-----	----	-----

Were custody papers dry, filled out properly, and the project identifiable ✓              Were Method 5035 sampling containers present? ✓              If YES, what time were they transferred to freezer? 11:00              Did all bottles arrive unbroken/unopened? ✓              Are there any missing / extra samples?                     Are samples in the appropriate containers for indicated tests?                     Are sample labels present, in good condition and complete?                     Does the container count match the COC?                     Do the sample labels agree with custody papers?                     Was sufficient amount of sample sent for tests requested?                     Did you change the hold time in LIMS for unpreserved VOAs?                     Did you change the hold time in LIMS for preserved terracores?                     Are bubbles > 6mm present in VOA samples?                     Was the client contacted concerning this sample delivery?                     

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

YES	NO	N/A
-----	----	-----

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)                     Did you check preservatives for all bottles for each sample?                     Did you document your preservative check?                     

pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

 H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_**Section 6:**Explanations/Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Date Logged in 2-9 By (print) ZLA (sign) \_\_\_\_\_Date Labeled 2-9 By (print) JH (sign) \_\_\_\_\_



# ENTHALPY

## ANALYTICAL

### SAMPLE ACCEPTANCE CHECKLIST

#### Section 1

Client: ERM West  
Date Received: 2/11/21

Project: 0520818

Sampler's Name Present:  Yes  No

#### Section 2

Sample(s) received in a cooler?  Yes, How many? 1  No (skip section 2) Sample Temp (°C) (No Cooler): \_\_\_\_\_

Sample Temp (°C), One from each cooler: #1: 5.4 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: \_\_\_\_\_

#### Section 3

Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam  
 Paper  None  Other \_\_\_\_\_

Cooler Temp (°C): #1: 0.1 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

#### Section 4

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present? If custody seals are present, were they intact?		✓	
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests? Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		✓	
Was a sufficient amount of sample submitted for the requested tests?	✓		

#### Section 5 Explanations/Comments

#### Section 6

For discrepancies, how was the Project Manager notified?  Verbal PM Initials: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Email (email sent to/on): \_\_\_\_\_ / \_\_\_\_\_

Project Manager's response:

Completed By: \_\_\_\_\_

Date: 2/11/21



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL  
JOHN GOYETTE  
2323 5TH STREET  
BERKELEY, CA 94710

Tracking #: 552209342

CPS



**Ship To**  
ENTHALPY ANALYTICAL (ORG)  
SAMPLE RECEIVING  
931 W BARKLEY AVE.  
ORANGE, CA 92868

**ORANGE**

**COD:** \$0.00

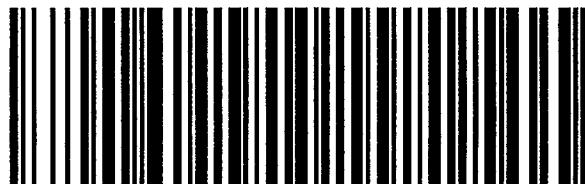
**Weight:** 0 lb(s)

**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

**S92868A**



36196814

**ORC CA927-CI1**

Print Date: 2/9/2021 5:31 PM

Package 2 of 2

**LABEL INSTRUCTIONS:**

5-7/01

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

## Analysis Results for 440642

Ian Hull  
 ERM  
 1277 Treat Blvd.  
 Suite 500  
 Walnut Creek, CA 94597

Lab Job #: 440642  
 Project No: 0520818  
 Location: Caltrain SF4K  
 Date Received: 02/09/21

<b>Sample ID:</b> MW-1-9	<b>Lab ID:</b> 440642-001	<b>Collected:</b> 02/09/21 09:40
	<b>Matrix:</b> Soil	

440642-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
--------------------	--------	------	-------	----	-----	----	-------	----------	----------	---------

Method: EPA 8015M

Prep Method: EPA 3580

DRO C10-C28	1.5	B,J	mg/Kg	10	0.62	1	261517	02/17/21	02/17/21	MES
ORO C28-C44	3.9	B,J	mg/Kg	20	0.62	1	261517	02/17/21	02/17/21	MES

Surrogates	Limits								
n-Triacontane	122%	%REC	70-130		1	261517	02/17/21	02/17/21	MES

Method: EPA 8260B

Prep Method: EPA 5035

TPH Gasoline	84	B	ug/Kg	76	4.9	0.76	261322	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	76	38	0.76	261322	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.8	0.6	0.76	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.8	0.1	0.76	261322	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.8	0.5	0.76	261322	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
2-Butanone	4.6	J	ug/Kg	76	2.4	0.76	261322	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR

## Analysis Results for 440642

440642-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
4-Methyl-2-Pentanone	ND		ug/Kg	3.8	1.4	0.76	261322	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Tetrachloroethene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	7.6	0.6	0.76	261322	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	3.8	0.2	0.76	261322	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	3.8	0.6	0.76	261322	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	3.8	0.3	0.76	261322	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	3.8	0.5	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.8	0.5	0.76	261322	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	3.8	0.7	0.76	261322	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	3.8	0.5	0.76	261322	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	3.8	0.7	0.76	261322	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	3.8	0.4	0.76	261322	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	102%		%REC	70-145	1.0	0.76	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	108%		%REC	70-145		0.76	261322	02/12/21	02/12/21	LXR
Toluene-d8	98%		%REC	70-145		0.76	261322	02/12/21	02/12/21	LXR
Bromofluorobenzene	93%		%REC	70-145	1.1	0.76	261322	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Pyridine	ND		ug/Kg	250	34	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodimethylamine	ND		ug/Kg	250	23	1	261320	02/11/21	02/13/21	MTS
Phenol	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Aniline	ND		ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	1	261320	02/11/21	02/13/21	MTS
2-Chlorophenol	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/11/21	02/13/21	MTS
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/11/21	02/13/21	MTS
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/11/21	02/13/21	MTS
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/11/21	02/13/21	MTS
Isophorone	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Naphthalene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/11/21	02/13/21	MTS
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/11/21	02/13/21	MTS
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/11/21	02/13/21	MTS
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/11/21	02/13/21	MTS
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/11/21	02/13/21	MTS
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
Fluorene	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/11/21	02/13/21	MTS
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/11/21	02/13/21	MTS
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/11/21	02/13/21	MTS
Anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/11/21	02/13/21	MTS
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/11/21	02/13/21	MTS
Pyrene	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/11/21	02/13/21	MTS
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Chrysene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/11/21	02/13/21	MTS
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/11/21	02/13/21	MTS
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/11/21	02/13/21	MTS
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
<b>Surrogates</b>		<b>Limits</b>								
2-Fluorophenol	78%	%REC	29-120			1	261320	02/11/21	02/13/21	MTS
Phenol-d6	76%	%REC	30-120			1	261320	02/11/21	02/13/21	MTS
2,4,6-Tribromophenol	68%	%REC	32-120			1	261320	02/11/21	02/13/21	MTS
Nitrobenzene-d5	68%	%REC	33-120			1	261320	02/11/21	02/13/21	MTS
2-Fluorobiphenyl	67%	%REC	39-120			1	261320	02/11/21	02/13/21	MTS
Terphenyl-d14	77%	%REC	44-125			1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

Sample ID: MW-3-6	Lab ID: 440642-002	Collected: 02/09/21 08:10
	Matrix: Soil	

440642-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	6.0	B,J	mg/Kg	10	0.62	1	261517	02/17/21	02/17/21	MES
ORO C28-C44	6.2	B,J	mg/Kg	20	0.62	1	261517	02/17/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	128%	%REC	70-130			1	261517	02/17/21	02/17/21	MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	76,000		ug/Kg	4,200	330	42	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	210	30	42	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	210	24	42	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	210	31	42	261327	02/12/21	02/12/21	LXR
Bromomethane	63	B,J,b	ug/Kg	210	37	42	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	210	57	42	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	210	7.1	42	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	4,200	2,100	42	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	210	31	42	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	210	17	42	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	210	76	42	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	210	36	42	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	210	21	42	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	210	20	42	261327	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	4,200	130	42	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	210	40	42	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	210	14	42	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	210	15	42	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	210	18	42	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	210	18	42	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	210	25	42	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	210	20	42	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	210	18	42	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	210	27	42	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	210	23	42	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	210	21	42	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	210	23	42	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	210	79	42	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	210	25	42	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	210	32	42	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	210	23	42	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440642

440642-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	210	28	42	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	210	25	42	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	210	25	42	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	210	23	42	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	420	50	42	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	210	25	42	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	210	23	42	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	210	29	42	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	210	30	42	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	210	22	42	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	210	31	42	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	210	30	42	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	210	33	42	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	210	40	42	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	210	33	42	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	210	38	42	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	210	35	42	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	210	38	42	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	210	35	42	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	210	45	42	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	210	36	42	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	210	43	42	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	210	46	42	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	210	37	42	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	210	52	42	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	210	46	42	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	210	52	42	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	210	36	42	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	210	42	42	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>							<b>Limits</b>			
Dibromofluoromethane	96%	%REC	70-145		42	261327	02/12/21	02/12/21	LXR	
1,2-Dichloroethane-d4	102%	%REC	70-145		42	261327	02/12/21	02/12/21	LXR	
Toluene-d8	100%	%REC	70-145		42	261327	02/12/21	02/12/21	LXR	
Bromofluorobenzene	90%	%REC	70-145		42	261327	02/12/21	02/12/21	LXR	

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Pyridine	ND	ug/Kg	250	34	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/11/21	02/13/21	MTS
Phenol	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Aniline	ND	ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/11/21	02/13/21	MTS
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/11/21	02/13/21	MTS
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/11/21	02/13/21	MTS
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/11/21	02/13/21	MTS
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/11/21	02/13/21	MTS
Isophorone	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Naphthalene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/11/21	02/13/21	MTS
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/11/21	02/13/21	MTS
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/11/21	02/13/21	MTS
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/11/21	02/13/21	MTS
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/11/21	02/13/21	MTS
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
Fluorene	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/11/21	02/13/21	MTS
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/11/21	02/13/21	MTS
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/11/21	02/13/21	MTS
Anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/11/21	02/13/21	MTS
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/11/21	02/13/21	MTS
Pyrene	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/11/21	02/13/21	MTS
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Chrysene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/11/21	02/13/21	MTS
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/11/21	02/13/21	MTS
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/11/21	02/13/21	MTS
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
Surrogates	Limits									
2-Fluorophenol	83%	%REC	29-120			1	261320	02/11/21	02/13/21	MTS
Phenol-d6	81%	%REC	30-120			1	261320	02/11/21	02/13/21	MTS
2,4,6-Tribromophenol	79%	%REC	32-120			1	261320	02/11/21	02/13/21	MTS
Nitrobenzene-d5	70%	%REC	33-120			1	261320	02/11/21	02/13/21	MTS
2-Fluorobiphenyl	72%	%REC	39-120			1	261320	02/11/21	02/13/21	MTS
Terphenyl-d14	84%	%REC	44-125			1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

<b>Sample ID:</b> MW-4-7	<b>Lab ID:</b> 440642-003	<b>Collected:</b> 02/09/21 12:25
	<b>Matrix:</b> Soil	

440642-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	1.4	B,J	mg/Kg	10	0.62	1	261517	02/17/21	02/17/21	MES
ORO C28-C44	4.2	B,J	mg/Kg	20	0.62	1	261517	02/17/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	113%		%REC	70-130			1	261517	02/17/21	02/17/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	23	B,J	ug/Kg	68	4.4	0.68	261322	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	68	34	0.68	261322	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.4	0.5	0.68	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.4	0.1	0.68	261322	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.4	0.5	0.68	261322	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	68	2.2	0.68	261322	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.4	0.1	0.68	261322	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.4	1.3	0.68	261322	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR

## Analysis Results for 440642

440642-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	6.8	0.6	0.68	261322	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	3.4	0.5	0.68	261322	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	3.4	0.2	0.68	261322	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261322	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	3.4	0.5	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	3.4	0.6	0.68	261322	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	3.4	0.6	0.68	261322	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261322	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	101%		%REC	70-145	0.9	0.68	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	107%		%REC	70-145		0.68	261322	02/12/21	02/12/21	LXR
Toluene-d8	98%		%REC	70-145		0.68	261322	02/12/21	02/12/21	LXR
Bromofluorobenzene	90%		%REC	70-145	1.0	0.68	261322	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Pyridine	ND	ug/Kg	250	34	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/11/21	02/13/21	MTS
Phenol	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Aniline	ND	ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/11/21	02/13/21	MTS
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/11/21	02/13/21	MTS
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/11/21	02/13/21	MTS
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/11/21	02/13/21	MTS
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/11/21	02/13/21	MTS
Isophorone	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Naphthalene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/11/21	02/13/21	MTS
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/11/21	02/13/21	MTS
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/11/21	02/13/21	MTS
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/11/21	02/13/21	MTS
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/11/21	02/13/21	MTS
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
Fluorene	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/11/21	02/13/21	MTS
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/11/21	02/13/21	MTS
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/11/21	02/13/21	MTS
Anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/11/21	02/13/21	MTS
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/11/21	02/13/21	MTS
Pyrene	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/11/21	02/13/21	MTS
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Chrysene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/11/21	02/13/21	MTS
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/11/21	02/13/21	MTS
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/11/21	02/13/21	MTS
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	85%		%REC	29-120		1	261320	02/11/21	02/13/21	MTS
Phenol-d6	83%		%REC	30-120		1	261320	02/11/21	02/13/21	MTS
2,4,6-Tribromophenol	74%		%REC	32-120		1	261320	02/11/21	02/13/21	MTS
Nitrobenzene-d5	69%		%REC	33-120		1	261320	02/11/21	02/13/21	MTS
2-Fluorobiphenyl	74%		%REC	39-120		1	261320	02/11/21	02/13/21	MTS
Terphenyl-d14	75%		%REC	44-125		1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

<b>Sample ID:</b> MW-4-11	<b>Lab ID:</b> 440642-004	<b>Collected:</b> 02/09/21 12:30
	<b>Matrix:</b> Soil	

440642-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
--------------------	--------	------	-------	----	-----	----	-------	----------	----------	---------

Method: EPA 8015M

Prep Method: EPA 3580

DRO C10-C28	1.5	B,J	mg/Kg	10	0.62	1	261517	02/17/21	02/17/21	MES
ORO C28-C44	3.3	B,J	mg/Kg	20	0.62	1	261517	02/17/21	02/17/21	MES

**Surrogates****Limits**

n-Triacontane	119%	%REC	70-130	1	261517	02/17/21	02/17/21	MES
---------------	------	------	--------	---	--------	----------	----------	-----

Method: EPA 8260B

Prep Method: EPA 5035

TPH Gasoline	21	B,J	ug/Kg	69	4.5	0.69	261322	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	69	35	0.69	261322	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.5	0.5	0.69	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.5	0.1	0.69	261322	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.5	0.5	0.69	261322	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	69	2.2	0.69	261322	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.5	0.1	0.69	261322	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.5	1.3	0.69	261322	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR

## Analysis Results for 440642

440642-004 Analyte		Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
Dibromochloromethane	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
1,2-Dibromoethane	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
Chlorobenzene	ND	ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR		
1,1,1,2-Tetrachloroethane	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
Ethylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
m,p-Xylenes	ND	ug/Kg	6.9	0.6	0.69	261322	02/12/21	02/12/21	LXR		
o-Xylene	ND	ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR		
Styrene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
Bromoform	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
Isopropylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
1,1,2,2-Tetrachloroethane	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
1,2,3-Trichloropropane	ND	ug/Kg	3.5	0.5	0.69	261322	02/12/21	02/12/21	LXR		
Propylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
Bromobenzene	ND	ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR		
1,3,5-Trimethylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
2-Chlorotoluene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
4-Chlorotoluene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
tert-Butylbenzene	ND	ug/Kg	3.5	0.2	0.69	261322	02/12/21	02/12/21	LXR		
1,2,4-Trimethylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
sec-Butylbenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
para-Isopropyl Toluene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
1,3-Dichlorobenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
1,4-Dichlorobenzene	ND	ug/Kg	3.5	0.3	0.69	261322	02/12/21	02/12/21	LXR		
n-Butylbenzene	ND	ug/Kg	3.5	0.5	0.69	261322	02/12/21	02/12/21	LXR		
1,2-Dichlorobenzene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
1,2-Dibromo-3-Chloropropane	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
1,2,4-Trichlorobenzene	ND	ug/Kg	3.5	0.6	0.69	261322	02/12/21	02/12/21	LXR		
Hexachlorobutadiene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
Naphthalene	ND	ug/Kg	3.5	0.6	0.69	261322	02/12/21	02/12/21	LXR		
1,2,3-Trichlorobenzene	ND	ug/Kg	3.5	0.4	0.69	261322	02/12/21	02/12/21	LXR		
<b>Surrogates</b>		<b>Limits</b>									
Dibromofluoromethane	101%	%REC	70-145	0.9	0.69	261322	02/12/21	02/12/21	LXR		
1,2-Dichloroethane-d4	109%	%REC	70-145		0.69	261322	02/12/21	02/12/21	LXR		
Toluene-d8	96%	%REC	70-145		0.69	261322	02/12/21	02/12/21	LXR		
Bromofluorobenzene	91%	%REC	70-145	1.0	0.69	261322	02/12/21	02/12/21	LXR		

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Pyridine	ND	ug/Kg	250	34	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/11/21	02/13/21	MTS
Phenol	ND	ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Aniline	ND	ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/11/21	02/13/21	MTS
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/11/21	02/13/21	MTS
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/11/21	02/13/21	MTS
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/11/21	02/13/21	MTS
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/11/21	02/13/21	MTS
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/11/21	02/13/21	MTS
Isophorone	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Naphthalene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/11/21	02/13/21	MTS
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/11/21	02/13/21	MTS
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/11/21	02/13/21	MTS
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/11/21	02/13/21	MTS
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/11/21	02/13/21	MTS
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/11/21	02/13/21	MTS
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/11/21	02/13/21	MTS
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/11/21	02/13/21	MTS
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
Fluorene	ND		ug/Kg	250	49	1	261320	02/11/21	02/13/21	MTS
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/11/21	02/13/21	MTS
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/11/21	02/13/21	MTS
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/11/21	02/13/21	MTS
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/11/21	02/13/21	MTS
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/11/21	02/13/21	MTS
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/11/21	02/13/21	MTS
Anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/11/21	02/13/21	MTS
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/11/21	02/13/21	MTS
Pyrene	ND		ug/Kg	250	55	1	261320	02/11/21	02/13/21	MTS
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/11/21	02/13/21	MTS
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/11/21	02/13/21	MTS
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Chrysene	ND		ug/Kg	250	42	1	261320	02/11/21	02/13/21	MTS
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/11/21	02/13/21	MTS
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/11/21	02/13/21	MTS
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/11/21	02/13/21	MTS
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/11/21	02/13/21	MTS
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/11/21	02/13/21	MTS
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/11/21	02/13/21	MTS
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/11/21	02/13/21	MTS
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/11/21	02/13/21	MTS
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	82%		%REC	29-120		1	261320	02/11/21	02/13/21	MTS
Phenol-d6	80%		%REC	30-120		1	261320	02/11/21	02/13/21	MTS
2,4,6-Tribromophenol	68%		%REC	32-120		1	261320	02/11/21	02/13/21	MTS
Nitrobenzene-d5	68%		%REC	33-120		1	261320	02/11/21	02/13/21	MTS
2-Fluorobiphenyl	70%		%REC	39-120		1	261320	02/11/21	02/13/21	MTS
Terphenyl-d14	73%		%REC	44-125		1	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

Sample ID: MW-9-4	Lab ID: 440642-005	Collected: 02/09/21 11:25
	Matrix: Soil	

440642-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	11,000		mg/Kg	250	15	25	261517	02/17/21	02/18/21	MES
ORO C28-C44	3,000		mg/Kg	500	15	25	261517	02/17/21	02/18/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	DO	%REC	70-130		25	261517	02/17/21	02/18/21	MES	
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	250,000		ug/Kg	9,800	780	98	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	490	71	98	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	490	57	98	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	490	73	98	261327	02/12/21	02/12/21	LXR
Bromomethane	97	B,J,b	ug/Kg	490	86	98	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	490	130	98	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	490	17	98	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	9,800	4,900	98	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	490	73	98	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	490	39	98	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	490	180	98	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	490	84	98	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	490	49	98	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	490	47	98	261327	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	9,800	310	98	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	490	94	98	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	490	33	98	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	490	35	98	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	490	43	98	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	490	43	98	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	490	59	98	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	490	47	98	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	490	41	98	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	490	63	98	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	490	55	98	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	490	49	98	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	490	55	98	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	490	190	98	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	490	59	98	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	490	75	98	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	88	J	ug/Kg	490	55	98	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440642

440642-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	490	67	98	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	490	59	98	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	490	59	98	261327	02/12/21	02/12/21	LXR
Ethylbenzene	59	J	ug/Kg	490	53	98	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	980	120	98	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	490	59	98	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	490	55	98	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	490	69	98	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	99	J	ug/Kg	490	71	98	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	490	51	98	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	490	73	98	261327	02/12/21	02/12/21	LXR
Propylbenzene	150	J	ug/Kg	490	71	98	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	490	76	98	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	490	94	98	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	490	78	98	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	490	90	98	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	490	82	98	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	490	88	98	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	170	J	ug/Kg	490	82	98	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	490	110	98	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	490	84	98	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	490	100	98	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	150	J	ug/Kg	490	110	98	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	490	86	98	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	490	120	98	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	490	110	98	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	490	120	98	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	490	84	98	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	490	98	98	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>							<b>Limits</b>			
Dibromofluoromethane	99%		%REC	70-145		98	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	100%		%REC	70-145		98	261327	02/12/21	02/12/21	LXR
Toluene-d8	102%		%REC	70-145		98	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	86%		%REC	70-145		98	261327	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
1-Methylnaphthalene	ND	ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
Pyridine	ND	ug/Kg	6,300	850	25	261320	02/11/21	02/13/21	MTS
N-Nitrosodimethylamine	ND	ug/Kg	6,300	570	25	261320	02/11/21	02/13/21	MTS
Phenol	ND	ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
Aniline	ND	ug/Kg	6,300	910	25	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethyl)ether	ND	ug/Kg	30,000	1,400	25	261320	02/11/21	02/13/21	MTS
2-Chlorophenol	ND	ug/Kg	6,300	990	25	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
1,4-Dichlorobenzene	ND		ug/Kg	6,300	810	25	261320	02/11/21	02/13/21	MTS
Benzyl alcohol	ND		ug/Kg	6,300	6,200	25	261320	02/11/21	02/13/21	MTS
1,2-Dichlorobenzene	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
2-Methylphenol	ND		ug/Kg	6,300	2,700	25	261320	02/11/21	02/13/21	MTS
bis(2-Chloroisopropyl) ether	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
3-,4-Methylphenol	ND		ug/Kg	10,000	1,500	25	261320	02/11/21	02/13/21	MTS
N-Nitroso-di-n-propylamine	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
Hexachloroethane	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Nitrobenzene	ND		ug/Kg	30,000	900	25	261320	02/11/21	02/13/21	MTS
Isophorone	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
2-Nitrophenol	ND		ug/Kg	6,300	960	25	261320	02/11/21	02/13/21	MTS
2,4-Dimethylphenol	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Benzoic acid	ND		ug/Kg	30,000	3,400	25	261320	02/11/21	02/13/21	MTS
bis(2-Chloroethoxy)methane	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
2,4-Dichlorophenol	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
1,2,4-Trichlorobenzene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Naphthalene	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
4-Chloroaniline	ND		ug/Kg	6,300	1,500	25	261320	02/11/21	02/13/21	MTS
Hexachlorobutadiene	ND		ug/Kg	6,300	900	25	261320	02/11/21	02/13/21	MTS
4-Chloro-3-methylphenol	ND		ug/Kg	6,300	1,500	25	261320	02/11/21	02/13/21	MTS
2-Methylnaphthalene	ND		ug/Kg	6,300	920	25	261320	02/11/21	02/13/21	MTS
Hexachlorocyclopentadiene	ND		ug/Kg	30,000	500	25	261320	02/11/21	02/13/21	MTS
2,4,6-Trichlorophenol	ND		ug/Kg	6,300	810	25	261320	02/11/21	02/13/21	MTS
2,4,5-Trichlorophenol	ND		ug/Kg	6,300	960	25	261320	02/11/21	02/13/21	MTS
2-Chloronaphthalene	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
2-Nitroaniline	ND		ug/Kg	6,300	1,400	25	261320	02/11/21	02/13/21	MTS
Dimethylphthalate	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
Acenaphthylene	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
2,6-Dinitrotoluene	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
3-Nitroaniline	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
Acenaphthene	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
2,4-Dinitrophenol	ND		ug/Kg	30,000	1,300	25	261320	02/11/21	02/13/21	MTS
4-Nitrophenol	ND		ug/Kg	6,300	4,100	25	261320	02/11/21	02/13/21	MTS
Dibenzofuran	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
2,4-Dinitrotoluene	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
Diethylphthalate	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
Fluorene	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
4-Chlorophenyl-phenylether	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
4-Nitroaniline	ND		ug/Kg	6,300	2,100	25	261320	02/11/21	02/13/21	MTS
4,6-Dinitro-2-methylphenol	ND		ug/Kg	6,300	910	25	261320	02/11/21	02/13/21	MTS
N-Nitrosodiphenylamine	ND		ug/Kg	6,300	1,400	25	261320	02/11/21	02/13/21	MTS
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
4-Bromophenyl-phenylether	ND		ug/Kg	6,300	1,400	25	261320	02/11/21	02/13/21	MTS
Hexachlorobenzene	ND		ug/Kg	6,300	1,100	25	261320	02/11/21	02/13/21	MTS
Pentachlorophenol	ND		ug/Kg	30,000	1,200	25	261320	02/11/21	02/13/21	MTS

## Analysis Results for 440642

440642-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
Anthracene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Di-n-butylphthalate	ND		ug/Kg	6,300	1,500	25	261320	02/11/21	02/13/21	MTS
Fluoranthene	ND		ug/Kg	6,300	1,200	25	261320	02/11/21	02/13/21	MTS
Benzidine	ND		ug/Kg	30,000	5,100	25	261320	02/11/21	02/13/21	MTS
Pyrene	ND		ug/Kg	6,300	1,400	25	261320	02/11/21	02/13/21	MTS
Butylbenzylphthalate	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
3,3'-Dichlorobenzidine	ND		ug/Kg	30,000	4,000	25	261320	02/11/21	02/13/21	MTS
Benzo(a)anthracene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Chrysene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	6,300	1,800	25	261320	02/11/21	02/13/21	MTS
Di-n-octylphthalate	ND		ug/Kg	6,300	1,500	25	261320	02/11/21	02/13/21	MTS
Benzo(b)fluoranthene	ND		ug/Kg	6,300	1,300	25	261320	02/11/21	02/13/21	MTS
Benzo(k)fluoranthene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Benzo(a)pyrene	ND		ug/Kg	6,300	840	25	261320	02/11/21	02/13/21	MTS
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	6,300	2,200	25	261320	02/11/21	02/13/21	MTS
Dibenz(a,h)anthracene	ND		ug/Kg	6,300	700	25	261320	02/11/21	02/13/21	MTS
Benzo(g,h,i)perylene	ND		ug/Kg	6,300	1,000	25	261320	02/11/21	02/13/21	MTS
Surrogates	Limits									
2-Fluorophenol	61%	%REC	29-120		25	261320	02/11/21	02/13/21	MTS	
Phenol-d6	60%	%REC	30-120		25	261320	02/11/21	02/13/21	MTS	
2,4,6-Tribromophenol	51%	%REC	32-120		25	261320	02/11/21	02/13/21	MTS	
Nitrobenzene-d5	61%	%REC	33-120		25	261320	02/11/21	02/13/21	MTS	
2-Fluorobiphenyl	81%	%REC	39-120		25	261320	02/11/21	02/13/21	MTS	
Terphenyl-d14	100%	%REC	44-125		25	261320	02/11/21	02/13/21	MTS	

B Contamination found in associated Method Blank

DO Diluted Out

J Estimated value

ND Not Detected

b See narrative

## Batch QC

Type: Blank	Lab ID: QC908651			Batch: 261320			
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546			
<b>QC908651 Analyte</b>							
QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Carbazole	ND		ug/Kg	250	49	02/11/21	02/12/21
1-Methylnaphthalene	ND		ug/Kg	250	46	02/11/21	02/12/21
Pyridine	ND		ug/Kg	250	34	02/11/21	02/12/21
N-Nitrosodimethylamine	ND		ug/Kg	250	23	02/11/21	02/12/21
Phenol	ND		ug/Kg	250	49	02/11/21	02/12/21
Aniline	ND		ug/Kg	250	36	02/11/21	02/12/21
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	02/11/21	02/12/21
2-Chlorophenol	ND		ug/Kg	250	40	02/11/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	52	02/11/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	32	02/11/21	02/12/21
Benzyl alcohol	ND		ug/Kg	250	250	02/11/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	45	02/11/21	02/12/21
2-Methylphenol	ND		ug/Kg	250	110	02/11/21	02/12/21
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	02/11/21	02/12/21
3-,4-Methylphenol	ND		ug/Kg	400	60	02/11/21	02/12/21
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	02/11/21	02/12/21
Hexachloroethane	ND		ug/Kg	250	42	02/11/21	02/12/21
Nitrobenzene	ND		ug/Kg	1,200	36	02/11/21	02/12/21
Isophorone	ND		ug/Kg	250	41	02/11/21	02/12/21
2-Nitrophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2,4-Dimethylphenol	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzoic acid	ND		ug/Kg	1,200	140	02/11/21	02/12/21
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	02/11/21	02/12/21
2,4-Dichlorophenol	ND		ug/Kg	250	46	02/11/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	02/11/21	02/12/21
Naphthalene	ND		ug/Kg	250	44	02/11/21	02/12/21
4-Chloroaniline	ND		ug/Kg	250	59	02/11/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	36	02/11/21	02/12/21
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	02/11/21	02/12/21
2-Methylnaphthalene	ND		ug/Kg	250	37	02/11/21	02/12/21
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	02/11/21	02/12/21
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	02/11/21	02/12/21
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2-Chloronaphthalene	ND		ug/Kg	250	51	02/11/21	02/12/21
2-Nitroaniline	ND		ug/Kg	250	57	02/11/21	02/12/21
Dimethylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthylene	ND		ug/Kg	250	46	02/11/21	02/12/21
2,6-Dinitrotoluene	ND		ug/Kg	250	42	02/11/21	02/12/21
3-Nitroaniline	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthene	ND		ug/Kg	250	44	02/11/21	02/12/21
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	02/11/21	02/12/21
4-Nitrophenol	ND		ug/Kg	250	170	02/11/21	02/12/21

### Batch QC

QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Dibenzofuran	ND		ug/Kg	250	49	02/11/21	02/12/21
2,4-Dinitrotoluene	ND		ug/Kg	250	46	02/11/21	02/12/21
Diethylphthalate	ND		ug/Kg	250	51	02/11/21	02/12/21
Fluorene	ND		ug/Kg	250	49	02/11/21	02/12/21
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	02/11/21	02/12/21
4-Nitroaniline	ND		ug/Kg	250	84	02/11/21	02/12/21
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	02/11/21	02/12/21
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	02/11/21	02/12/21
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	02/11/21	02/12/21
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	02/11/21	02/12/21
Hexachlorobenzene	ND		ug/Kg	250	43	02/11/21	02/12/21
Pentachlorophenol	ND		ug/Kg	1,200	48	02/11/21	02/12/21
Phenanthrene	ND		ug/Kg	250	47	02/11/21	02/12/21
Anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Di-n-butylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Fluoranthene	ND		ug/Kg	250	50	02/11/21	02/12/21
Benzidine	ND		ug/Kg	1,200	200	02/11/21	02/12/21
Pyrene	ND		ug/Kg	250	55	02/11/21	02/12/21
Butylbenzylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	02/11/21	02/12/21
Benzo(a)anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Chrysene	ND		ug/Kg	250	42	02/11/21	02/12/21
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	02/11/21	02/12/21
Di-n-octylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Benzo(b)fluoranthene	ND		ug/Kg	250	52	02/11/21	02/12/21
Benzo(k)fluoranthene	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzo(a)pyrene	ND		ug/Kg	250	33	02/11/21	02/12/21
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	02/11/21	02/12/21
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	02/11/21	02/12/21
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	02/11/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
2-Fluorophenol	81%		%REC	29-120		02/11/21	02/12/21
Phenol-d6	83%		%REC	30-120		02/11/21	02/12/21
2,4,6-Tribromophenol	84%		%REC	32-120		02/11/21	02/12/21
Nitrobenzene-d5	75%		%REC	33-120		02/11/21	02/12/21
2-Fluorobiphenyl	76%		%REC	39-120		02/11/21	02/12/21
Terphenyl-d14	90%		%REC	44-125		02/11/21	02/12/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC908652			Batch: 261320		
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546		
QC908652 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	1,602	2000	ug/Kg	80%		42-120
2-Chlorophenol	1,572	2000	ug/Kg	79%		41-120
1,4-Dichlorobenzene	1,516	2000	ug/Kg	76%		36-120
3-,4-Methylphenol	1,669	2000	ug/Kg	83%		42-120
N-Nitroso-di-n-propylamine	1,608	2000	ug/Kg	80%		43-121
2,4-Dimethylphenol	1,597	2000	ug/Kg	80%		25-120
1,2,4-Trichlorobenzene	1,556	2000	ug/Kg	78%		38-120
4-Chloro-3-methylphenol	1,661	2000	ug/Kg	83%		40-125
2,4,5-Trichlorophenol	1,782	2000	ug/Kg	89%		40-124
Acenaphthene	1,671	2000	ug/Kg	84%		35-126
4-Nitrophenol	1,711	2000	ug/Kg	86%		24-128
2,4-Dinitrotoluene	1,795	2000	ug/Kg	90%		40-131
Pentachlorophenol	1,478	2000	ug/Kg	74%		35-120
Pyrene	1,810	2000	ug/Kg	91%		37-135
Chrysene	1,849	2000	ug/Kg	92%		38-132
Benzo(b)fluoranthene	1,947	2000	ug/Kg	97%		38-135
<b>Surrogates</b>						
2-Fluorophenol	1,782	2000	ug/Kg	89%		29-120
Phenol-d6	1,796	2000	ug/Kg	90%		30-120
2,4,6-Tribromophenol	1,931	2000	ug/Kg	97%		32-120
Nitrobenzene-d5	1,627	2000	ug/Kg	81%		33-120
2-Fluorobiphenyl	1,660	2000	ug/Kg	83%		39-120
Terphenyl-d14	1,897	2000	ug/Kg	95%		44-125

## Batch QC

Type: Matrix Spike	Lab ID: QC908653	Batch: 261320
Matrix (Source ID): Soil (440642-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908653 Analyte	Result	Source Sample		Recovery	Qual	Limits	DF
		Result	Spiked				
Phenol	1,171	ND	2000	ug/Kg	59%	37-120	1
2-Chlorophenol	1,185	ND	2000	ug/Kg	59%	33-120	1
1,4-Dichlorobenzene	1,239	ND	2000	ug/Kg	62%	32-120	1
3,-4-Methylphenol	1,133	ND	2000	ug/Kg	57%	37-120	1
N-Nitroso-di-n-propylamine	959.7	ND	2000	ug/Kg	48%	32-120	1
2,4-Dimethylphenol	1,077	ND	2000	ug/Kg	54%	32-120	1
1,2,4-Trichlorobenzene	1,094	ND	2000	ug/Kg	55%	33-120	1
4-Chloro-3-methylphenol	967.6	ND	2000	ug/Kg	48%	41-121	1
2,4,5-Trichlorophenol	961.5	ND	2000	ug/Kg	48%	40-120	1
Acenaphthene	967.0	ND	2000	ug/Kg	48%	37-120	1
4-Nitrophenol	858.3	ND	2000	ug/Kg	43%	20-141	1
2,4-Dinitrotoluene	695.6	ND	2000	ug/Kg	35%	33-128	1
Pentachlorophenol	902.7	ND	2000	ug/Kg	45%	28-132	1
Pyrene	914.9	ND	2000	ug/Kg	46%	39-135	1
Chrysene	887.9	ND	2000	ug/Kg	44%	37-135	1
Benzo(b)fluoranthene	898.3	ND	2000	ug/Kg	45%	34-139	1
<b>Surrogates</b>							
2-Fluorophenol	1,434		2000	ug/Kg	72%	29-120	1
Phenol-d6	1,272		2000	ug/Kg	64%	30-120	1
2,4,6-Tribromophenol	891.2		2000	ug/Kg	45%	32-120	1
Nitrobenzene-d5	1,022		2000	ug/Kg	51%	33-120	1
2-Fluorobiphenyl	958.2		2000	ug/Kg	48%	39-120	1
Terphenyl-d14	897.3		2000	ug/Kg	45%	44-125	1

## Batch QC

Type: Matrix Spike Duplicate Matrix (Source ID): Soil (440642-001)	Lab ID: QC908654 Method: EPA 8270C	Batch: 261320 Prep Method: EPA 3546
---	---------------------------------------	--

QC908654 Analyte	Result	Source Sample Result		Spiked	Units	Recovery	Qual	Limits	RPD		DF
		Sample Result	Spiked						RPD Lim		
Phenol	1,512	ND	2000	ug/Kg	76%	37-120	25	49	49	1	
2-Chlorophenol	1,533	ND	2000	ug/Kg	77%	33-120	26	52	52	1	
1,4-Dichlorobenzene	1,483	ND	2000	ug/Kg	74%	32-120	18	50	50	1	
3,-4-Methylphenol	1,539	ND	2000	ug/Kg	77%	37-120	30	54	54	1	
N-Nitroso-di-n-propylamine	1,422	ND	2000	ug/Kg	71%	32-120	39	50	50	1	
2,4-Dimethylphenol	1,485	ND	2000	ug/Kg	74%	32-120	32	50	50	1	
1,2,4-Trichlorobenzene	1,420	ND	2000	ug/Kg	71%	33-120	26	50	50	1	
4-Chloro-3-methylphenol	1,488	ND	2000	ug/Kg	74%	41-121	42	43	43	1	
2,4,5-Trichlorophenol	1,580	ND	2000	ug/Kg	79%	40-120	49*	47	47	1	
Acenaphthene	1,453	ND	2000	ug/Kg	73%	37-120	40	48	48	1	
4-Nitrophenol	1,586	ND	2000	ug/Kg	79%	20-141	60*	30	30	1	
2,4-Dinitrotoluene	1,423	ND	2000	ug/Kg	71%	33-128	69*	50	50	1	
Pentachlorophenol	1,349	ND	2000	ug/Kg	67%	28-132	40*	30	30	1	
Pyrene	1,543	ND	2000	ug/Kg	77%	39-135	51*	41	41	1	
Chrysene	1,528	ND	2000	ug/Kg	76%	37-135	53*	46	46	1	
Benzo(b)fluoranthene	1,568	ND	2000	ug/Kg	78%	34-139	54*	47	47	1	
<b>Surrogates</b>											
2-Fluorophenol	1,677		2000	ug/Kg	84%	29-120				1	
Phenol-d6	1,643		2000	ug/Kg	82%	30-120				1	
2,4,6-Tribromophenol	1,558		2000	ug/Kg	78%	32-120				1	
Nitrobenzene-d5	1,421		2000	ug/Kg	71%	33-120				1	
2-Fluorobiphenyl	1,419		2000	ug/Kg	71%	39-120				1	
Terphenyl-d14	1,555		2000	ug/Kg	78%	44-125				1	

Type: Lab Control Sample Matrix: Soil	Lab ID: QC908660 Method: EPA 8260B	Batch: 261322 Prep Method: EPA 5035
--	---------------------------------------	--

QC908660 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	54.47	50.00	ug/Kg	109%		70-131
MTBE	53.35	50.00	ug/Kg	107%		69-130
Benzene	51.60	50.00	ug/Kg	103%		70-130
Trichloroethene	54.01	50.00	ug/Kg	108%		70-130
Toluene	53.74	50.00	ug/Kg	107%		70-130
Chlorobenzene	55.19	50.00	ug/Kg	110%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.79	50.00	ug/Kg	102%		70-130
1,2-Dichloroethane-d4	49.22	50.00	ug/Kg	98%		70-145
Toluene-d8	50.46	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	53.28	50.00	ug/Kg	107%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908661	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908661 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	51.06	50.00	ug/Kg	102%		70-131	6	33
MTBE	52.29	50.00	ug/Kg	105%		69-130	2	30
Benzene	48.76	50.00	ug/Kg	98%		70-130	6	30
Trichloroethene	49.21	50.00	ug/Kg	98%		70-130	9	30
Toluene	49.32	50.00	ug/Kg	99%		70-130	9	30
Chlorobenzene	50.53	50.00	ug/Kg	101%		70-130	9	30
<b>Surrogates</b>								
Dibromofluoromethane	50.68	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	49.51	50.00	ug/Kg	99%		70-145		
Toluene-d8	50.04	50.00	ug/Kg	100%		70-145		
Bromofluorobenzene	51.75	50.00	ug/Kg	103%		70-145		

Type: Lab Control Sample	Lab ID: QC908662	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908662 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	541.0	500.0	ug/Kg	108%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.75	50.00	ug/Kg	100%		70-130
1,2-Dichloroethane-d4	50.16	50.00	ug/Kg	100%		70-145
Toluene-d8	48.14	50.00	ug/Kg	96%		70-145
Bromofluorobenzene	46.65	50.00	ug/Kg	93%		70-145

Type: Lab Control Sample Duplicate	Lab ID: QC908663	Batch: 261322
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908663 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	500.8	500.0	ug/Kg	100%		70-130	8	20
<b>Surrogates</b>								
Dibromofluoromethane	50.64	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	48.68	50.00	ug/Kg	97%		70-145		
Toluene-d8	49.68	50.00	ug/Kg	99%		70-145		
Bromofluorobenzene	46.87	50.00	ug/Kg	94%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908664			Batch: 261322			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908664 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	36	J	ug/Kg	100	6.4	02/11/21	02/11/21
Freon 12	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromomethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Acetone	ND		ug/Kg	100	50	02/11/21	02/11/21
Freon 113	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
MTBE	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Butanone	ND		ug/Kg	100	3.2	02/11/21	02/11/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chloroform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Benzene	ND		ug/Kg	5.0	0.2	02/11/21	02/11/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/11/21	02/11/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/11/21	02/11/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21

### Batch QC

QC908664 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Bromoform	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/11/21	02/11/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/11/21	02/11/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/11/21	02/11/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/11/21	02/11/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/11/21	02/11/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/11/21	02/11/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	102%	%REC	70-130	1.3	02/11/21	02/11/21	
1,2-Dichloroethane-d4	106%	%REC	70-145		02/11/21	02/11/21	
Toluene-d8	97%	%REC	70-145		02/11/21	02/11/21	
Bromofluorobenzene	92%	%REC	70-145	1.5	02/11/21	02/11/21	

## Batch QC

Type: Blank	Lab ID: QC908676			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	28	J	ug/Kg	100	6.4	02/12/21	02/12/21
Freon 12	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromomethane	0.5	J,b	ug/Kg	5.0	0.3	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Acetone	ND		ug/Kg	100	50	02/12/21	02/12/21
Freon 113	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
MTBE	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	100	3.2	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chloroform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Benzene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21

### Batch QC

QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	101%	%REC	70-130	1.3	02/12/21	02/12/21	
1,2-Dichloroethane-d4	101%	%REC	70-145		02/12/21	02/12/21	
Toluene-d8	99%	%REC	70-145		02/12/21	02/12/21	
Bromofluorobenzene	92%	%REC	70-145	1.5	02/12/21	02/12/21	

Type: Lab Control Sample	Lab ID: QC908677	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908677 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	50.71	50.00	ug/Kg	101%		70-131
MTBE	48.85	50.00	ug/Kg	98%		69-130
Benzene	48.20	50.00	ug/Kg	96%		70-130
Trichloroethene	49.41	50.00	ug/Kg	99%		70-130
Toluene	50.36	50.00	ug/Kg	101%		70-130
Chlorobenzene	51.10	50.00	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.55	50.00	ug/Kg	99%		70-130
1,2-Dichloroethane-d4	46.32	50.00	ug/Kg	93%		70-145
Toluene-d8	50.67	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	52.95	50.00	ug/Kg	106%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908678	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908678 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	47.25	50.00	ug/Kg	95%		70-131	7	33
MTBE	45.73	50.00	ug/Kg	91%		69-130	7	30
Benzene	44.88	50.00	ug/Kg	90%		70-130	7	30
Trichloroethene	46.65	50.00	ug/Kg	93%		70-130	6	30
Toluene	46.99	50.00	ug/Kg	94%		70-130	7	30
Chlorobenzene	47.31	50.00	ug/Kg	95%		70-130	8	30
<b>Surrogates</b>								
Dibromofluoromethane	49.96	50.00	ug/Kg	100%		70-130		
1,2-Dichloroethane-d4	47.26	50.00	ug/Kg	95%		70-145		
Toluene-d8	50.59	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	52.46	50.00	ug/Kg	105%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908679			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	1,500	J	ug/Kg	5,000	400	02/12/21	02/12/21
Freon 12	ND		ug/Kg	250	36	02/12/21	02/12/21
Chloromethane	71	J	ug/Kg	250	29	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	250	37	02/12/21	02/12/21
Bromomethane	100	J,b	ug/Kg	250	44	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	250	68	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/12/21	02/12/21
Acetone	ND		ug/Kg	5,000	2,500	02/12/21	02/12/21
Freon 113	ND		ug/Kg	250	37	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	250	91	02/12/21	02/12/21
MTBE	ND		ug/Kg	250	43	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	5,000	160	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/12/21	02/12/21
Chloroform	ND		ug/Kg	250	17	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	18	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
Benzene	ND		ug/Kg	250	21	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	250	32	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	250	25	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	250	28	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/12/21	02/12/21
Toluene	ND		ug/Kg	250	26	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	250	34	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	250	26	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	250	27	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	500	60	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	250	30	02/12/21	02/12/21

### Batch QC

QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	35	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	250	39	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/12/21	02/12/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	93%		%REC	70-130		02/12/21	02/12/21
1,2-Dichloroethane-d4	102%		%REC	70-145		02/12/21	02/12/21
Toluene-d8	99%		%REC	70-145		02/12/21	02/12/21
Bromofluorobenzene	90%		%REC	70-145		02/12/21	02/12/21

Type: Lab Control Sample	Lab ID: QC908680	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908680 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	510.1	500.0	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.70	50.00	ug/Kg	101%		70-130
1,2-Dichloroethane-d4	49.68	50.00	ug/Kg	99%		70-145
Toluene-d8	48.90	50.00	ug/Kg	98%		70-145
Bromofluorobenzene	46.20	50.00	ug/Kg	92%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908681	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908681 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	499.7	500.0	ug/Kg	100%		70-130	2	20
<b>Surrogates</b>								
Dibromofluoromethane	48.97	50.00	ug/Kg	98%		70-130		
1,2-Dichloroethane-d4	49.47	50.00	ug/Kg	99%		70-145		
Toluene-d8	48.26	50.00	ug/Kg	97%		70-145		
Bromofluorobenzene	46.28	50.00	ug/Kg	93%		70-145		

Type: Blank	Lab ID: QC909260	Batch: 261517
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC909260 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	1.3	J	mg/Kg	9.9	0.61	02/17/21	02/17/21
ORO C28-C44	3.1	J	mg/Kg	20	0.61	02/17/21	02/17/21
<b>Surrogates</b>							
n-Triacontane	110%		%REC	70-130		02/17/21	02/17/21

Type: Lab Control Sample	Lab ID: QC909261	Batch: 261517
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC909261 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	255.4	250.0	mg/Kg	102%		76-122
<b>Surrogates</b>						
n-Triacontane	11.95	10.00	mg/Kg	120%		70-130

Type: Matrix Spike	Lab ID: QC909262	Batch: 261517
Matrix (Source ID): Soil (440947-020)	Method: EPA 8015M	Prep Method: EPA 3580

QC909262 Analyte	Result	Source Sample Result		Spiked	Units	Recovery	Qual	Limits	DF
		Result	Spiked						
Diesel C10-C28	271.6	2.027	248.8	mg/Kg		108%		62-126	1
<b>Surrogates</b>									
n-Triacontane	11.77		9.950	mg/Kg		118%		70-130	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC909263	Batch: 261517
Matrix (Source ID): Soil (440947-020)	Method: EPA 8015M	Prep Method: EPA 3580

QC909263 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD		
								RPD	Lim	DF
Diesel C10-C28	251.4	2.027	248.8	mg/Kg	100%		62-126	8	35	1
<b>Surrogates</b>										
n-Triacontane	11.62		9.950	mg/Kg	117%		70-130			1

\* Value is outside QC limits

J Estimated value

ND Not Detected

b See narrative



Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

[enthalpy.com](http://enthalpy.com)

Lab Job Number: 440717  
Report Level: II  
Report Date: 02/19/2021

**Analytical Report prepared for:**

Ian Hull  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Project: 0520818 - Caltrain HPK

*Authorized for release by:*

A handwritten signature in black ink that appears to read "Richard Villafania".

Richard Villafania, Project Manager  
[richard.villafania@enthalpy.com](mailto:richard.villafania@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member



## Sample Summary

---

Ian Hull	Lab Job #:	440717
ERM	Project No:	0520818
1277 Treat Blvd.	Location:	Caltrain HPK
Suite 500	Date Received:	02/10/21
Walnut Creek, CA 94597		

---

Sample ID	Lab ID	Collected	Matrix
MW-2-4-5	440717-001	02/10/21 12:40	Soil
MW-7-4	440717-002	02/10/21 11:50	Soil
MW-7-8	440717-003	02/10/21 12:00	Soil
MW-7-11-12	440717-004	02/10/21 12:25	Soil
MW-8-4-5	440717-005	02/10/21 08:50	Soil
MW-8-9	440717-006	02/10/21 08:55	Soil
MW-8-11.5	440717-007	02/10/21 09:00	Soil
MW-9-7	440717-008	02/10/21 11:10	Soil
MW-9-9-10	440717-009	02/10/21 11:15	Soil

## Case Narrative

ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
Ian Hull

Lab Job Number: 440717  
Project No: 0520818  
Location: Caltrain HPK  
Date Received: 02/10/21

This data package contains sample and QC results for nine soil samples, requested for the above referenced project on 02/10/21. The samples were received cold and intact.

**TPH-Extractables by GC (EPA 8015M):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

High response was observed for bromomethane in the CCV analyzed 02/12/21 07:37; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". High response was observed for bromomethane in the CCV analyzed 02/12/21 20:21; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b". Bromomethane and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327. Bromomethane, chloromethane, and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261327. Bromomethane and TPH gasoline were detected between the MDL and the RL in the method blank for batch 261406; these analytes were either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. TPH gasoline was detected between the MDL and the RL in the method blank for batch 261406; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. MW-9-7 (lab # 440717-008) was diluted due to high hydrocarbons. No other analytical problems were encountered.

**Semivolatile Organics by GC/MS (EPA 8270C):**

High RPD was observed for many analytes in the MS/MSD of MW-1-9 (lab # 440642-001); these analytes were not detected at or above the RL in the associated samples. MW-2-4-5 (lab # 440717-001) and MW-7-4 (lab # 440717-002) were diluted due to the dark color of the sample extracts. No other analytical problems were encountered.

# **CHAIN OF CUSTODY**

# **ea** ENTHALPY ANALYTICAL

Formerly Curtis & Tompkins Labs

2323 Fifth Street  
Berkeley, CA 94710

Phone (510) 486-0900  
Fax (510) 486-0532

Project No: 0520318

Sampler: Alex Martinez

Project Name: Caltrain HPIG

Report To: Clint Harms / Tom Hall

Project P. O. No:

Company: ERM

## EDD Format: Report

Standard

E-mail: [al...@...](mailto:al...@...)

Turnaround Time:  RUSH  Standard Email: clint.harms@erm.com ian.hall@erm.com

Notes:	SAMPLE RECEIPT	RELINQUISHED BY:	RECEIVED BY:
	<input type="checkbox"/> Intact <input type="checkbox"/> Cold <input type="checkbox"/> On Ice <input type="checkbox"/> Ambient	<u>Alan Martinez</u> <u>2/10/21</u> <u>DATE: 2/10/21</u> <u>TIME: 1510</u>	<u>Audrey Andrew</u> <u>2/10/21</u> <u>DATE: 2/10/21</u> <u>TIME: 1708</u>
		<u>Audrey Andrew</u> <u>2/11/21</u> <u>DATE: 2/11/21</u> <u>TIME: 1510</u>	<u>Audrey Andrew</u> <u>2/12/21</u> <u>DATE: 2/12/21</u> <u>TIME: 1200</u>

440717

Page | of |

**Chain of Custody #**

# ANALYTICAL REQUEST

**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 440717Client: CRMDate Received: 2-10-21

Project: \_\_\_\_\_

**Section 2: Shipping info (if applicable)**Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASamples received in a cooler?  Yes, how many? 1  No (skip Section 3 below)If no cooler Sample Temp (°C): \_\_\_\_\_ using IR Gun #  B, or  C Samples received on ice directly from the field. Cooling process had begunIf in cooler: Date Opened 2-10 By (print) JL (sign) JL**Section 3:****Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used:  Wet,  Blue/Gel,  NoneTemperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_, or IR Gun #  B  C

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

Were custody papers dry, filled out properly, and the project identifiable

 YES  NO  N/A

Were Method 5035 sampling containers present?

If YES, what time were they transferred to freezer? 1800

Did all bottles arrive unbroken/unopened?

Are there any missing / extra samples?

Are samples in the appropriate containers for indicated tests?

Are sample labels present, in good condition and complete?

Does the container count match the COC?

Do the sample labels agree with custody papers?

Was sufficient amount of sample sent for tests requested?

Did you change the hold time in LIMS for unpreserved VOAs?

Did you change the hold time in LIMS for preserved terracores?

Are bubbles &gt; 6mm present in VOA samples?

Was the client contacted concerning this sample delivery?

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)

 YES  NO  N/A

Did you check preservatives for all bottles for each sample?

Did you document your preservative check?

pH strip lot# \_\_\_\_\_ pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

 H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_ NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_**Section 6:**Explanations/Comments: Vials with sample ID's different than COO-005-A,BDate Logged in 2-10By (print) ZLA (sign) \_\_\_\_\_Date Labeled 2-11By (print) JL (sign) JL



# ENTHALPY

## ANALYTICAL

### SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: ERM

Project: 0520818

Date Received: 2/12/21

Sampler's Name Present:  Yes  No**Section 2**Sample(s) received in a cooler?  Yes, How many? 1  No (skip section 2) Sample Temp (°C) (No Cooler): \_\_\_\_\_

Sample Temp (°C), One from each cooler: #1: 2.3 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

*(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)*

Shipping Information:

**Section 3**Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam  
 Paper  None  Other \_\_\_\_\_

Cooler Temp (°C): #1: 1.0 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

**Section 4**

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present? If custody seals are present, were they intact?		✓	
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

**Section 5 Explanations/Comments****Section 6**For discrepancies, how was the Project Manager notified?  Verbal PM Initials: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Email (email sent to/on): \_\_\_\_\_ / \_\_\_\_\_

Project Manager's response:

Completed By: \_\_\_\_\_

Date: 2/12/21



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL  
JOHN GOYETTE  
2323 5TH STREET  
BERKELEY, CA 94710

**Ship To**  
ENTHALPY ANALYTICAL (ORG)  
SAMPLE RECEIVING  
931 W BARKLEY AVE.  
ORANGE, CA 92868

**COD:** \$0.00

**Weight:** 0 lb(s)

**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

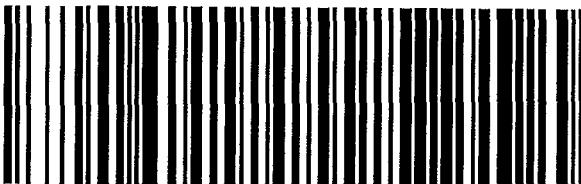
Tracking #: 552236267

CPS



**ORANGE**

**S92868A**



36340473

**ORC CA927-CI1**

Print Date: 2/11/2021 12:34 PM

Package 4 of 4

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

23/10

## Analysis Results for 440717

Ian Hull  
 ERM  
 1277 Treat Blvd.  
 Suite 500  
 Walnut Creek, CA 94597

Lab Job #: 440717  
 Project No: 0520818  
 Location: Caltrain HPK  
 Date Received: 02/10/21

<b>Sample ID:</b> MW-2-4-5	<b>Lab ID:</b> 440717-001	<b>Collected:</b> 02/10/21 12:40
<b>Matrix:</b> Soil		

440717-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	<b>64</b>		mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	<b>49</b>		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	95%		%REC	70-130			1	261396	02/12/21	02/17/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	<b>100</b>	B	ug/Kg	79	5.1	0.79	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Chloromethane	<b>0.3</b>	J	ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromomethane	<b>0.3</b>	B,J,b	ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Acetone	<b>240</b>		ug/Kg	79	40	0.79	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	4.0	0.6	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	4.0	0.1	0.79	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
2-Butanone	<b>52</b>	J	ug/Kg	79	2.5	0.79	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Benzene	<b>0.2</b>	J	ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440717

440717-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
4-Methyl-2-Pentanone	ND		ug/Kg	4.0	1.5	0.79	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Tetrachloroethene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	2.0	J	ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	7.9	0.7	0.79	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	4.0	0.6	0.79	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	4.0	0.7	0.79	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	4.0	0.7	0.79	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	95%		%REC	70-145	1.0	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	93%		%REC	70-145		0.79	261327	02/12/21	02/12/21	LXR
Toluene-d8	109%		%REC	70-145		0.79	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	105%		%REC	70-145	1.2	0.79	261327	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
1-MethylNaphthalene	ND	ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Pyridine	ND		ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND		ug/Kg	1,300	110	5	261320	02/12/21	02/15/21	DJL
Phenol	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Aniline	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND		ug/Kg	6,000	290	5	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
1,3-Dichlorobenzene	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	1,300	1,200	5	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	1,300	530	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	2,000	300	5	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	6,000	180	5	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	6,000	680	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	1,300	300	5	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	6,000	100	5	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	6,000	260	5	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	1,300	830	5	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	1,300	420	5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
4,6-Dinitro-2-methylphenol	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	6,000	240	5	261320	02/12/21	02/15/21	DJL
Phenanthrene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	6,000	1,000	5	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	6,000	800	5	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	1,300	360	5	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	1,300	430	5	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	1,300	140	5	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>		<b>Limits</b>								
2-Fluorophenol	82%		%REC	29-120		5	261320	02/12/21	02/15/21	DJL
Phenol-d6	75%		%REC	30-120		5	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	52%		%REC	32-120		5	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	51%		%REC	33-120		5	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	72%		%REC	39-120		5	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	73%		%REC	44-125		5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-7-4	<b>Lab ID:</b> 440717-002	<b>Collected:</b> 02/10/21 11:50
	<b>Matrix:</b> Soil	

440717-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	52		mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	43		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	90%		%REC	70-130			1	261396	02/12/21	02/17/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	40	B,J	ug/Kg	91	5.8	0.91	261406	02/13/21	02/13/21	LXR
Freon 12	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Chloromethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Vinyl Chloride	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Bromomethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Chloroethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Trichlorofluoromethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Acetone	ND		ug/Kg	91	45	0.91	261406	02/13/21	02/13/21	LXR
Freon 113	ND		ug/Kg	4.5	0.7	0.91	261406	02/13/21	02/13/21	LXR
1,1-Dichloroethene	ND		ug/Kg	4.5	0.2	0.91	261406	02/13/21	02/13/21	LXR
Methylene Chloride	ND		ug/Kg	4.5	0.6	0.91	261406	02/13/21	02/13/21	LXR
MTBE	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,1-Dichloroethane	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
2-Butanone	7.6	J	ug/Kg	91	2.9	0.91	261406	02/13/21	02/13/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
2,2-Dichloropropane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Chloroform	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Bromochloromethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
1,1-Dichloropropene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Carbon Tetrachloride	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dichloroethane	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Benzene	ND		ug/Kg	4.5	0.2	0.91	261406	02/13/21	02/13/21	LXR
Trichloroethene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dichloropropane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Bromodichloromethane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Dibromomethane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	4.5	1.7	0.91	261406	02/13/21	02/13/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Toluene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
1,3-Dichloropropane	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR

## Analysis Results for 440717

440717-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Dibromochloromethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dibromoethane	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Chlorobenzene	ND		ug/Kg	4.5	0.2	0.91	261406	02/13/21	02/13/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Ethylbenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
m,p-Xylenes	ND		ug/Kg	9.1	0.8	0.91	261406	02/13/21	02/13/21	LXR
o-Xylene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Styrene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
Bromoform	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Isopropylbenzene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	4.5	0.7	0.91	261406	02/13/21	02/13/21	LXR
Propylbenzene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
Bromobenzene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
2-Chlorotoluene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
4-Chlorotoluene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
tert-Butylbenzene	ND		ug/Kg	4.5	0.3	0.91	261406	02/13/21	02/13/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
sec-Butylbenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	4.5	0.4	0.91	261406	02/13/21	02/13/21	LXR
n-Butylbenzene	ND		ug/Kg	4.5	0.6	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.5	0.6	0.91	261406	02/13/21	02/13/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	4.5	0.8	0.91	261406	02/13/21	02/13/21	LXR
Hexachlorobutadiene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
Naphthalene	ND		ug/Kg	4.5	0.8	0.91	261406	02/13/21	02/13/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	4.5	0.5	0.91	261406	02/13/21	02/13/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	100%		%REC	70-145	1.2	0.91	261406	02/13/21	02/13/21	LXR
1,2-Dichloroethane-d4	107%		%REC	70-145		0.91	261406	02/13/21	02/13/21	LXR
Toluene-d8	98%		%REC	70-145		0.91	261406	02/13/21	02/13/21	LXR
Bromofluorobenzene	92%		%REC	70-145	1.4	0.91	261406	02/13/21	02/13/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	1,300	110	5	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	6,000	290	5	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	1,300	1,200	5	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	1,300	530	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	2,000	300	5	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	6,000	180	5	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	6,000	680	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	1,300	300	5	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	6,000	100	5	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	6,000	260	5	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	1,300	830	5	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	1,300	420	5	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	6,000	240	5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	6,000	1,000	5	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	6,000	800	5	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	1,300	360	5	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	1,300	430	5	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	1,300	140	5	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	81%		%REC	29-120		5	261320	02/12/21	02/15/21	DJL
Phenol-d6	83%		%REC	30-120		5	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	63%		%REC	32-120		5	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	54%		%REC	33-120		5	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	68%		%REC	39-120		5	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	81%		%REC	44-125		5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-7-8	<b>Lab ID:</b> 440717-003	<b>Collected:</b> 02/10/21 12:00
	<b>Matrix:</b> Soil	

440717-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28 ND mg/Kg 10 4.0 1 261396 02/12/21 02/17/21 MES										
ORO C28-C44 ND mg/Kg 20 4.0 1 261396 02/12/21 02/17/21 MES										
<b>Surrogates</b> <b>Limits</b>										
n-Triacontane	99%		%REC	70-130			1 261396	02/12/21	02/17/21	MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	<b>78</b>	B	ug/Kg	68	4.3	0.68	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	68	34	0.68	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.4	0.1	0.68	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
2-Butanone	<b>2.4</b>	J	ug/Kg	68	2.2	0.68	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.4	0.1	0.68	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.4	1.3	0.68	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440717

440717-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	6.8	0.6	0.68	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	3.4	0.6	0.68	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	3.4	0.6	0.68	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	99%		%REC	70-145	0.9	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	103%		%REC	70-145		0.68	261327	02/12/21	02/12/21	LXR
Toluene-d8	101%		%REC	70-145		0.68	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	94%		%REC	70-145	1.0	0.68	261327	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	90%		%REC	29-120		1	261320	02/12/21	02/15/21	DJL
Phenol-d6	83%		%REC	30-120		1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	64%		%REC	32-120		1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	70%		%REC	33-120		1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	69%		%REC	39-120		1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	67%		%REC	44-125		1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-7-11-12	<b>Lab ID:</b> 440717-004	<b>Collected:</b> 02/10/21 12:25
<b>Matrix:</b> Soil		

440717-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	ND		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	101%		%REC	70-130			1	261396	02/12/21	02/17/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	62	B,J	ug/Kg	74	4.7	0.74	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Chloromethane	0.5	J	ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Bromomethane	0.9	B,J,b	ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	74	37	0.74	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.7	0.5	0.74	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.7	0.1	0.74	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.7	0.5	0.74	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	74	2.4	0.74	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.7	1.4	0.74	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR

Results for any subcontracted analyses are not included in this section.

## Analysis Results for 440717

440717-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	7.4	0.6	0.74	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	3.7	0.2	0.74	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	3.7	0.5	0.74	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	3.7	0.3	0.74	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	3.7	0.5	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.7	0.5	0.74	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	3.7	0.7	0.74	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	3.7	0.6	0.74	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	3.7	0.4	0.74	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	99%		%REC	70-145	1.0	0.74	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	106%		%REC	70-145		0.74	261327	02/12/21	02/12/21	LXR
Toluene-d8	99%		%REC	70-145		0.74	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	92%		%REC	70-145	1.1	0.74	261327	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	91%		%REC	29-120		1	261320	02/12/21	02/15/21	DJL
Phenol-d6	88%		%REC	30-120		1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	80%		%REC	32-120		1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	77%		%REC	33-120		1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	110%		%REC	39-120		1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	94%		%REC	44-125		1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-8-4-5	<b>Lab ID:</b> 440717-005	<b>Collected:</b> 02/10/21 08:50
	<b>Matrix:</b> Soil	

440717-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
--------------------	--------	------	-------	----	-----	----	-------	----------	----------	---------

Method: EPA 8015M

Prep Method: EPA 3580

DRO C10-C28	<b>4.2</b>	J	mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	ND		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES

**Surrogates****Limits**

n-Triacontane	101%	%REC	70-130	1	261396	02/12/21	02/17/21	MES
---------------	------	------	--------	---	--------	----------	----------	-----

Method: EPA 8260B

Prep Method: EPA 5035

TPH Gasoline	<b>45</b>	B,J	ug/Kg	79	5.1	0.79	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Acetone	<b>85</b>		ug/Kg	79	40	0.79	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	4.0	0.6	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	4.0	0.1	0.79	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
2-Butanone	<b>15</b>	J	ug/Kg	79	2.5	0.79	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	4.0	1.5	0.79	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440717

440717-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	7.9	0.7	0.79	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	4.0	0.2	0.79	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	4.0	0.6	0.79	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	4.0	0.3	0.79	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	4.0	0.7	0.79	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	4.0	0.5	0.79	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	4.0	0.7	0.79	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	4.0	0.4	0.79	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	103%		%REC	70-145	1.0	0.79	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane-d4	104%		%REC	70-145		0.79	261327	02/12/21	02/12/21	LXR
Toluene-d8	98%		%REC	70-145		0.79	261327	02/12/21	02/12/21	LXR
Bromofluorobenzene	94%		%REC	70-145	1.2	0.79	261327	02/12/21	02/12/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	83%		%REC	29-120		1	261320	02/12/21	02/15/21	DJL
Phenol-d6	80%		%REC	30-120		1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	61%		%REC	32-120		1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	61%		%REC	33-120		1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	62%		%REC	39-120		1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	66%		%REC	44-125		1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-8-9	<b>Lab ID:</b> 440717-006	<b>Collected:</b> 02/10/21 08:55
	<b>Matrix:</b> Soil	

440717-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28 ND mg/Kg 10 4.0 1 261396 02/12/21 02/17/21 MES										
ORO C28-C44 ND mg/Kg 20 4.0 1 261396 02/12/21 02/17/21 MES										
<b>Surrogates</b> <b>Limits</b>										
n-Triacontane	100%	%REC	70-130			1	261396	02/12/21	02/17/21	MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	<b>26</b>	B,J	ug/Kg	68	4.4	0.68	261327	02/12/21	02/12/21	LXR
Freon 12	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Chloromethane	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Bromomethane	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Chloroethane	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Acetone	ND	ug/Kg		68	34	0.68	261327	02/12/21	02/12/21	LXR
Freon 113	ND	ug/Kg		3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND	ug/Kg		3.4	0.1	0.68	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND	ug/Kg		3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR
MTBE	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
2-Butanone	ND	ug/Kg		68	2.2	0.68	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Chloroform	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Benzene	ND	ug/Kg		3.4	0.1	0.68	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND	ug/Kg		3.4	1.3	0.68	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND	ug/Kg		3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR
Toluene	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND	ug/Kg		3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND	ug/Kg		3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR

Results for any subcontracted analyses are not included in this section.

## Analysis Results for 440717

440717-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist	
Tetrachloroethene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
Dibromochloromethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
1,2-Dibromoethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
Chlorobenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR	
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
Ethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
m,p-Xylenes	ND		ug/Kg	6.8	0.6	0.68	261327	02/12/21	02/12/21	LXR	
o-Xylene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR	
Styrene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
Bromoform	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
Isopropylbenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR	
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
1,2,3-Trichloropropane	ND		ug/Kg	3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR	
Propylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
Bromobenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR	
1,3,5-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
2-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
4-Chlorotoluene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
tert-Butylbenzene	ND		ug/Kg	3.4	0.2	0.68	261327	02/12/21	02/12/21	LXR	
1,2,4-Trimethylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
sec-Butylbenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
para-Isopropyl Toluene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
1,3-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
1,4-Dichlorobenzene	ND		ug/Kg	3.4	0.3	0.68	261327	02/12/21	02/12/21	LXR	
n-Butylbenzene	ND		ug/Kg	3.4	0.5	0.68	261327	02/12/21	02/12/21	LXR	
1,2-Dichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
1,2,4-Trichlorobenzene	ND		ug/Kg	3.4	0.6	0.68	261327	02/12/21	02/12/21	LXR	
Hexachlorobutadiene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
Naphthalene	ND		ug/Kg	3.4	0.6	0.68	261327	02/12/21	02/12/21	LXR	
1,2,3-Trichlorobenzene	ND		ug/Kg	3.4	0.4	0.68	261327	02/12/21	02/12/21	LXR	
<b>Surrogates</b>				<b>Limits</b>							
Dibromofluoromethane	101%		%REC	70-145	0.9	0.68	261327	02/12/21	02/12/21	LXR	
1,2-Dichloroethane-d4	110%		%REC	70-145		0.68	261327	02/12/21	02/12/21	LXR	
Toluene-d8	97%		%REC	70-145		0.68	261327	02/12/21	02/12/21	LXR	
Bromofluorobenzene	92%		%REC	70-145	1.0	0.68	261327	02/12/21	02/12/21	LXR	

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>										
<b>Limits</b>										
2-Fluorophenol	84%		%REC	29-120		1	261320	02/12/21	02/15/21	DJL
Phenol-d6	77%		%REC	30-120		1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	51%		%REC	32-120		1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	68%		%REC	33-120		1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	61%		%REC	39-120		1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	61%		%REC	44-125		1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-8-11.5	<b>Lab ID:</b> 440717-007	<b>Collected:</b> 02/10/21 09:00
	<b>Matrix:</b> Soil	

440717-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10	4.0	1	261396	02/12/21	02/13/21	MTS
ORO C28-C44	5.4	J	mg/Kg	20	4.0	1	261396	02/12/21	02/13/21	MTS
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	96%		%REC	70-130			1	261396	02/12/21	02/13/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	25	B,J	ug/Kg	70	4.5	0.7	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	70	35	0.7	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.5	0.5	0.7	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	ND		ug/Kg	3.5	0.1	0.7	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.5	0.5	0.7	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
2-Butanone	ND		ug/Kg	70	2.3	0.7	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Chloroform	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Bromochloromethane	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Benzene	ND		ug/Kg	3.5	0.1	0.7	261327	02/12/21	02/12/21	LXR
Trichloroethene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Dibromomethane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.5	1.3	0.7	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR

## Analysis Results for 440717

440717-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Dibromochloromethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Chlorobenzene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Ethylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
m,p-Xylenes	ND		ug/Kg	7.0	0.6	0.7	261327	02/12/21	02/12/21	LXR
o-Xylene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
Styrene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Bromoform	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Isopropylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	3.5	0.5	0.7	261327	02/12/21	02/12/21	LXR
Propylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
Bromobenzene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene	ND		ug/Kg	3.5	0.2	0.7	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	3.5	0.3	0.7	261327	02/12/21	02/12/21	LXR
n-Butylbenzene	ND		ug/Kg	3.5	0.5	0.7	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	3.5	0.5	0.7	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	3.5	0.6	0.7	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
Naphthalene	ND		ug/Kg	3.5	0.6	0.7	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	3.5	0.4	0.7	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	99%	%REC	70-145	0.9	0.7	261327	02/12/21	02/12/21	LXR	
1,2-Dichloroethane-d4	105%	%REC	70-145		0.7	261327	02/12/21	02/12/21	LXR	
Toluene-d8	99%	%REC	70-145		0.7	261327	02/12/21	02/12/21	LXR	
Bromofluorobenzene	96%	%REC	70-145	1.1	0.7	261327	02/12/21	02/12/21	LXR	

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>		<b>Limits</b>								
2-Fluorophenol	76%	%REC	29-120		1	261320	02/12/21	02/15/21	DJL	
Phenol-d6	74%	%REC	30-120		1	261320	02/12/21	02/15/21	DJL	
2,4,6-Tribromophenol	61%	%REC	32-120		1	261320	02/12/21	02/15/21	DJL	
Nitrobenzene-d5	67%	%REC	33-120		1	261320	02/12/21	02/15/21	DJL	
2-Fluorobiphenyl	69%	%REC	39-120		1	261320	02/12/21	02/15/21	DJL	
Terphenyl-d14	77%	%REC	44-125		1	261320	02/12/21	02/15/21	DJL	

## Analysis Results for 440717

Sample ID: MW-9-7	Lab ID: 440717-008	Collected: 02/10/21 11:10
	Matrix: Soil	

440717-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	ND		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES
<b>Surrogates</b>										
n-Triacontane	97%	%REC	70-130			1	261396	02/12/21	02/17/21	MES
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	<b>67,000</b>		ug/Kg	3,700	300	37	261406	02/13/21	02/13/21	LXR
Freon 12	ND		ug/Kg	190	27	37	261406	02/13/21	02/13/21	LXR
Chloromethane	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
Vinyl Chloride	ND		ug/Kg	190	28	37	261406	02/13/21	02/13/21	LXR
Bromomethane	<b>49</b>	B,J,b	ug/Kg	190	33	37	261406	02/13/21	02/13/21	LXR
Chloroethane	ND		ug/Kg	190	51	37	261406	02/13/21	02/13/21	LXR
Trichlorofluoromethane	ND		ug/Kg	190	6.3	37	261406	02/13/21	02/13/21	LXR
Acetone	ND		ug/Kg	3,700	1,900	37	261406	02/13/21	02/13/21	LXR
Freon 113	ND		ug/Kg	190	28	37	261406	02/13/21	02/13/21	LXR
1,1-Dichloroethene	ND		ug/Kg	190	15	37	261406	02/13/21	02/13/21	LXR
Methylene Chloride	ND		ug/Kg	190	68	37	261406	02/13/21	02/13/21	LXR
MTBE	ND		ug/Kg	190	32	37	261406	02/13/21	02/13/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
1,1-Dichloroethane	ND		ug/Kg	190	18	37	261406	02/13/21	02/13/21	LXR
2-Butanone	ND		ug/Kg	3,700	120	37	261406	02/13/21	02/13/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
2,2-Dichloropropane	ND		ug/Kg	190	36	37	261406	02/13/21	02/13/21	LXR
Chloroform	<b>13</b>	J	ug/Kg	190	13	37	261406	02/13/21	02/13/21	LXR
Bromochloromethane	ND		ug/Kg	190	13	37	261406	02/13/21	02/13/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	190	16	37	261406	02/13/21	02/13/21	LXR
1,1-Dichloropropene	ND		ug/Kg	190	16	37	261406	02/13/21	02/13/21	LXR
Carbon Tetrachloride	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
1,2-Dichloroethane	ND		ug/Kg	190	18	37	261406	02/13/21	02/13/21	LXR
Benzene	ND		ug/Kg	190	16	37	261406	02/13/21	02/13/21	LXR
Trichloroethene	ND		ug/Kg	190	24	37	261406	02/13/21	02/13/21	LXR
1,2-Dichloropropane	ND		ug/Kg	190	21	37	261406	02/13/21	02/13/21	LXR
Bromodichloromethane	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
Dibromomethane	ND		ug/Kg	190	21	37	261406	02/13/21	02/13/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	190	71	37	261406	02/13/21	02/13/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
Toluene	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	190	28	37	261406	02/13/21	02/13/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	190	21	37	261406	02/13/21	02/13/21	LXR
1,3-Dichloropropane	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR

Results for any subcontracted analyses are not included in this section.

## Analysis Results for 440717

440717-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/Kg	190	25	37	261406	02/13/21	02/13/21	LXR
Dibromochloromethane	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
1,2-Dibromoethane	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
Chlorobenzene	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
1,1,1,2-Tetrachloroethane	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
Ethylbenzene	31	J	ug/Kg	190	20	37	261406	02/13/21	02/13/21	LXR
m,p-Xylenes	ND		ug/Kg	370	45	37	261406	02/13/21	02/13/21	LXR
o-Xylene	ND		ug/Kg	190	22	37	261406	02/13/21	02/13/21	LXR
Styrene	ND		ug/Kg	190	21	37	261406	02/13/21	02/13/21	LXR
Bromoform	ND		ug/Kg	190	26	37	261406	02/13/21	02/13/21	LXR
Isopropylbenzene	37	J	ug/Kg	190	27	37	261406	02/13/21	02/13/21	LXR
1,1,2,2-Tetrachloroethane	ND		ug/Kg	190	19	37	261406	02/13/21	02/13/21	LXR
1,2,3-Trichloropropane	ND		ug/Kg	190	28	37	261406	02/13/21	02/13/21	LXR
Propylbenzene	52	J	ug/Kg	190	27	37	261406	02/13/21	02/13/21	LXR
Bromobenzene	ND		ug/Kg	190	29	37	261406	02/13/21	02/13/21	LXR
1,3,5-Trimethylbenzene	ND		ug/Kg	190	36	37	261406	02/13/21	02/13/21	LXR
2-Chlorotoluene	ND		ug/Kg	190	30	37	261406	02/13/21	02/13/21	LXR
4-Chlorotoluene	ND		ug/Kg	190	34	37	261406	02/13/21	02/13/21	LXR
tert-Butylbenzene	ND		ug/Kg	190	31	37	261406	02/13/21	02/13/21	LXR
1,2,4-Trimethylbenzene	ND		ug/Kg	190	34	37	261406	02/13/21	02/13/21	LXR
sec-Butylbenzene	52	J	ug/Kg	190	31	37	261406	02/13/21	02/13/21	LXR
para-Isopropyl Toluene	ND		ug/Kg	190	40	37	261406	02/13/21	02/13/21	LXR
1,3-Dichlorobenzene	ND		ug/Kg	190	32	37	261406	02/13/21	02/13/21	LXR
1,4-Dichlorobenzene	ND		ug/Kg	190	39	37	261406	02/13/21	02/13/21	LXR
n-Butylbenzene	52	J	ug/Kg	190	41	37	261406	02/13/21	02/13/21	LXR
1,2-Dichlorobenzene	ND		ug/Kg	190	33	37	261406	02/13/21	02/13/21	LXR
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	190	46	37	261406	02/13/21	02/13/21	LXR
1,2,4-Trichlorobenzene	ND		ug/Kg	190	41	37	261406	02/13/21	02/13/21	LXR
Hexachlorobutadiene	ND		ug/Kg	190	46	37	261406	02/13/21	02/13/21	LXR
Naphthalene	ND		ug/Kg	190	32	37	261406	02/13/21	02/13/21	LXR
1,2,3-Trichlorobenzene	ND		ug/Kg	190	37	37	261406	02/13/21	02/13/21	LXR
<b>Surrogates</b>							<b>Limits</b>			
Dibromofluoromethane	94%		%REC	70-145		37	261406	02/13/21	02/13/21	LXR
1,2-Dichloroethane-d4	101%		%REC	70-145		37	261406	02/13/21	02/13/21	LXR
Toluene-d8	103%		%REC	70-145		37	261406	02/13/21	02/13/21	LXR
Bromofluorobenzene	94%		%REC	70-145		37	261406	02/13/21	02/13/21	LXR

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
<b>Surrogates</b>							<b>Limits</b>			
2-Fluorophenol	89%	%REC	29-120			1	261320	02/12/21	02/15/21	DJL
Phenol-d6	88%	%REC	30-120			1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	64%	%REC	32-120			1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	72%	%REC	33-120			1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	72%	%REC	39-120			1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	68%	%REC	44-125			1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

<b>Sample ID:</b> MW-9-9-10	<b>Lab ID:</b> 440717-009	<b>Collected:</b> 02/10/21 11:15
	<b>Matrix:</b> Soil	

440717-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M										
Prep Method: EPA 3580										
DRO C10-C28	ND		mg/Kg	10	4.0	1	261396	02/12/21	02/17/21	MES
ORO C28-C44	ND		mg/Kg	20	4.0	1	261396	02/12/21	02/17/21	MES
<b>Surrogates</b>										
<b>Limits</b>										
n-Triacontane	97%		%REC	70-130			1	261396	02/12/21	02/17/21
Method: EPA 8260B										
Prep Method: EPA 5035										
TPH Gasoline	<b>500</b>		ug/Kg	76	4.9	0.76	261327	02/12/21	02/12/21	LXR
Freon 12	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Chloromethane	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Vinyl Chloride	<b>2.6</b>	J	ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Bromomethane	ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Chloroethane	ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Trichlorofluoromethane	ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Acetone	ND		ug/Kg	76	38	0.76	261327	02/12/21	02/12/21	LXR
Freon 113	ND		ug/Kg	3.8	0.6	0.76	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethene	<b>0.3</b>	J	ug/Kg	3.8	0.1	0.76	261327	02/12/21	02/12/21	LXR
Methylene Chloride	ND		ug/Kg	3.8	0.5	0.76	261327	02/12/21	02/12/21	LXR
MTBE	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
trans-1,2-Dichloroethene	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,1-Dichloroethane	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
2-Butanone	<b>3.3</b>	J	ug/Kg	76	2.4	0.76	261327	02/12/21	02/12/21	LXR
cis-1,2-Dichloroethene	ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
2,2-Dichloropropane	ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
Chloroform	<b>4.6</b>		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Bromochloromethane	<b>6.3</b>		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,1,1-Trichloroethane	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,1-Dichloropropene	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Carbon Tetrachloride	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,2-Dichloroethane	<b>990</b>		ug/Kg	190	18	38	261327	02/12/21	02/12/21	LXR
Benzene	<b>0.2</b>	J	ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Trichloroethene	<b>0.5</b>	J	ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
1,2-Dichloropropane	ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
Bromodichloromethane	<b>27</b>		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
Dibromomethane	<b>75</b>		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
4-Methyl-2-Pentanone	ND		ug/Kg	3.8	1.4	0.76	261327	02/12/21	02/12/21	LXR
cis-1,3-Dichloropropene	ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Toluene	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
trans-1,3-Dichloropropene	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,1,2-Trichloroethane	ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
1,3-Dichloropropane	ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR

Results for any subcontracted analyses are not included in this section.

## Analysis Results for 440717

440717-009 Analyte		Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
Dibromochloromethane		130		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,2-Dibromoethane		14,000		ug/Kg	960	100	190	261406	02/13/21	02/13/21	LXR
Chlorobenzene		ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
1,1,1,2-Tetrachloroethane		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
Ethylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
m,p-Xylenes		ND		ug/Kg	7.6	0.6	0.76	261327	02/12/21	02/12/21	LXR
o-Xylene		ND		ug/Kg	3.8	0.2	0.76	261327	02/12/21	02/12/21	LXR
Styrene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Bromoform		930		ug/Kg	190	27	38	261327	02/12/21	02/12/21	LXR
Isopropylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,1,2,2-Tetrachloroethane		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,2,3-Trichloropropane		ND		ug/Kg	3.8	0.6	0.76	261327	02/12/21	02/12/21	LXR
Propylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
Bromobenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,3,5-Trimethylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
2-Chlorotoluene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
4-Chlorotoluene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
tert-Butylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
1,2,4-Trimethylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
sec-Butylbenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
para-Isopropyl Toluene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
1,3-Dichlorobenzene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
1,4-Dichlorobenzene		ND		ug/Kg	3.8	0.3	0.76	261327	02/12/21	02/12/21	LXR
n-Butylbenzene		ND		ug/Kg	3.8	0.5	0.76	261327	02/12/21	02/12/21	LXR
1,2-Dichlorobenzene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
1,2-Dibromo-3-Chloropropane		ND		ug/Kg	3.8	0.5	0.76	261327	02/12/21	02/12/21	LXR
1,2,4-Trichlorobenzene		ND		ug/Kg	3.8	0.7	0.76	261327	02/12/21	02/12/21	LXR
Hexachlorobutadiene		ND		ug/Kg	3.8	0.5	0.76	261327	02/12/21	02/12/21	LXR
Naphthalene		ND		ug/Kg	3.8	0.7	0.76	261327	02/12/21	02/12/21	LXR
1,2,3-Trichlorobenzene		ND		ug/Kg	3.8	0.4	0.76	261327	02/12/21	02/12/21	LXR
<b>Surrogates</b>		<b>Limits</b>									
Dibromofluoromethane	112%		%REC	70-145	1.0	0.76	261327	02/12/21	02/12/21	LXR	
1,2-Dichloroethane-d4	115%		%REC	70-145		0.76	261327	02/12/21	02/12/21	LXR	
Toluene-d8	95%		%REC	70-145		0.76	261327	02/12/21	02/12/21	LXR	
Bromofluorobenzene	89%		%REC	70-145	1.1	0.76	261327	02/12/21	02/12/21	LXR	

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	250	34	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	250	23	1	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	1,200	57	1	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,3-Dichlorobenzene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND		ug/Kg	250	32	1	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND		ug/Kg	250	250	1	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND		ug/Kg	250	110	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	1	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND		ug/Kg	400	60	1	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND		ug/Kg	1,200	36	1	261320	02/12/21	02/15/21	DJL
Isophorone	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND		ug/Kg	1,200	140	1	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Naphthalene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Hexachlorobutadiene	ND		ug/Kg	250	36	1	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	1	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	1	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	1	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	250	57	1	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	250	44	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	1	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	250	170	1	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	250	46	1	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	250	49	1	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	250	84	1	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	1	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	1	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	1	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	250	43	1	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	1,200	48	1	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440717

440717-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Phenanthrene	ND		ug/Kg	250	47	1	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	250	50	1	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	1,200	200	1	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	250	55	1	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	250	53	1	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	1	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	250	42	1	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	1	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	250	59	1	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	250	52	1	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	250	40	1	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	250	33	1	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	1	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	1	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	1	261320	02/12/21	02/15/21	DJL
Surrogates	Limits									
2-Fluorophenol	85%	%REC	29-120			1	261320	02/12/21	02/15/21	DJL
Phenol-d6	75%	%REC	30-120			1	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	55%	%REC	32-120			1	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	64%	%REC	33-120			1	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	62%	%REC	39-120			1	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	64%	%REC	44-125			1	261320	02/12/21	02/15/21	DJL

B Contamination found in associated Method Blank

J Estimated value

ND Not Detected

b See narrative

## Batch QC

Type: Blank	Lab ID: QC908651	Batch: 261320					
Matrix: Soil	Method: EPA 8270C	Prep Method: EPA 3546					
<b>QC908651 Analyte</b>							
QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Carbazole	ND		ug/Kg	250	49	02/11/21	02/12/21
1-Methylnaphthalene	ND		ug/Kg	250	46	02/11/21	02/12/21
Pyridine	ND		ug/Kg	250	34	02/11/21	02/12/21
N-Nitrosodimethylamine	ND		ug/Kg	250	23	02/11/21	02/12/21
Phenol	ND		ug/Kg	250	49	02/11/21	02/12/21
Aniline	ND		ug/Kg	250	36	02/11/21	02/12/21
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	02/11/21	02/12/21
2-Chlorophenol	ND		ug/Kg	250	40	02/11/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	52	02/11/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	32	02/11/21	02/12/21
Benzyl alcohol	ND		ug/Kg	250	250	02/11/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	45	02/11/21	02/12/21
2-Methylphenol	ND		ug/Kg	250	110	02/11/21	02/12/21
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	02/11/21	02/12/21
3-,4-Methylphenol	ND		ug/Kg	400	60	02/11/21	02/12/21
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	02/11/21	02/12/21
Hexachloroethane	ND		ug/Kg	250	42	02/11/21	02/12/21
Nitrobenzene	ND		ug/Kg	1,200	36	02/11/21	02/12/21
Isophorone	ND		ug/Kg	250	41	02/11/21	02/12/21
2-Nitrophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2,4-Dimethylphenol	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzoic acid	ND		ug/Kg	1,200	140	02/11/21	02/12/21
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	02/11/21	02/12/21
2,4-Dichlorophenol	ND		ug/Kg	250	46	02/11/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	02/11/21	02/12/21
Naphthalene	ND		ug/Kg	250	44	02/11/21	02/12/21
4-Chloroaniline	ND		ug/Kg	250	59	02/11/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	36	02/11/21	02/12/21
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	02/11/21	02/12/21
2-Methylnaphthalene	ND		ug/Kg	250	37	02/11/21	02/12/21
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	02/11/21	02/12/21
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	02/11/21	02/12/21
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2-Chloronaphthalene	ND		ug/Kg	250	51	02/11/21	02/12/21
2-Nitroaniline	ND		ug/Kg	250	57	02/11/21	02/12/21
Dimethylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthylene	ND		ug/Kg	250	46	02/11/21	02/12/21
2,6-Dinitrotoluene	ND		ug/Kg	250	42	02/11/21	02/12/21
3-Nitroaniline	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthene	ND		ug/Kg	250	44	02/11/21	02/12/21
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	02/11/21	02/12/21
4-Nitrophenol	ND		ug/Kg	250	170	02/11/21	02/12/21

### Batch QC

QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Dibenzofuran	ND		ug/Kg	250	49	02/11/21	02/12/21
2,4-Dinitrotoluene	ND		ug/Kg	250	46	02/11/21	02/12/21
Diethylphthalate	ND		ug/Kg	250	51	02/11/21	02/12/21
Fluorene	ND		ug/Kg	250	49	02/11/21	02/12/21
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	02/11/21	02/12/21
4-Nitroaniline	ND		ug/Kg	250	84	02/11/21	02/12/21
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	02/11/21	02/12/21
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	02/11/21	02/12/21
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	02/11/21	02/12/21
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	02/11/21	02/12/21
Hexachlorobenzene	ND		ug/Kg	250	43	02/11/21	02/12/21
Pentachlorophenol	ND		ug/Kg	1,200	48	02/11/21	02/12/21
Phenanthrene	ND		ug/Kg	250	47	02/11/21	02/12/21
Anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Di-n-butylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Fluoranthene	ND		ug/Kg	250	50	02/11/21	02/12/21
Benzidine	ND		ug/Kg	1,200	200	02/11/21	02/12/21
Pyrene	ND		ug/Kg	250	55	02/11/21	02/12/21
Butylbenzylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	02/11/21	02/12/21
Benzo(a)anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Chrysene	ND		ug/Kg	250	42	02/11/21	02/12/21
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	02/11/21	02/12/21
Di-n-octylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Benzo(b)fluoranthene	ND		ug/Kg	250	52	02/11/21	02/12/21
Benzo(k)fluoranthene	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzo(a)pyrene	ND		ug/Kg	250	33	02/11/21	02/12/21
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	02/11/21	02/12/21
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	02/11/21	02/12/21
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	02/11/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
2-Fluorophenol	81%		%REC	29-120		02/11/21	02/12/21
Phenol-d6	83%		%REC	30-120		02/11/21	02/12/21
2,4,6-Tribromophenol	84%		%REC	32-120		02/11/21	02/12/21
Nitrobenzene-d5	75%		%REC	33-120		02/11/21	02/12/21
2-Fluorobiphenyl	76%		%REC	39-120		02/11/21	02/12/21
Terphenyl-d14	90%		%REC	44-125		02/11/21	02/12/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC908652			Batch: 261320		
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546		
QC908652 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	1,602	2000	ug/Kg	80%		42-120
2-Chlorophenol	1,572	2000	ug/Kg	79%		41-120
1,4-Dichlorobenzene	1,516	2000	ug/Kg	76%		36-120
3-,4-Methylphenol	1,669	2000	ug/Kg	83%		42-120
N-Nitroso-di-n-propylamine	1,608	2000	ug/Kg	80%		43-121
2,4-Dimethylphenol	1,597	2000	ug/Kg	80%		25-120
1,2,4-Trichlorobenzene	1,556	2000	ug/Kg	78%		38-120
4-Chloro-3-methylphenol	1,661	2000	ug/Kg	83%		40-125
2,4,5-Trichlorophenol	1,782	2000	ug/Kg	89%		40-124
Acenaphthene	1,671	2000	ug/Kg	84%		35-126
4-Nitrophenol	1,711	2000	ug/Kg	86%		24-128
2,4-Dinitrotoluene	1,795	2000	ug/Kg	90%		40-131
Pentachlorophenol	1,478	2000	ug/Kg	74%		35-120
Pyrene	1,810	2000	ug/Kg	91%		37-135
Chrysene	1,849	2000	ug/Kg	92%		38-132
Benzo(b)fluoranthene	1,947	2000	ug/Kg	97%		38-135
<b>Surrogates</b>						
2-Fluorophenol	1,782	2000	ug/Kg	89%		29-120
Phenol-d6	1,796	2000	ug/Kg	90%		30-120
2,4,6-Tribromophenol	1,931	2000	ug/Kg	97%		32-120
Nitrobenzene-d5	1,627	2000	ug/Kg	81%		33-120
2-Fluorobiphenyl	1,660	2000	ug/Kg	83%		39-120
Terphenyl-d14	1,897	2000	ug/Kg	95%		44-125

## Batch QC

Type: Matrix Spike	Lab ID: QC908653	Batch: 261320
Matrix (Source ID): Soil (440642-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908653 Analyte	Result	Source Sample		Recovery	Qual	Limits	DF
		Result	Spiked				
Phenol	1,171	ND	2000	ug/Kg	59%	37-120	1
2-Chlorophenol	1,185	ND	2000	ug/Kg	59%	33-120	1
1,4-Dichlorobenzene	1,239	ND	2000	ug/Kg	62%	32-120	1
3,-4-Methylphenol	1,133	ND	2000	ug/Kg	57%	37-120	1
N-Nitroso-di-n-propylamine	959.7	ND	2000	ug/Kg	48%	32-120	1
2,4-Dimethylphenol	1,077	ND	2000	ug/Kg	54%	32-120	1
1,2,4-Trichlorobenzene	1,094	ND	2000	ug/Kg	55%	33-120	1
4-Chloro-3-methylphenol	967.6	ND	2000	ug/Kg	48%	41-121	1
2,4,5-Trichlorophenol	961.5	ND	2000	ug/Kg	48%	40-120	1
Acenaphthene	967.0	ND	2000	ug/Kg	48%	37-120	1
4-Nitrophenol	858.3	ND	2000	ug/Kg	43%	20-141	1
2,4-Dinitrotoluene	695.6	ND	2000	ug/Kg	35%	33-128	1
Pentachlorophenol	902.7	ND	2000	ug/Kg	45%	28-132	1
Pyrene	914.9	ND	2000	ug/Kg	46%	39-135	1
Chrysene	887.9	ND	2000	ug/Kg	44%	37-135	1
Benzo(b)fluoranthene	898.3	ND	2000	ug/Kg	45%	34-139	1
<b>Surrogates</b>							
2-Fluorophenol	1,434		2000	ug/Kg	72%	29-120	1
Phenol-d6	1,272		2000	ug/Kg	64%	30-120	1
2,4,6-Tribromophenol	891.2		2000	ug/Kg	45%	32-120	1
Nitrobenzene-d5	1,022		2000	ug/Kg	51%	33-120	1
2-Fluorobiphenyl	958.2		2000	ug/Kg	48%	39-120	1
Terphenyl-d14	897.3		2000	ug/Kg	45%	44-125	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC908654	Batch: 261320
Matrix (Source ID): Soil (440642-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908654 Analyte	Result	Source Sample		Recovery	Qual	Limits	RPD		
		Result	Spiked				Lim	DF	
Phenol	1,512	ND	2000	ug/Kg	76%	37-120	25	49	1
2-Chlorophenol	1,533	ND	2000	ug/Kg	77%	33-120	26	52	1
1,4-Dichlorobenzene	1,483	ND	2000	ug/Kg	74%	32-120	18	50	1
3,-4-Methylphenol	1,539	ND	2000	ug/Kg	77%	37-120	30	54	1
N-Nitroso-di-n-propylamine	1,422	ND	2000	ug/Kg	71%	32-120	39	50	1
2,4-Dimethylphenol	1,485	ND	2000	ug/Kg	74%	32-120	32	50	1
1,2,4-Trichlorobenzene	1,420	ND	2000	ug/Kg	71%	33-120	26	50	1
4-Chloro-3-methylphenol	1,488	ND	2000	ug/Kg	74%	41-121	42	43	1
2,4,5-Trichlorophenol	1,580	ND	2000	ug/Kg	79%	40-120	49*	47	1
Acenaphthene	1,453	ND	2000	ug/Kg	73%	37-120	40	48	1
4-Nitrophenol	1,586	ND	2000	ug/Kg	79%	20-141	60*	30	1
2,4-Dinitrotoluene	1,423	ND	2000	ug/Kg	71%	33-128	69*	50	1
Pentachlorophenol	1,349	ND	2000	ug/Kg	67%	28-132	40*	30	1
Pyrene	1,543	ND	2000	ug/Kg	77%	39-135	51*	41	1
Chrysene	1,528	ND	2000	ug/Kg	76%	37-135	53*	46	1
Benzo(b)fluoranthene	1,568	ND	2000	ug/Kg	78%	34-139	54*	47	1
<b>Surrogates</b>									
2-Fluorophenol	1,677		2000	ug/Kg	84%	29-120			1
Phenol-d6	1,643		2000	ug/Kg	82%	30-120			1
2,4,6-Tribromophenol	1,558		2000	ug/Kg	78%	32-120			1
Nitrobenzene-d5	1,421		2000	ug/Kg	71%	33-120			1
2-Fluorobiphenyl	1,419		2000	ug/Kg	71%	39-120			1
Terphenyl-d14	1,555		2000	ug/Kg	78%	44-125			1

## Batch QC

Type: Blank	Lab ID: QC908676			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	28	J	ug/Kg	100	6.4	02/12/21	02/12/21
Freon 12	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromomethane	0.5	J,b	ug/Kg	5.0	0.3	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Acetone	ND		ug/Kg	100	50	02/12/21	02/12/21
Freon 113	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
MTBE	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	100	3.2	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chloroform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Benzene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21

### Batch QC

QC908676 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	101%	%REC	70-130	1.3	02/12/21	02/12/21	
1,2-Dichloroethane-d4	101%	%REC	70-145		02/12/21	02/12/21	
Toluene-d8	99%	%REC	70-145		02/12/21	02/12/21	
Bromofluorobenzene	92%	%REC	70-145	1.5	02/12/21	02/12/21	

Type: Lab Control Sample	Lab ID: QC908677	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908677 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	50.71	50.00	ug/Kg	101%		70-131
MTBE	48.85	50.00	ug/Kg	98%		69-130
Benzene	48.20	50.00	ug/Kg	96%		70-130
Trichloroethene	49.41	50.00	ug/Kg	99%		70-130
Toluene	50.36	50.00	ug/Kg	101%		70-130
Chlorobenzene	51.10	50.00	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.55	50.00	ug/Kg	99%		70-130
1,2-Dichloroethane-d4	46.32	50.00	ug/Kg	93%		70-145
Toluene-d8	50.67	50.00	ug/Kg	101%		70-145
Bromofluorobenzene	52.95	50.00	ug/Kg	106%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908678	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908678 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	47.25	50.00	ug/Kg	95%		70-131	7	33
MTBE	45.73	50.00	ug/Kg	91%		69-130	7	30
Benzene	44.88	50.00	ug/Kg	90%		70-130	7	30
Trichloroethene	46.65	50.00	ug/Kg	93%		70-130	6	30
Toluene	46.99	50.00	ug/Kg	94%		70-130	7	30
Chlorobenzene	47.31	50.00	ug/Kg	95%		70-130	8	30
<b>Surrogates</b>								
Dibromofluoromethane	49.96	50.00	ug/Kg	100%		70-130		
1,2-Dichloroethane-d4	47.26	50.00	ug/Kg	95%		70-145		
Toluene-d8	50.59	50.00	ug/Kg	101%		70-145		
Bromofluorobenzene	52.46	50.00	ug/Kg	105%		70-145		

## Batch QC

Type: Blank	Lab ID: QC908679			Batch: 261327			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	1,500	J	ug/Kg	5,000	400	02/12/21	02/12/21
Freon 12	ND		ug/Kg	250	36	02/12/21	02/12/21
Chloromethane	71	J	ug/Kg	250	29	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	250	37	02/12/21	02/12/21
Bromomethane	100	J,b	ug/Kg	250	44	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	250	68	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/12/21	02/12/21
Acetone	ND		ug/Kg	5,000	2,500	02/12/21	02/12/21
Freon 113	ND		ug/Kg	250	37	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	250	91	02/12/21	02/12/21
MTBE	ND		ug/Kg	250	43	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	5,000	160	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/12/21	02/12/21
Chloroform	ND		ug/Kg	250	17	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	18	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
Benzene	ND		ug/Kg	250	21	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	250	32	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	250	25	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	250	28	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/12/21	02/12/21
Toluene	ND		ug/Kg	250	26	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	250	34	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	250	26	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	250	27	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	500	60	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	250	30	02/12/21	02/12/21

### Batch QC

QC908679 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	35	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	250	39	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/12/21	02/12/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	93%		%REC	70-130		02/12/21	02/12/21
1,2-Dichloroethane-d4	102%		%REC	70-145		02/12/21	02/12/21
Toluene-d8	99%		%REC	70-145		02/12/21	02/12/21
Bromofluorobenzene	90%		%REC	70-145		02/12/21	02/12/21

Type: Lab Control Sample	Lab ID: QC908680	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908680 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	510.1	500.0	ug/Kg	102%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.70	50.00	ug/Kg	101%		70-130
1,2-Dichloroethane-d4	49.68	50.00	ug/Kg	99%		70-145
Toluene-d8	48.90	50.00	ug/Kg	98%		70-145
Bromofluorobenzene	46.20	50.00	ug/Kg	92%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908681	Batch: 261327
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908681 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	499.7	500.0	ug/Kg	100%		70-130	2	20
<b>Surrogates</b>								
Dibromofluoromethane	48.97	50.00	ug/Kg	98%		70-130		
1,2-Dichloroethane-d4	49.47	50.00	ug/Kg	99%		70-145		
Toluene-d8	48.26	50.00	ug/Kg	97%		70-145		
Bromofluorobenzene	46.28	50.00	ug/Kg	93%		70-145		

Type: Blank	Lab ID: QC908912	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908912 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	10	4.0	02/12/21	02/13/21
ORO C28-C44	ND		mg/Kg	20	4.0	02/12/21	02/13/21
<b>Surrogates</b>							
n-Triacontane	95%		%REC	70-130		02/12/21	02/13/21

Type: Lab Control Sample	Lab ID: QC908913	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908913 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	265.8	250.0	mg/Kg	106%		76-122
<b>Surrogates</b>						
n-Triacontane	10.04	10.00	mg/Kg	100%		70-130

Type: Matrix Spike	Lab ID: QC908914	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908914 Analyte	Result	Source Sample Result		Spiked	Units	Recovery	Qual	Limits	DF
		Sample	Result						
Diesel C10-C28	273.2	ND		250.0	mg/Kg	109%		62-126	1
<b>Surrogates</b>									
n-Triacontane	9.846			10.00	mg/Kg	98%		70-130	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC908915	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908915 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD		
								RPD	Lim	DF
Diesel C10-C28	271.5	ND	250.0	mg/Kg	109%		62-126	1	35	1
<b>Surrogates</b>										
n-Triacontane	9.836		10.00	mg/Kg	98%		70-130			1

## Batch QC

Type: Blank	Lab ID: QC908927			Batch: 261406			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908927 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	1,800	J	ug/Kg	5,000	400	02/12/21	02/12/21
Freon 12	ND		ug/Kg	250	36	02/12/21	02/12/21
Chloromethane	ND		ug/Kg	250	29	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	250	37	02/12/21	02/12/21
Bromomethane	89	J,b	ug/Kg	250	44	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	250	68	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	250	8.5	02/12/21	02/12/21
Acetone	ND		ug/Kg	5,000	2,500	02/12/21	02/12/21
Freon 113	ND		ug/Kg	250	37	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	250	20	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	250	91	02/12/21	02/12/21
MTBE	ND		ug/Kg	250	43	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	250	25	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	5,000	160	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	250	26	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	250	48	02/12/21	02/12/21
Chloroform	ND		ug/Kg	250	17	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	18	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	250	22	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	250	22	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	250	24	02/12/21	02/12/21
Benzene	ND		ug/Kg	250	21	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	250	32	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	250	25	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	250	28	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	250	95	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	250	30	02/12/21	02/12/21
Toluene	ND		ug/Kg	250	26	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	250	38	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	250	28	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	250	26	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	250	34	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	250	30	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	250	26	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	250	26	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	250	30	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	250	27	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	500	60	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	250	30	02/12/21	02/12/21

### Batch QC

QC908927 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	250	28	02/12/21	02/12/21
Bromoform	ND		ug/Kg	250	35	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	250	26	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	250	37	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	250	36	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	250	39	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	250	48	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	250	40	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	250	46	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	250	45	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	250	42	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	250	54	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	52	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	44	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	250	62	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	55	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	62	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	250	43	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	250	50	02/12/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	94%		%REC	70-130		02/12/21	02/12/21
1,2-Dichloroethane-d4	99%		%REC	70-145		02/12/21	02/12/21
Toluene-d8	98%		%REC	70-145		02/12/21	02/12/21
Bromofluorobenzene	90%		%REC	70-145		02/12/21	02/12/21

## Batch QC

Type: Blank	Lab ID: QC908928			Batch: 261406			
Matrix: Soil	Method: EPA 8260B			Prep Method: EPA 5035			
QC908928 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	30	J	ug/Kg	100	6.4	02/12/21	02/12/21
Freon 12	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromomethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Acetone	ND		ug/Kg	100	50	02/12/21	02/12/21
Freon 113	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
MTBE	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Butanone	ND		ug/Kg	100	3.2	02/12/21	02/12/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chloroform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Benzene	ND		ug/Kg	5.0	0.2	02/12/21	02/12/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/12/21	02/12/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/12/21	02/12/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21

### Batch QC

QC908928 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Bromoform	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/12/21	02/12/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/12/21	02/12/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/12/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/12/21	02/12/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/12/21	02/12/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/12/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	100%	%REC	70-130	1.3	02/12/21	02/12/21	
1,2-Dichloroethane-d4	102%	%REC	70-145		02/12/21	02/12/21	
Toluene-d8	99%	%REC	70-145		02/12/21	02/12/21	
Bromofluorobenzene	91%	%REC	70-145	1.5	02/12/21	02/12/21	

Type: Lab Control Sample	Lab ID: QC908929	Batch: 261406
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908929 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	50.34	50.00	ug/Kg	101%		70-131
MTBE	50.14	50.00	ug/Kg	100%		69-130
Benzene	46.37	50.00	ug/Kg	93%		70-130
Trichloroethene	48.24	50.00	ug/Kg	96%		70-130
Toluene	48.92	50.00	ug/Kg	98%		70-130
Chlorobenzene	49.83	50.00	ug/Kg	100%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.18	50.00	ug/Kg	100%		70-130
1,2-Dichloroethane-d4	47.15	50.00	ug/Kg	94%		70-145
Toluene-d8	49.85	50.00	ug/Kg	100%		70-145
Bromofluorobenzene	51.15	50.00	ug/Kg	102%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC908930	Batch: 261406
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908930 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	44.68	50.00	ug/Kg	89%		70-131	12	33
MTBE	47.94	50.00	ug/Kg	96%		69-130	4	30
Benzene	43.17	50.00	ug/Kg	86%		70-130	7	30
Trichloroethene	42.95	50.00	ug/Kg	86%		70-130	12	30
Toluene	43.99	50.00	ug/Kg	88%		70-130	11	30
Chlorobenzene	45.46	50.00	ug/Kg	91%		70-130	9	30
<b>Surrogates</b>								
Dibromofluoromethane	50.32	50.00	ug/Kg	101%		70-130		
1,2-Dichloroethane-d4	47.52	50.00	ug/Kg	95%		70-145		
Toluene-d8	49.52	50.00	ug/Kg	99%		70-145		
Bromofluorobenzene	51.50	50.00	ug/Kg	103%		70-145		

Type: Lab Control Sample	Lab ID: QC908931	Batch: 261406
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

QC908931 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	523.4	500.0	ug/Kg	105%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	51.75	50.00	ug/Kg	104%		70-130
1,2-Dichloroethane-d4	49.46	50.00	ug/Kg	99%		70-145
Toluene-d8	48.00	50.00	ug/Kg	96%		70-145
Bromofluorobenzene	45.84	50.00	ug/Kg	92%		70-145

Type: Lab Control Sample Duplicate	Lab ID: QC908932	Batch: 261406
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5035

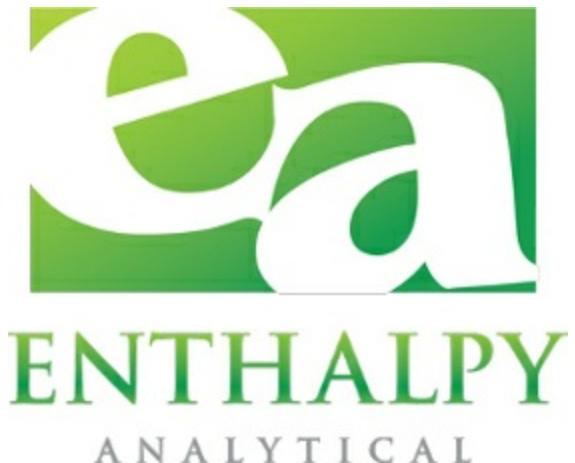
QC908932 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	518.3	500.0	ug/Kg	104%		70-130	1	20
<b>Surrogates</b>								
Dibromofluoromethane	50.24	50.00	ug/Kg	100%		70-130		
1,2-Dichloroethane-d4	48.78	50.00	ug/Kg	98%		70-145		
Toluene-d8	48.72	50.00	ug/Kg	97%		70-145		
Bromofluorobenzene	45.86	50.00	ug/Kg	92%		70-145		

\* Value is outside QC limits

J Estimated value

ND Not Detected

b See narrative



Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

[enthalpy.com](http://enthalpy.com)

Lab Job Number: 440781  
Report Level: II  
Report Date: 02/22/2021

**Analytical Report prepared for:**

Ian Hull  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Project: 0520818 - Caltrain HPK

*Authorized for release by:*

A handwritten signature in black ink that appears to read "Richard Villafania".

Richard Villafania, Project Manager  
[richard.villafania@enthalpy.com](mailto:richard.villafania@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member



## Sample Summary

---

Ian Hull	Lab Job #:	440781
ERM	Project No:	0520818
1277 Treat Blvd.	Location:	Caltrain HPK
Suite 500	Date Received:	02/11/21
Walnut Creek, CA 94597		

---

Sample ID	Lab ID	Collected	Matrix
HPK-20210211	440781-001	02/11/21 09:30	Soil
HPK-20210211-2	440781-002	02/11/21 09:40	Water

## Case Narrative

ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
Ian Hull

Lab Job Number: 440781  
Project No: 0520818  
Location: Caltrain HPK  
Date Received: 02/11/21

This data package contains sample and QC results for one soil sample and one water sample, requested for the above referenced project on 02/11/21. The samples were received cold and intact.

### **TPH-Extractables by GC (EPA 8015M) Water:**

No analytical problems were encountered.

### **TPH-Extractables by GC (EPA 8015M) Soil:**

HPK-20210211 (lab # 440781-001) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.

### **Volatile Organics by GC/MS (EPA 8260B) Water:**

Naphthalene was detected between the MDL and the RL in the method blank for batch 261585; this analyte was not detected in the sample at or above the RL. HPK-20210211-2 (lab # 440781-002) was diluted due to foaming. No other analytical problems were encountered.

### **Volatile Organics by GC/MS (EPA 8260B) Soil:**

TPH gasoline was detected between the MDL and the RL in the method blank for batch 261504; this analyte was detected in the sample at a level at least 10 times that of the blank. No other analytical problems were encountered.

### **Semivolatile Organics by GC/MS (EPA 8270C) Water:**

No analytical problems were encountered.

### **Semivolatile Organics by GC/MS (EPA 8270C) Soil:**

High RPD was observed for many analytes in the MS/MSD of MW-1-9 (lab # 440642-001); these analytes were not detected at or above the RL in the associated sample. HPK-20210211 (lab # 440781-001) was diluted due to the dark color of the sample extract. No other analytical problems were encountered.

### **Metals (EPA 6010B and EPA 7470A) Water:**

High response was observed for mercury in the CCV analyzed 02/16/21 19:31; affected data was qualified with "b". Selenium and vanadium were detected between the MDL and the RL in the method blank for batch 261436; these analytes were either not detected in the sample at or above the RL, or detected at a level at least 10 times that of the blank. No other analytical problems were encountered.

### **Metals (EPA 6010B and EPA 7471A) Soil:**

Low recoveries were observed for antimony in the MS/MSD for batch 261415; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

# **CHAIN OF CUSTODY**



# ENTHALPY ANALYTICAL

Formerly Curtis & Tompkins Labs

2323 Fifth Street  
Berkeley, CA 94710

Phone (510) 486-0900  
Fax (510) 486-0532

Project No: 0520819

Sampler: Alex Martinez

Project Name: Caltrain HPK

Report To: Clint Harms & Ian Hull

**Project P. O. No:**

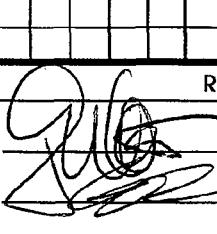
Company: ELM

EDD Format: Report Level  II  III  IV Telephone:

Turnaround Time:  RUSH

Standard

Email: clint.harms@erm.com | jay.hull@erm

ANALYTICAL REQUEST	
X X	TPH-gas by 8260
X X	TPH-diesel & motor oil by 8015
X X	BTEX, naphthalene by 8260
X X	VOCs by 8260
X X	SVOCs by 8270
X X	CAM 17 metals
RECEIVED BY:	
	
36	DATE: 2/14/21 TIME: 1230 -
9	DATE: 2/14/21 TIME: 1200
	DATE: TIME:

### **Notes:**

Samples composited in  
the field.

**SAMPLE  
RECEIPT**

RELINQUISHED BY:			
<u>Mark Martinez</u>	Alex martinez	DATE: 2-11-21	TIME: 1236
<u>JM</u>	2-11-21	DATE: 1339	TIME:
		DATE:	TIME:

RECEIVED BY

DATE: 12/21 TIME: 1230-  
DATE: 12/21 TIME: 1230

DATE: TIME:

**SAMPLE RECEIPT CHECKLIST**Section 1: Login # 440781  
Date Received: 2-11-21Client: ERIN  
Project: \_\_\_\_\_**Section 2: Shipping Info (if applicable)**Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  NoneWere custody seals intact upon arrival?  Yes  No  N/ASamples received in a cooler?  Yes, how many? 1  No (skip Section 3 below)If no cooler Sample Temp (°C): \_\_\_\_\_ using IR Gun #  B, or  C Samples received on ice directly from the field. Cooling process had begunIf in cooler: Date Opened 2-11-21 By (print) JH (sign) JH**Section 3:****Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

 Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels Samples received on ice directly from the field. Cooling process had begunType of ice used:  Wet,  Blue/Gel,  None Temperature blank(s) included?  Yes,  NoTemperature measured using  Thermometer ID: \_\_\_\_\_, or IR Gun #  B  C

Cooler Temp (°C): #1: \_\_\_\_\_, #2: \_\_\_\_\_, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

YES NO N/A

Were custody papers dry, filled out properly, and the project identifiable ✓ ✓ ✓Were Method 5035 sampling containers present? ✓ ✓ ✓

If YES, what time were they transferred to freezer? \_\_\_\_\_

Did all bottles arrive unbroken/unopened? ✓ ✓ ✓Are there any missing / extra samples? ✓ ✓ ✓Are samples in the appropriate containers for indicated tests? ✓ ✓ ✓Are sample labels present, in good condition and complete? ✓ ✓ ✓Does the container count match the COC? ✓ ✓ ✓Do the sample labels agree with custody papers? ✓ ✓ ✓Was sufficient amount of sample sent for tests requested? ✓ ✓ ✓Did you change the hold time in LIMS for unpreserved VOAs? ✓ ✓ ✓Did you change the hold time in LIMS for preserved terracores? ✓ ✓ ✓Are bubbles > 6mm present in VOA samples? ✓ ✓ ✓Was the client contacted concerning this sample delivery? ✓ ✓ ✓

If YES, who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

YES NO N/A

Are the samples appropriately preserved? (if N/A, skip the rest of section 5) ✓ ✓ ✓Did you check preservatives for all bottles for each sample? ✓ ✓ ✓Did you document your preservative check? ✓ ✓ ✓

pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

- H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_  
 HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_  
 HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_  
 NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_

**Section 6:**

Explanations/Comments: \_\_\_\_\_

Date Logged in 2-11 By (print) JH (sign) \_\_\_\_\_Date Labeled 2-11 By (print) JH (sign) JH



# ENTHALPY

## ANALYTICAL

### SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: ERM  
Date Received: 2/12/21

Project: 0520818

Sampler's Name Present:  Yes  No

**Section 2**

Sample(s) received in a cooler?  Yes, How many? 1  No (skip section 2) Sample Temp (°C) (No Cooler) : \_\_\_\_\_

Sample Temp (°C), One from each cooler: #1: 3.0 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: \_\_\_\_\_

**Section 3**

Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam  
 Paper  None  Other \_\_\_\_\_

Cooler Temp (°C): #1: 2.0 #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_

**Section 4**

	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)	✓		
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?	✓		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?		✓	
Was a sufficient amount of sample submitted for the requested tests?	✓		

**Section 5 Explanations/Comments****Section 6**

For discrepancies, how was the Project Manager notified?  Verbal PM Initials: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Email (email sent to/on): \_\_\_\_\_ / \_\_\_\_\_

Project Manager's response:

Completed By: \_\_\_\_\_

Date: 2/12/21



800-322-5555  
www.gls-us.com

**Ship From**  
ENTHALPY ANALYTICAL  
JOHN GOYETTE  
2323 5TH STREET  
BERKELEY, CA 94710

Tracking #: 552236266

CPS



**Ship To**  
ENTHALPY ANALYTICAL (ORG)  
SAMPLE RECEIVING  
931 W BARKLEY AVE.  
ORANGE, CA 92868

**ORANGE**

**COD:** \$0.00

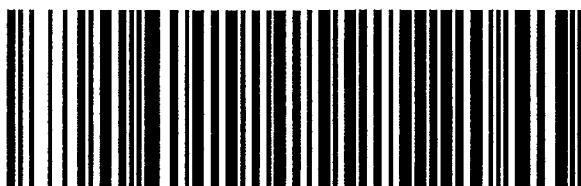
**Weight:** 0 lb(s)

**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

**S92868A**



36340472

**ORC CA927-CI1**

Print Date: 2/11/2021 12:34 PM

Package 3 of 4

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

2-0/3-0

## Analysis Results for 440781

Ian Hull  
 ERM  
 1277 Treat Blvd.  
 Suite 500  
 Walnut Creek, CA 94597

Lab Job #: 440781  
 Project No: 0520818  
 Location: Caltrain HPK  
 Date Received: 02/11/21

<b>Sample ID:</b> HPK-20210211	<b>Lab ID:</b> 440781-001	<b>Collected:</b> 02/11/21 09:30
	<b>Matrix:</b> Soil	

440781-001 Analyte		Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B											
Prep Method: EPA 3050B											
Antimony	ND	mg/Kg	2.7	1.5	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Arsenic	<b>3.5</b>	mg/Kg	0.91	0.61	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Barium	<b>190</b>	mg/Kg	0.91	0.10	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Beryllium	<b>0.66</b>	mg/Kg	0.45	0.061	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Cadmium	ND	mg/Kg	0.45	0.085	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Chromium	<b>35</b>	mg/Kg	0.91	0.087	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Cobalt	<b>15</b>	mg/Kg	0.45	0.078	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Copper	<b>17</b>	mg/Kg	0.91	0.38	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Lead	<b>14</b>	mg/Kg	0.91	0.76	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Molybdenum	ND	mg/Kg	0.91	0.54	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Nickel	<b>35</b>	mg/Kg	0.91	0.24	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Selenium	ND	mg/Kg	2.7	1.6	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Silver	ND	mg/Kg	0.45	0.15	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Thallium	ND	mg/Kg	2.7	1.0	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Vanadium	<b>42</b>	mg/Kg	0.91	0.24	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	
Zinc	<b>49</b>	mg/Kg	4.5	0.68	0.91	261415	02/13/21	02/16/21	02/16/21	SBW	

Method: EPA 7471A  
 Prep Method: METHOD

Mercury	<b>0.047</b>	J	mg/Kg	0.14	0.039	1	261416	02/16/21	02/16/21	JDB
---------	--------------	---	-------	------	-------	---	--------	----------	----------	-----

Method: EPA 8015M  
 Prep Method: EPA 3580

DRO C10-C28	<b>64</b>	mg/Kg	50	20	5	261396	02/12/21	02/13/21	MTS
ORO C28-C44	<b>100</b>	mg/Kg	100	20	5	261396	02/12/21	02/13/21	MTS

Surrogates	Limits								
n-Triacontane	102%	%REC	70-130		5	261396	02/12/21	02/13/21	MTS

Method: EPA 8260B  
 Prep Method: EPA 5030B

TPH Gasoline	<b>230</b>	ug/Kg	100	6.4	1	261504	02/17/21	02/17/21	LYZ
Freon 12	ND	ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Chloromethane	ND	ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Vinyl Chloride	ND	ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Bromomethane	ND	ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
Chloroethane	ND	ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
Trichlorofluoromethane	ND	ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ

## Analysis Results for 440781

440781-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Acetone	ND		ug/Kg	100	50	1	261504	02/17/21	02/17/21	LYZ
Freon 113	ND		ug/Kg	5.0	0.7	1	261504	02/17/21	02/17/21	LYZ
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	1	261504	02/17/21	02/17/21	LYZ
Methylene Chloride	ND		ug/Kg	5.0	0.7	1	261504	02/17/21	02/17/21	LYZ
MTBE	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
2-Butanone	ND		ug/Kg	100	3.2	1	261504	02/17/21	02/17/21	LYZ
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Chloroform	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Bromochloromethane	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
1,2-Dichloroethane	<b>0.9</b>	J	ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Benzene	ND		ug/Kg	5.0	0.2	1	261504	02/17/21	02/17/21	LYZ
Trichloroethene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
Bromodichloromethane	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Dibromomethane	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	1	261504	02/17/21	02/17/21	LYZ
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
Toluene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Tetrachloroethene	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
Dibromochloromethane	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,2-Dibromoethane	<b>6.8</b>		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Chlorobenzene	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Ethylbenzene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
m,p-Xylenes	ND		ug/Kg	10	0.8	1	261504	02/17/21	02/17/21	LYZ
o-Xylene	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
Styrene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Bromoform	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Isopropylbenzene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	1	261504	02/17/21	02/17/21	LYZ
Propylbenzene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
Bromobenzene	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	1	261504	02/17/21	02/17/21	LYZ
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	1	261504	02/17/21	02/17/21	LYZ

## Analysis Results for 440781

440781-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
1,2,4-Trimethylbenzene	0.5	J	ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
n-Butylbenzene	ND		ug/Kg	5.0	0.7	1	261504	02/17/21	02/17/21	LYZ
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	1	261504	02/17/21	02/17/21	LYZ
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	1	261504	02/17/21	02/17/21	LYZ
Naphthalene	2.2	J	ug/Kg	5.0	0.9	1	261504	02/17/21	02/17/21	LYZ
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	1	261504	02/17/21	02/17/21	LYZ
Surrogates	Limits									
Dibromofluoromethane	93%		%REC	70-145	1.3	1	261504	02/17/21	02/17/21	LYZ
1,2-Dichloroethane-d4	101%		%REC	70-145		1	261504	02/17/21	02/17/21	LYZ
Toluene-d8	99%		%REC	70-145		1	261504	02/17/21	02/17/21	LYZ
Bromofluorobenzene	92%		%REC	70-145	1.5	1	261504	02/17/21	02/17/21	LYZ

Method: EPA 8270C

Prep Method: EPA 3546

Carbazole	ND	ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
1-Methylnaphthalene	ND	ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Pyridine	ND	ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodimethylamine	ND	ug/Kg	1,300	110	5	261320	02/12/21	02/15/21	DJL
Phenol	ND	ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Aniline	ND	ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethyl)ether	ND	ug/Kg	6,000	290	5	261320	02/12/21	02/15/21	DJL
2-Chlorophenol	ND	ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
1,3-Dichlorobenzene	ND	ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
1,4-Dichlorobenzene	ND	ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
Benzyl alcohol	ND	ug/Kg	1,300	1,200	5	261320	02/12/21	02/15/21	DJL
1,2-Dichlorobenzene	ND	ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2-Methylphenol	ND	ug/Kg	1,300	530	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroisopropyl) ether	ND	ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
3-,4-Methylphenol	ND	ug/Kg	2,000	300	5	261320	02/12/21	02/15/21	DJL
N-Nitroso-di-n-propylamine	ND	ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
Hexachloroethane	ND	ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
Nitrobenzene	ND	ug/Kg	6,000	180	5	261320	02/12/21	02/15/21	DJL
Isophorone	ND	ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
2-Nitrophenol	ND	ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2,4-Dimethylphenol	ND	ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzoic acid	ND	ug/Kg	6,000	680	5	261320	02/12/21	02/15/21	DJL
bis(2-Chloroethoxy)methane	ND	ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
2,4-Dichlorophenol	ND	ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
1,2,4-Trichlorobenzene	ND	ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Naphthalene	ND	ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Chloroaniline	ND	ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440781

440781-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Hexachlorobutadiene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
4-Chloro-3-methylphenol	ND		ug/Kg	1,300	300	5	261320	02/12/21	02/15/21	DJL
2-Methylnaphthalene	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
Hexachlorocyclopentadiene	ND		ug/Kg	6,000	100	5	261320	02/12/21	02/15/21	DJL
2,4,6-Trichlorophenol	ND		ug/Kg	1,300	160	5	261320	02/12/21	02/15/21	DJL
2,4,5-Trichlorophenol	ND		ug/Kg	1,300	190	5	261320	02/12/21	02/15/21	DJL
2-Chloronaphthalene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
2-Nitroaniline	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Dimethylphthalate	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthylene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
2,6-Dinitrotoluene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
3-Nitroaniline	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Acenaphthene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrophenol	ND		ug/Kg	6,000	260	5	261320	02/12/21	02/15/21	DJL
4-Nitrophenol	ND		ug/Kg	1,300	830	5	261320	02/12/21	02/15/21	DJL
Dibenzofuran	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
2,4-Dinitrotoluene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Diethylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Fluorene	ND		ug/Kg	1,300	240	5	261320	02/12/21	02/15/21	DJL
4-Chlorophenyl-phenylether	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
4-Nitroaniline	ND		ug/Kg	1,300	420	5	261320	02/12/21	02/15/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/Kg	1,300	180	5	261320	02/12/21	02/15/21	DJL
N-Nitrosodiphenylamine	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
4-Bromophenyl-phenylether	ND		ug/Kg	1,300	280	5	261320	02/12/21	02/15/21	DJL
Hexachlorobenzene	ND		ug/Kg	1,300	220	5	261320	02/12/21	02/15/21	DJL
Pentachlorophenol	ND		ug/Kg	6,000	240	5	261320	02/12/21	02/15/21	DJL
Phenanthrene	ND		ug/Kg	1,300	230	5	261320	02/12/21	02/15/21	DJL
Anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Di-n-butylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Fluoranthene	ND		ug/Kg	1,300	250	5	261320	02/12/21	02/15/21	DJL
Benzidine	ND		ug/Kg	6,000	1,000	5	261320	02/12/21	02/15/21	DJL
Pyrene	ND		ug/Kg	1,300	270	5	261320	02/12/21	02/15/21	DJL
Butylbenzylphthalate	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
3,3'-Dichlorobenzidine	ND		ug/Kg	6,000	800	5	261320	02/12/21	02/15/21	DJL
Benzo(a)anthracene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Chrysene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	1,300	360	5	261320	02/12/21	02/15/21	DJL
Di-n-octylphthalate	ND		ug/Kg	1,300	290	5	261320	02/12/21	02/15/21	DJL
Benzo(b)fluoranthene	ND		ug/Kg	1,300	260	5	261320	02/12/21	02/15/21	DJL
Benzo(k)fluoranthene	ND		ug/Kg	1,300	200	5	261320	02/12/21	02/15/21	DJL
Benzo(a)pyrene	ND		ug/Kg	1,300	170	5	261320	02/12/21	02/15/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	1,300	430	5	261320	02/12/21	02/15/21	DJL
Dibenz(a,h)anthracene	ND		ug/Kg	1,300	140	5	261320	02/12/21	02/15/21	DJL
Benzo(g,h,i)perylene	ND		ug/Kg	1,300	210	5	261320	02/12/21	02/15/21	DJL

**Surrogates**
**Limits**

## Analysis Results for 440781

440781-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
2-Fluorophenol	74%	%REC	29-120			5	261320	02/12/21	02/15/21	DJL
Phenol-d6	70%	%REC	30-120			5	261320	02/12/21	02/15/21	DJL
2,4,6-Tribromophenol	42%	%REC	32-120			5	261320	02/12/21	02/15/21	DJL
Nitrobenzene-d5	51%	%REC	33-120			5	261320	02/12/21	02/15/21	DJL
2-Fluorobiphenyl	60%	%REC	39-120			5	261320	02/12/21	02/15/21	DJL
Terphenyl-d14	65%	%REC	44-125			5	261320	02/12/21	02/15/21	DJL

## Analysis Results for 440781

Sample ID: HPK-20210211-2	Lab ID: 440781-002	Collected: 02/11/21 09:40
	Matrix: Water	

440781-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
--------------------	--------	------	-------	----	-----	----	-------	----------	----------	---------

Method: EPA 6010B

Prep Method: EPA 3010A

Antimony	ND		ug/L	40	2.0	1	261436	02/16/21	02/16/21	SBW
Arsenic	7.9	J	ug/L	10	1.4	1	261436	02/16/21	02/16/21	SBW
Barium	220		ug/L	10	0.93	1	261436	02/16/21	02/16/21	SBW
Beryllium	0.96	J	ug/L	1.0	0.30	1	261436	02/16/21	02/16/21	SBW
Cadmium	ND		ug/L	5.0	0.41	1	261436	02/16/21	02/16/21	SBW
Chromium	49		ug/L	10	0.76	1	261436	02/16/21	02/16/21	SBW
Cobalt	91		ug/L	5.0	0.54	1	261436	02/16/21	02/16/21	SBW
Copper	34		ug/L	10	2.1	1	261436	02/16/21	02/16/21	SBW
Lead	20		ug/L	10	1.1	1	261436	02/16/21	02/16/21	SBW
Molybdenum	15		ug/L	10	0.75	1	261436	02/16/21	02/16/21	SBW
Nickel	56		ug/L	10	1.1	1	261436	02/16/21	02/16/21	SBW
Selenium	3.1	B,J	ug/L	30	1.9	1	261436	02/16/21	02/16/21	SBW
Silver	1.5	J	ug/L	5.0	0.66	1	261436	02/16/21	02/16/21	SBW
Thallium	ND		ug/L	50	3.0	1	261436	02/16/21	02/16/21	SBW
Vanadium	71		ug/L	5.0	1.2	1	261436	02/16/21	02/16/21	SBW
Zinc	150		ug/L	50	1.0	1	261436	02/16/21	02/16/21	SBW

Method: EPA 7470A

Prep Method: METHOD

Mercury	ND		ug/L	0.40	0.094	1	261475	02/16/21	02/16/21	JDB
---------	----	--	------	------	-------	---	--------	----------	----------	-----

Method: EPA 8015M

Prep Method: EPA 3510C

DRO C10-C28	4.0		mg/L	1.3	0.038	261550	02/17/21	02/19/21	MES
ORO C28-C44	ND		mg/L	1.3	0.038	261550	02/17/21	02/19/21	MES

### Surrogates

### Limits

n-Triacontane	DO	%REC	35-130	0.038	261550	02/17/21	02/19/21	MES
---------------	----	------	--------	-------	--------	----------	----------	-----

Method: EPA 8260B

Prep Method: EPA 5030B

3-Chloropropene	ND		ug/L	25	1.8	5	261585	02/18/21	02/18/21	LYZ
TPH Gasoline	220	J	ug/L	250	100	5	261585	02/18/21	02/18/21	LYZ
Freon 12	ND		ug/L	25	1.7	5	261585	02/18/21	02/18/21	LYZ
Chloromethane	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
Vinyl Chloride	ND		ug/L	25	0.9	5	261585	02/18/21	02/18/21	LYZ
Bromomethane	ND		ug/L	25	3.4	5	261585	02/18/21	02/18/21	LYZ
Chloroethane	ND		ug/L	25	2.3	5	261585	02/18/21	02/18/21	LYZ
Trichlorofluoromethane	ND		ug/L	25	0.9	5	261585	02/18/21	02/18/21	LYZ
Acetone	ND		ug/L	500	250	5	261585	02/18/21	02/18/21	LYZ
Freon 113	ND		ug/L	25	1.8	5	261585	02/18/21	02/18/21	LYZ
1,1-Dichloroethene	ND		ug/L	25	1.5	5	261585	02/18/21	02/18/21	LYZ
Methylene Chloride	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
MTBE	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ

## Analysis Results for 440781

440781-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
trans-1,2-Dichloroethene	ND		ug/L	25	1.7	5	261585	02/18/21	02/18/21	LYZ
1,1-Dichloroethane	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
2-Butanone	ND		ug/L	500	4.9	5	261585	02/18/21	02/18/21	LYZ
cis-1,2-Dichloroethene	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
2,2-Dichloropropane	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
Chloroform	ND		ug/L	25	0.9	5	261585	02/18/21	02/18/21	LYZ
Bromochloromethane	ND		ug/L	25	1.5	5	261585	02/18/21	02/18/21	LYZ
1,1,1-Trichloroethane	ND		ug/L	25	1.9	5	261585	02/18/21	02/18/21	LYZ
1,1-Dichloropropene	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
Carbon Tetrachloride	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
1,2-Dichloroethane	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
Benzene	ND		ug/L	25	0.9	5	261585	02/18/21	02/18/21	LYZ
Trichloroethene	ND		ug/L	25	2.0	5	261585	02/18/21	02/18/21	LYZ
1,2-Dichloropropane	ND		ug/L	25	1.8	5	261585	02/18/21	02/18/21	LYZ
Bromodichloromethane	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
Dibromomethane	ND		ug/L	25	2.2	5	261585	02/18/21	02/18/21	LYZ
4-Methyl-2-Pentanone	ND		ug/L	25	2.3	5	261585	02/18/21	02/18/21	LYZ
cis-1,3-Dichloropropene	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
Toluene	ND		ug/L	25	1.2	5	261585	02/18/21	02/18/21	LYZ
trans-1,3-Dichloropropene	ND		ug/L	25	1.2	5	261585	02/18/21	02/18/21	LYZ
1,1,2-Trichloroethane	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
1,3-Dichloropropane	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
Tetrachloroethene	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
Dibromochloromethane	ND		ug/L	25	1.1	5	261585	02/18/21	02/18/21	LYZ
1,2-Dibromoethane	6.5	J	ug/L	25	1.1	5	261585	02/18/21	02/18/21	LYZ
Chlorobenzene	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
Ethylbenzene	ND		ug/L	25	1.1	5	261585	02/18/21	02/18/21	LYZ
m,p-Xylenes	ND		ug/L	50	2.3	5	261585	02/18/21	02/18/21	LYZ
o-Xylene	ND		ug/L	25	1.5	5	261585	02/18/21	02/18/21	LYZ
Styrene	ND		ug/L	25	1.1	5	261585	02/18/21	02/18/21	LYZ
Bromoform	ND		ug/L	25	1.0	5	261585	02/18/21	02/18/21	LYZ
Isopropylbenzene	ND		ug/L	25	1.2	5	261585	02/18/21	02/18/21	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
1,2,3-Trichloropropane	ND		ug/L	25	0.8	5	261585	02/18/21	02/18/21	LYZ
Propylbenzene	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
Bromobenzene	ND		ug/L	25	2.7	5	261585	02/18/21	02/18/21	LYZ
1,3,5-Trimethylbenzene	ND		ug/L	25	1.2	5	261585	02/18/21	02/18/21	LYZ
2-Chlorotoluene	ND		ug/L	25	1.7	5	261585	02/18/21	02/18/21	LYZ
4-Chlorotoluene	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
tert-Butylbenzene	ND		ug/L	25	2.0	5	261585	02/18/21	02/18/21	LYZ
1,2,4-Trimethylbenzene	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
sec-Butylbenzene	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
para-Isopropyl Toluene	ND		ug/L	25	1.6	5	261585	02/18/21	02/18/21	LYZ
1,3-Dichlorobenzene	ND		ug/L	25	1.7	5	261585	02/18/21	02/18/21	LYZ
1,4-Dichlorobenzene	ND		ug/L	25	2.2	5	261585	02/18/21	02/18/21	LYZ

## Analysis Results for 440781

440781-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
n-Butylbenzene	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
1,2-Dichlorobenzene	ND		ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/L	25	0.6	5	261585	02/18/21	02/18/21	LYZ
1,2,4-Trichlorobenzene	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
Hexachlorobutadiene	ND		ug/L	25	2.6	5	261585	02/18/21	02/18/21	LYZ
Naphthalene	3.5	B,J	ug/L	25	1.3	5	261585	02/18/21	02/18/21	LYZ
1,2,3-Trichlorobenzene	ND		ug/L	25	1.4	5	261585	02/18/21	02/18/21	LYZ
cis-1,4-Dichloro-2-butene	ND		ug/L	25	3.2	5	261585	02/18/21	02/18/21	LYZ
trans-1,4-Dichloro-2-butene	ND		ug/L	25	2.4	5	261585	02/18/21	02/18/21	LYZ
Xylene (total)	ND		ug/L	25		5	261585	02/18/21	02/18/21	LYZ
<b>Surrogates</b>					<b>Limits</b>					
Dibromofluoromethane	96%		%REC	70-140		5	261585	02/18/21	02/18/21	LYZ
1,2-Dichloroethane-d4	102%		%REC	70-140		5	261585	02/18/21	02/18/21	LYZ
Toluene-d8	101%		%REC	70-140		5	261585	02/18/21	02/18/21	LYZ
Bromofluorobenzene	93%		%REC	70-140		5	261585	02/18/21	02/18/21	LYZ

Method: EPA 8270C

Prep Method: EPA 3510C

Carbazole	ND	ug/L	9.4	0.66	0.94	261496	02/16/21	02/17/21	DJL
Pyridine	ND	ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
N-Nitrosodimethylamine	ND	ug/L	9.4	0.23	0.94	261496	02/16/21	02/17/21	DJL
Phenol	ND	ug/L	9.4	0.36	0.94	261496	02/16/21	02/17/21	DJL
Aniline	ND	ug/L	9.4	0.77	0.94	261496	02/16/21	02/17/21	DJL
bis(2-Chloroethyl)ether	ND	ug/L	24	1.2	0.94	261496	02/16/21	02/17/21	DJL
2-Chlorophenol	ND	ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
1,3-Dichlorobenzene	ND	ug/L	9.4	1.8	0.94	261496	02/16/21	02/17/21	DJL
1,4-Dichlorobenzene	ND	ug/L	9.4	1.7	0.94	261496	02/16/21	02/17/21	DJL
Benzyl alcohol	ND	ug/L	9.4	7.5	0.94	261496	02/16/21	02/17/21	DJL
1,2-Dichlorobenzene	ND	ug/L	9.4	1.7	0.94	261496	02/16/21	02/17/21	DJL
2-Methylphenol	ND	ug/L	9.4	0.71	0.94	261496	02/16/21	02/17/21	DJL
bis(2-Chloroisopropyl) ether	ND	ug/L	9.4	1.2	0.94	261496	02/16/21	02/17/21	DJL
3,4-Methylphenol	ND	ug/L	9.4	0.85	0.94	261496	02/16/21	02/17/21	DJL
N-Nitroso-di-n-propylamine	ND	ug/L	9.4	0.23	0.94	261496	02/16/21	02/17/21	DJL
Hexachloroethane	ND	ug/L	9.4	1.9	0.94	261496	02/16/21	02/17/21	DJL
Nitrobenzene	ND	ug/L	24	1.1	0.94	261496	02/16/21	02/17/21	DJL
Isophorone	ND	ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
2-Nitrophenol	ND	ug/L	9.4	0.92	0.94	261496	02/16/21	02/17/21	DJL
2,4-Dimethylphenol	ND	ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
Benzoic acid	ND	ug/L	47	0.35	0.94	261496	02/16/21	02/17/21	DJL
bis(2-Chloroethoxy)methane	ND	ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
2,4-Dichlorophenol	ND	ug/L	9.4	1.3	0.94	261496	02/16/21	02/17/21	DJL
1,2,4-Trichlorobenzene	ND	ug/L	9.4	1.8	0.94	261496	02/16/21	02/17/21	DJL
Naphthalene	ND	ug/L	9.4	1.2	0.94	261496	02/16/21	02/17/21	DJL
4-Chloroaniline	ND	ug/L	9.4	0.38	0.94	261496	02/16/21	02/17/21	DJL
Hexachlorobutadiene	ND	ug/L	9.4	2.0	0.94	261496	02/16/21	02/17/21	DJL
4-Chloro-3-methylphenol	ND	ug/L	9.4	0.73	0.94	261496	02/16/21	02/17/21	DJL
2-Methylnaphthalene	ND	ug/L	9.4	1.4	0.94	261496	02/16/21	02/17/21	DJL

## Analysis Results for 440781

440781-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Hexachlorocyclopentadiene	ND		ug/L	24	1.8	0.94	261496	02/16/21	02/17/21	DJL
2,4,6-Trichlorophenol	ND		ug/L	9.4	0.53	0.94	261496	02/16/21	02/17/21	DJL
2,4,5-Trichlorophenol	ND		ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
2-Chloronaphthalene	ND		ug/L	9.4	1.3	0.94	261496	02/16/21	02/17/21	DJL
2-Nitroaniline	ND		ug/L	47	0.47	0.94	261496	02/16/21	02/17/21	DJL
Dimethylphthalate	ND		ug/L	9.4	0.78	0.94	261496	02/16/21	02/17/21	DJL
Acenaphthylene	ND		ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
2,6-Dinitrotoluene	ND		ug/L	9.4	0.52	0.94	261496	02/16/21	02/17/21	DJL
3-Nitroaniline	ND		ug/L	9.4	0.52	0.94	261496	02/16/21	02/17/21	DJL
Acenaphthene	ND		ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
2,4-Dinitrophenol	ND		ug/L	47	0.53	0.94	261496	02/16/21	02/17/21	DJL
4-Nitrophenol	ND		ug/L	9.4	0.72	0.94	261496	02/16/21	02/17/21	DJL
Dibenzofuran	ND		ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
2,4-Dinitrotoluene	ND		ug/L	9.4	0.39	0.94	261496	02/16/21	02/17/21	DJL
Diethylphthalate	ND		ug/L	9.4	0.66	0.94	261496	02/16/21	02/17/21	DJL
Fluorene	ND		ug/L	9.4	0.94	0.94	261496	02/16/21	02/17/21	DJL
4-Chlorophenyl-phenylether	ND		ug/L	9.4	1.1	0.94	261496	02/16/21	02/17/21	DJL
4-Nitroaniline	ND		ug/L	9.4	0.63	0.94	261496	02/16/21	02/17/21	DJL
4,6-Dinitro-2-methylphenol	ND		ug/L	47	0.37	0.94	261496	02/16/21	02/17/21	DJL
N-Nitrosodiphenylamine	ND		ug/L	9.4	0.93	0.94	261496	02/16/21	02/17/21	DJL
1,2-diphenylhydrazine (as azobenzene)	ND		ug/L	9.4	0.94	0.94	261496	02/16/21	02/17/21	DJL
4-Bromophenyl-phenylether	ND		ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
Hexachlorobenzene	ND		ug/L	9.4	0.79	0.94	261496	02/16/21	02/17/21	DJL
Pentachlorophenol	ND		ug/L	24	1.2	0.94	261496	02/16/21	02/17/21	DJL
Phenanthrene	ND		ug/L	9.4	0.76	0.94	261496	02/16/21	02/17/21	DJL
Anthracene	ND		ug/L	9.4	0.90	0.94	261496	02/16/21	02/17/21	DJL
Di-n-butylphthalate	ND		ug/L	9.4	0.86	0.94	261496	02/16/21	02/17/21	DJL
Fluoranthene	ND		ug/L	9.4	0.72	0.94	261496	02/16/21	02/17/21	DJL
Benzidine	ND		ug/L	47	1.2	0.94	261496	02/16/21	02/17/21	DJL
Pyrene	ND		ug/L	9.4	0.84	0.94	261496	02/16/21	02/17/21	DJL
Butylbenzylphthalate	ND		ug/L	9.4	0.81	0.94	261496	02/16/21	02/17/21	DJL
3,3'-Dichlorobenzidine	ND		ug/L	24	0.60	0.94	261496	02/16/21	02/17/21	DJL
Benzo(a)anthracene	ND		ug/L	9.4	0.61	0.94	261496	02/16/21	02/17/21	DJL
Chrysene	ND		ug/L	9.4	0.69	0.94	261496	02/16/21	02/17/21	DJL
bis(2-Ethylhexyl)phthalate	ND		ug/L	9.4	0.93	0.94	261496	02/16/21	02/17/21	DJL
Di-n-octylphthalate	ND		ug/L	9.4	1.0	0.94	261496	02/16/21	02/17/21	DJL
Benzo(b)fluoranthene	ND		ug/L	9.4	0.55	0.94	261496	02/16/21	02/17/21	DJL
Benzo(k)fluoranthene	ND		ug/L	9.4	0.75	0.94	261496	02/16/21	02/17/21	DJL
Benzo(a)pyrene	ND		ug/L	9.4	0.64	0.94	261496	02/16/21	02/17/21	DJL
Indeno(1,2,3-cd)pyrene	ND		ug/L	9.4	0.82	0.94	261496	02/16/21	02/17/21	DJL
Dibenz(a,h)anthracene	ND		ug/L	9.4	0.75	0.94	261496	02/16/21	02/17/21	DJL
Benzo(g,h,i)perylene	ND		ug/L	9.4	0.91	0.94	261496	02/16/21	02/17/21	DJL
<b>Surrogates</b>							<b>Limits</b>			
2-Fluorophenol	33%	%REC	10-140		0.94	261496	02/16/21	02/17/21		DJL
Phenol-d6	23%	%REC	10-140		0.94	261496	02/16/21	02/17/21		DJL
2,4,6-Tribromophenol	38%	%REC	12-140		0.94	261496	02/16/21	02/17/21		DJL

## Analysis Results for 440781

440781-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Nitrobenzene-d5	33%	%REC	10-140		0.94	261496	02/16/21	02/17/21	DJL	
2-Fluorobiphenyl	32%	%REC	11-140		0.94	261496	02/16/21	02/17/21	DJL	
Terphenyl-d14	43%	%REC	20-140		0.94	261496	02/16/21	02/17/21	DJL	

B Contamination found in associated Method Blank

DO Diluted Out

J Estimated value

ND Not Detected

## Batch QC

Type: Blank	Lab ID: QC908651			Batch: 261320			
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546			
<b>QC908651 Analyte</b>							
QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Carbazole	ND		ug/Kg	250	49	02/11/21	02/12/21
1-Methylnaphthalene	ND		ug/Kg	250	46	02/11/21	02/12/21
Pyridine	ND		ug/Kg	250	34	02/11/21	02/12/21
N-Nitrosodimethylamine	ND		ug/Kg	250	23	02/11/21	02/12/21
Phenol	ND		ug/Kg	250	49	02/11/21	02/12/21
Aniline	ND		ug/Kg	250	36	02/11/21	02/12/21
bis(2-Chloroethyl)ether	ND		ug/Kg	1,200	57	02/11/21	02/12/21
2-Chlorophenol	ND		ug/Kg	250	40	02/11/21	02/12/21
1,3-Dichlorobenzene	ND		ug/Kg	250	52	02/11/21	02/12/21
1,4-Dichlorobenzene	ND		ug/Kg	250	32	02/11/21	02/12/21
Benzyl alcohol	ND		ug/Kg	250	250	02/11/21	02/12/21
1,2-Dichlorobenzene	ND		ug/Kg	250	45	02/11/21	02/12/21
2-Methylphenol	ND		ug/Kg	250	110	02/11/21	02/12/21
bis(2-Chloroisopropyl) ether	ND		ug/Kg	250	45	02/11/21	02/12/21
3-,4-Methylphenol	ND		ug/Kg	400	60	02/11/21	02/12/21
N-Nitroso-di-n-propylamine	ND		ug/Kg	250	49	02/11/21	02/12/21
Hexachloroethane	ND		ug/Kg	250	42	02/11/21	02/12/21
Nitrobenzene	ND		ug/Kg	1,200	36	02/11/21	02/12/21
Isophorone	ND		ug/Kg	250	41	02/11/21	02/12/21
2-Nitrophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2,4-Dimethylphenol	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzoic acid	ND		ug/Kg	1,200	140	02/11/21	02/12/21
bis(2-Chloroethoxy)methane	ND		ug/Kg	250	52	02/11/21	02/12/21
2,4-Dichlorophenol	ND		ug/Kg	250	46	02/11/21	02/12/21
1,2,4-Trichlorobenzene	ND		ug/Kg	250	40	02/11/21	02/12/21
Naphthalene	ND		ug/Kg	250	44	02/11/21	02/12/21
4-Chloroaniline	ND		ug/Kg	250	59	02/11/21	02/12/21
Hexachlorobutadiene	ND		ug/Kg	250	36	02/11/21	02/12/21
4-Chloro-3-methylphenol	ND		ug/Kg	250	60	02/11/21	02/12/21
2-Methylnaphthalene	ND		ug/Kg	250	37	02/11/21	02/12/21
Hexachlorocyclopentadiene	ND		ug/Kg	1,200	20	02/11/21	02/12/21
2,4,6-Trichlorophenol	ND		ug/Kg	250	33	02/11/21	02/12/21
2,4,5-Trichlorophenol	ND		ug/Kg	250	38	02/11/21	02/12/21
2-Chloronaphthalene	ND		ug/Kg	250	51	02/11/21	02/12/21
2-Nitroaniline	ND		ug/Kg	250	57	02/11/21	02/12/21
Dimethylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthylene	ND		ug/Kg	250	46	02/11/21	02/12/21
2,6-Dinitrotoluene	ND		ug/Kg	250	42	02/11/21	02/12/21
3-Nitroaniline	ND		ug/Kg	250	53	02/11/21	02/12/21
Acenaphthene	ND		ug/Kg	250	44	02/11/21	02/12/21
2,4-Dinitrophenol	ND		ug/Kg	1,200	51	02/11/21	02/12/21
4-Nitrophenol	ND		ug/Kg	250	170	02/11/21	02/12/21

### Batch QC

QC908651 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Dibenzofuran	ND		ug/Kg	250	49	02/11/21	02/12/21
2,4-Dinitrotoluene	ND		ug/Kg	250	46	02/11/21	02/12/21
Diethylphthalate	ND		ug/Kg	250	51	02/11/21	02/12/21
Fluorene	ND		ug/Kg	250	49	02/11/21	02/12/21
4-Chlorophenyl-phenylether	ND		ug/Kg	250	43	02/11/21	02/12/21
4-Nitroaniline	ND		ug/Kg	250	84	02/11/21	02/12/21
4,6-Dinitro-2-methylphenol	ND		ug/Kg	250	37	02/11/21	02/12/21
N-Nitrosodiphenylamine	ND		ug/Kg	250	55	02/11/21	02/12/21
1,2-diphenylhydrazine (as azobenzene)	ND		ug/Kg	250	51	02/11/21	02/12/21
4-Bromophenyl-phenylether	ND		ug/Kg	250	56	02/11/21	02/12/21
Hexachlorobenzene	ND		ug/Kg	250	43	02/11/21	02/12/21
Pentachlorophenol	ND		ug/Kg	1,200	48	02/11/21	02/12/21
Phenanthrene	ND		ug/Kg	250	47	02/11/21	02/12/21
Anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Di-n-butylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Fluoranthene	ND		ug/Kg	250	50	02/11/21	02/12/21
Benzidine	ND		ug/Kg	1,200	200	02/11/21	02/12/21
Pyrene	ND		ug/Kg	250	55	02/11/21	02/12/21
Butylbenzylphthalate	ND		ug/Kg	250	53	02/11/21	02/12/21
3,3'-Dichlorobenzidine	ND		ug/Kg	1,200	160	02/11/21	02/12/21
Benzo(a)anthracene	ND		ug/Kg	250	40	02/11/21	02/12/21
Chrysene	ND		ug/Kg	250	42	02/11/21	02/12/21
bis(2-Ethylhexyl)phthalate	ND		ug/Kg	250	72	02/11/21	02/12/21
Di-n-octylphthalate	ND		ug/Kg	250	59	02/11/21	02/12/21
Benzo(b)fluoranthene	ND		ug/Kg	250	52	02/11/21	02/12/21
Benzo(k)fluoranthene	ND		ug/Kg	250	40	02/11/21	02/12/21
Benzo(a)pyrene	ND		ug/Kg	250	33	02/11/21	02/12/21
Indeno(1,2,3-cd)pyrene	ND		ug/Kg	250	86	02/11/21	02/12/21
Dibenz(a,h)anthracene	ND		ug/Kg	250	28	02/11/21	02/12/21
Benzo(g,h,i)perylene	ND		ug/Kg	250	41	02/11/21	02/12/21
<b>Surrogates</b>		<b>Limits</b>					
2-Fluorophenol	81%		%REC	29-120		02/11/21	02/12/21
Phenol-d6	83%		%REC	30-120		02/11/21	02/12/21
2,4,6-Tribromophenol	84%		%REC	32-120		02/11/21	02/12/21
Nitrobenzene-d5	75%		%REC	33-120		02/11/21	02/12/21
2-Fluorobiphenyl	76%		%REC	39-120		02/11/21	02/12/21
Terphenyl-d14	90%		%REC	44-125		02/11/21	02/12/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC908652			Batch: 261320		
Matrix: Soil	Method: EPA 8270C			Prep Method: EPA 3546		
QC908652 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	1,602	2000	ug/Kg	80%		42-120
2-Chlorophenol	1,572	2000	ug/Kg	79%		41-120
1,4-Dichlorobenzene	1,516	2000	ug/Kg	76%		36-120
3-,4-Methylphenol	1,669	2000	ug/Kg	83%		42-120
N-Nitroso-di-n-propylamine	1,608	2000	ug/Kg	80%		43-121
2,4-Dimethylphenol	1,597	2000	ug/Kg	80%		25-120
1,2,4-Trichlorobenzene	1,556	2000	ug/Kg	78%		38-120
4-Chloro-3-methylphenol	1,661	2000	ug/Kg	83%		40-125
2,4,5-Trichlorophenol	1,782	2000	ug/Kg	89%		40-124
Acenaphthene	1,671	2000	ug/Kg	84%		35-126
4-Nitrophenol	1,711	2000	ug/Kg	86%		24-128
2,4-Dinitrotoluene	1,795	2000	ug/Kg	90%		40-131
Pentachlorophenol	1,478	2000	ug/Kg	74%		35-120
Pyrene	1,810	2000	ug/Kg	91%		37-135
Chrysene	1,849	2000	ug/Kg	92%		38-132
Benzo(b)fluoranthene	1,947	2000	ug/Kg	97%		38-135
Surrogates						
2-Fluorophenol	1,782	2000	ug/Kg	89%		29-120
Phenol-d6	1,796	2000	ug/Kg	90%		30-120
2,4,6-Tribromophenol	1,931	2000	ug/Kg	97%		32-120
Nitrobenzene-d5	1,627	2000	ug/Kg	81%		33-120
2-Fluorobiphenyl	1,660	2000	ug/Kg	83%		39-120
Terphenyl-d14	1,897	2000	ug/Kg	95%		44-125

## Batch QC

Type: Matrix Spike	Lab ID: QC908653	Batch: 261320
Matrix (Source ID): Soil (440642-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908653 Analyte	Result	Source Sample		Recovery	Qual	Limits	DF
		Result	Spiked				
Phenol	1,171	ND	2000	ug/Kg	59%	37-120	1
2-Chlorophenol	1,185	ND	2000	ug/Kg	59%	33-120	1
1,4-Dichlorobenzene	1,239	ND	2000	ug/Kg	62%	32-120	1
3,-4-Methylphenol	1,133	ND	2000	ug/Kg	57%	37-120	1
N-Nitroso-di-n-propylamine	959.7	ND	2000	ug/Kg	48%	32-120	1
2,4-Dimethylphenol	1,077	ND	2000	ug/Kg	54%	32-120	1
1,2,4-Trichlorobenzene	1,094	ND	2000	ug/Kg	55%	33-120	1
4-Chloro-3-methylphenol	967.6	ND	2000	ug/Kg	48%	41-121	1
2,4,5-Trichlorophenol	961.5	ND	2000	ug/Kg	48%	40-120	1
Acenaphthene	967.0	ND	2000	ug/Kg	48%	37-120	1
4-Nitrophenol	858.3	ND	2000	ug/Kg	43%	20-141	1
2,4-Dinitrotoluene	695.6	ND	2000	ug/Kg	35%	33-128	1
Pentachlorophenol	902.7	ND	2000	ug/Kg	45%	28-132	1
Pyrene	914.9	ND	2000	ug/Kg	46%	39-135	1
Chrysene	887.9	ND	2000	ug/Kg	44%	37-135	1
Benzo(b)fluoranthene	898.3	ND	2000	ug/Kg	45%	34-139	1
<b>Surrogates</b>							
2-Fluorophenol	1,434		2000	ug/Kg	72%	29-120	1
Phenol-d6	1,272		2000	ug/Kg	64%	30-120	1
2,4,6-Tribromophenol	891.2		2000	ug/Kg	45%	32-120	1
Nitrobenzene-d5	1,022		2000	ug/Kg	51%	33-120	1
2-Fluorobiphenyl	958.2		2000	ug/Kg	48%	39-120	1
Terphenyl-d14	897.3		2000	ug/Kg	45%	44-125	1

## Batch QC

Type: Matrix Spike Duplicate	Lab ID: QC908654	Batch: 261320
Matrix (Source ID): Soil (440642-001)	Method: EPA 8270C	Prep Method: EPA 3546

QC908654 Analyte	Result	Source Sample Result	RPD							
			Spiked	Units	Recovery	Qual	Limits	RPD Lim	DF	
Phenol	1,512	ND	2000	ug/Kg	76%		37-120	25	49	1
2-Chlorophenol	1,533	ND	2000	ug/Kg	77%		33-120	26	52	1
1,4-Dichlorobenzene	1,483	ND	2000	ug/Kg	74%		32-120	18	50	1
3,-4-Methylphenol	1,539	ND	2000	ug/Kg	77%		37-120	30	54	1
N-Nitroso-di-n-propylamine	1,422	ND	2000	ug/Kg	71%		32-120	39	50	1
2,4-Dimethylphenol	1,485	ND	2000	ug/Kg	74%		32-120	32	50	1
1,2,4-Trichlorobenzene	1,420	ND	2000	ug/Kg	71%		33-120	26	50	1
4-Chloro-3-methylphenol	1,488	ND	2000	ug/Kg	74%		41-121	42	43	1
2,4,5-Trichlorophenol	1,580	ND	2000	ug/Kg	79%		40-120	49*	47	1
Acenaphthene	1,453	ND	2000	ug/Kg	73%		37-120	40	48	1
4-Nitrophenol	1,586	ND	2000	ug/Kg	79%		20-141	60*	30	1
2,4-Dinitrotoluene	1,423	ND	2000	ug/Kg	71%		33-128	69*	50	1
Pentachlorophenol	1,349	ND	2000	ug/Kg	67%		28-132	40*	30	1
Pyrene	1,543	ND	2000	ug/Kg	77%		39-135	51*	41	1
Chrysene	1,528	ND	2000	ug/Kg	76%		37-135	53*	46	1
Benzo(b)fluoranthene	1,568	ND	2000	ug/Kg	78%		34-139	54*	47	1
<b>Surrogates</b>										
2-Fluorophenol	1,677		2000	ug/Kg	84%		29-120			1
Phenol-d6	1,643		2000	ug/Kg	82%		30-120			1
2,4,6-Tribromophenol	1,558		2000	ug/Kg	78%		32-120			1
Nitrobenzene-d5	1,421		2000	ug/Kg	71%		33-120			1
2-Fluorobiphenyl	1,419		2000	ug/Kg	71%		39-120			1
Terphenyl-d14	1,555		2000	ug/Kg	78%		44-125			1

Type: Blank	Lab ID: QC908912	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908912 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	ND		mg/Kg	10	4.0	02/12/21	02/13/21
ORO C28-C44	ND		mg/Kg	20	4.0	02/12/21	02/13/21
<b>Surrogates</b>							
n-Triacontane	95%		%REC	70-130		02/12/21	02/13/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC908913	Batch: 261396
Matrix: Soil	Method: EPA 8015M	Prep Method: EPA 3580

QC908913 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	265.8	250.0	mg/Kg	106%		76-122
<b>Surrogates</b>						
n-Triacontane	10.04	10.00	mg/Kg	100%		70-130

Type: Matrix Spike	Lab ID: QC908914	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908914 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	273.2	ND	250.0	mg/Kg	109%		62-126	1
<b>Surrogates</b>								
n-Triacontane	9.846		10.00	mg/Kg	98%		70-130	1

Type: Matrix Spike Duplicate	Lab ID: QC908915	Batch: 261396
Matrix (Source ID): Soil (440717-007)	Method: EPA 8015M	Prep Method: EPA 3580

QC908915 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	271.5	ND	250.0	mg/Kg	109%		62-126	1	35	1
<b>Surrogates</b>										
n-Triacontane	9.836		10.00	mg/Kg	98%		70-130			1

## Batch QC

Type: Blank Matrix: Soil	Lab ID: QC908951 Method: EPA 6010B	Batch: 261415 Prep Method: EPA 3050B
-----------------------------	---------------------------------------	---

QC908951 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Antimony	ND		mg/Kg	3.0	1.6	02/13/21	02/16/21
Arsenic	ND		mg/Kg	1.0	0.67	02/13/21	02/16/21
Barium	ND		mg/Kg	1.0	0.11	02/13/21	02/16/21
Beryllium	ND		mg/Kg	0.50	0.067	02/13/21	02/16/21
Cadmium	ND		mg/Kg	0.50	0.094	02/13/21	02/16/21
Chromium	ND		mg/Kg	1.0	0.096	02/13/21	02/16/21
Cobalt	ND		mg/Kg	0.50	0.086	02/13/21	02/16/21
Copper	ND		mg/Kg	1.0	0.42	02/13/21	02/16/21
Lead	ND		mg/Kg	1.0	0.84	02/13/21	02/16/21
Molybdenum	ND		mg/Kg	1.0	0.59	02/13/21	02/16/21
Nickel	ND		mg/Kg	1.0	0.26	02/13/21	02/16/21
Selenium	ND		mg/Kg	3.0	1.8	02/13/21	02/16/21
Silver	ND		mg/Kg	0.50	0.16	02/13/21	02/16/21
Thallium	ND		mg/Kg	3.0	1.1	02/13/21	02/16/21
Vanadium	ND		mg/Kg	1.0	0.26	02/13/21	02/16/21
Zinc	ND		mg/Kg	5.0	0.75	02/13/21	02/16/21

Type: Lab Control Sample Matrix: Soil	Lab ID: QC908952 Method: EPA 6010B	Batch: 261415 Prep Method: EPA 3050B
--	---------------------------------------	---

QC908952 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	94.62	100.0	mg/Kg	95%		80-120
Arsenic	96.82	100.0	mg/Kg	97%		80-120
Barium	99.17	100.0	mg/Kg	99%		80-120
Beryllium	98.52	100.0	mg/Kg	99%		80-120
Cadmium	98.10	100.0	mg/Kg	98%		80-120
Chromium	98.48	100.0	mg/Kg	98%		80-120
Cobalt	101.2	100.0	mg/Kg	101%		80-120
Copper	93.28	100.0	mg/Kg	93%		80-120
Lead	100.9	100.0	mg/Kg	101%		80-120
Molybdenum	100.5	100.0	mg/Kg	100%		80-120
Nickel	101.8	100.0	mg/Kg	102%		80-120
Selenium	85.55	100.0	mg/Kg	86%		80-120
Silver	94.74	100.0	mg/Kg	95%		80-120
Thallium	95.83	100.0	mg/Kg	96%		80-120
Vanadium	99.14	100.0	mg/Kg	99%		80-120
Zinc	100.0	100.0	mg/Kg	100%		80-120

## Batch QC

Type: Matrix Spike Matrix (Source ID): Soil (440851-003)	Lab ID: QC908953 Method: EPA 6010B	Batch: 261415 Prep Method: EPA 3050B
---	---------------------------------------	---

QC908953 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	42.22	ND	102.0	mg/Kg	41%	*	75-125	1
Arsenic	96.87	3.271	102.0	mg/Kg	92%		75-125	1
Barium	156.3	60.13	102.0	mg/Kg	94%		75-125	1
Beryllium	93.87	0.2770	102.0	mg/Kg	92%		75-125	1
Cadmium	97.32	ND	102.0	mg/Kg	95%		75-125	1
Chromium	126.4	34.72	102.0	mg/Kg	90%		75-125	1
Cobalt	99.86	6.918	102.0	mg/Kg	91%		75-125	1
Copper	114.6	20.25	102.0	mg/Kg	93%		75-125	1
Lead	106.9	12.12	102.0	mg/Kg	93%		75-125	1
Molybdenum	90.50	ND	102.0	mg/Kg	89%		75-125	1
Nickel	126.2	32.60	102.0	mg/Kg	92%		75-125	1
Selenium	84.70	ND	102.0	mg/Kg	83%		75-125	1
Silver	95.50	ND	102.0	mg/Kg	94%		75-125	1
Thallium	97.70	ND	102.0	mg/Kg	96%		75-125	1
Vanadium	137.3	35.51	102.0	mg/Kg	100%		75-125	1
Zinc	136.4	39.24	102.0	mg/Kg	95%		75-125	1

Type: Matrix Spike Duplicate Matrix (Source ID): Soil (440851-003)	Lab ID: QC908954 Method: EPA 6010B	Batch: 261415 Prep Method: EPA 3050B
---	---------------------------------------	---

QC908954 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Antimony	37.40	ND	101.0	mg/Kg	37%	*	75-125	11	41	1
Arsenic	95.66	3.271	101.0	mg/Kg	91%		75-125	0	35	1
Barium	151.9	60.13	101.0	mg/Kg	91%		75-125	2	20	1
Beryllium	91.17	0.2770	101.0	mg/Kg	90%		75-125	2	20	1
Cadmium	96.27	ND	101.0	mg/Kg	95%		75-125	0	20	1
Chromium	131.5	34.72	101.0	mg/Kg	96%		75-125	5	20	1
Cobalt	98.44	6.918	101.0	mg/Kg	91%		75-125	0	20	1
Copper	114.8	20.25	101.0	mg/Kg	94%		75-125	1	20	1
Lead	105.7	12.12	101.0	mg/Kg	93%		75-125	0	20	1
Molybdenum	88.41	ND	101.0	mg/Kg	88%		75-125	1	20	1
Nickel	134.4	32.60	101.0	mg/Kg	101%		75-125	7	20	1
Selenium	83.31	ND	101.0	mg/Kg	82%		75-125	1	20	1
Silver	95.69	ND	101.0	mg/Kg	95%		75-125	1	20	1
Thallium	96.61	ND	101.0	mg/Kg	96%		75-125	0	20	1
Vanadium	132.7	35.51	101.0	mg/Kg	96%		75-125	3	20	1
Zinc	139.7	39.24	101.0	mg/Kg	99%		75-125	3	20	1

## Batch QC

Type: Blank	Lab ID: QC908955	Batch: 261416
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC908955 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Mercury	ND		mg/Kg	0.14	0.039	02/16/21	02/16/21

Type: Lab Control Sample	Lab ID: QC908956	Batch: 261416
Matrix: Soil	Method: EPA 7471A	Prep Method: METHOD

QC908956 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	0.8189	0.8333	mg/Kg	98%		80-120

Type: Matrix Spike	Lab ID: QC908957	Batch: 261416
Matrix (Source ID): Soil (440837-001)	Method: EPA 7471A	Prep Method: METHOD

QC908957 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	0.7745	0.04576	0.8772	mg/Kg	83%		75-125	1.1

Type: Matrix Spike Duplicate	Lab ID: QC908958	Batch: 261416
Matrix (Source ID): Soil (440837-001)	Method: EPA 7471A	Prep Method: METHOD

QC908958 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Mercury	0.8550	0.04576	0.9091	mg/Kg	89%		75-125	6	20	1.1

## Batch QC

Type: Blank Matrix: Water	Lab ID: QC909032 Method: EPA 6010B	Batch: 261436 Prep Method: EPA 3010A
------------------------------	---------------------------------------	---

QC909032 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Antimony	ND		ug/L	40	2.0	02/16/21	02/16/21
Arsenic	ND		ug/L	10	1.4	02/16/21	02/16/21
Barium	ND		ug/L	10	0.93	02/16/21	02/16/21
Beryllium	ND		ug/L	1.0	0.30	02/16/21	02/16/21
Cadmium	ND		ug/L	5.0	0.41	02/16/21	02/16/21
Chromium	ND		ug/L	10	0.76	02/16/21	02/16/21
Cobalt	ND		ug/L	5.0	0.54	02/16/21	02/16/21
Copper	ND		ug/L	10	2.1	02/16/21	02/16/21
Lead	ND		ug/L	10	1.1	02/16/21	02/16/21
Molybdenum	ND		ug/L	10	0.75	02/16/21	02/16/21
Nickel	ND		ug/L	10	1.1	02/16/21	02/16/21
Selenium	3.2	J	ug/L	30	1.9	02/16/21	02/16/21
Silver	ND		ug/L	5.0	0.66	02/16/21	02/16/21
Thallium	ND		ug/L	50	3.0	02/16/21	02/16/21
Vanadium	2.8	J	ug/L	5.0	1.2	02/16/21	02/16/21
Zinc	ND		ug/L	50	1.0	02/16/21	02/16/21

Type: Lab Control Sample Matrix: Water	Lab ID: QC909033 Method: EPA 6010B	Batch: 261436 Prep Method: EPA 3010A
---	---------------------------------------	---

QC909033 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Antimony	1,837	2000	ug/L	92%		80-120
Arsenic	1,872	2000	ug/L	94%		80-120
Barium	1,939	2000	ug/L	97%		80-120
Beryllium	1,950	2000	ug/L	97%		80-120
Cadmium	1,930	2000	ug/L	96%		80-120
Chromium	1,911	2000	ug/L	96%		80-120
Cobalt	1,930	2000	ug/L	97%		80-120
Copper	1,826	2000	ug/L	91%		80-120
Lead	1,931	2000	ug/L	97%		80-120
Molybdenum	1,981	2000	ug/L	99%		80-120
Nickel	1,926	2000	ug/L	96%		80-120
Selenium	1,667	2000	ug/L	83%		80-120
Silver	1,840	2000	ug/L	92%		80-120
Thallium	1,908	2000	ug/L	95%		80-120
Vanadium	1,937	2000	ug/L	97%		80-120
Zinc	1,971	2000	ug/L	99%		80-120

## Batch QC

Type: Matrix Spike	Lab ID: QC909034	Batch: 261436
Matrix (Source ID): Water (440873-001)	Method: EPA 6010B	Prep Method: EPA 3010A

QC909034 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Antimony	918.5	4.320	1000	ug/L	91%		75-125	1
Arsenic	944.7	ND	1000	ug/L	94%		75-125	1
Barium	1,022	75.78	1000	ug/L	95%		75-125	1
Beryllium	970.9	ND	1000	ug/L	97%		75-125	1
Cadmium	941.4	0.5751	1000	ug/L	94%		75-125	1
Chromium	957.2	24.98	1000	ug/L	93%		75-125	1
Cobalt	954.3	1.103	1000	ug/L	95%		75-125	1
Copper	972.0	33.37	1000	ug/L	94%		75-125	1
Lead	960.4	13.43	1000	ug/L	95%		75-125	1
Molybdenum	965.3	11.47	1000	ug/L	95%		75-125	1
Nickel	967.5	18.65	1000	ug/L	95%		75-125	1
Selenium	781.2	2.718	1000	ug/L	78%		75-125	1
Silver	908.3	ND	1000	ug/L	91%		75-125	1
Thallium	921.9	ND	1000	ug/L	92%		75-125	1
Vanadium	961.5	12.24	1000	ug/L	95%		75-125	1
Zinc	1,430	447.3	1000	ug/L	98%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC909035	Batch: 261436
Matrix (Source ID): Water (440873-001)	Method: EPA 6010B	Prep Method: EPA 3010A

QC909035 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Antimony	904.2	4.320	1000	ug/L	90%		75-125	2	20	1
Arsenic	931.4	ND	1000	ug/L	93%		75-125	1	20	1
Barium	1,009	75.78	1000	ug/L	93%		75-125	1	20	1
Beryllium	952.7	ND	1000	ug/L	95%		75-125	2	20	1
Cadmium	927.4	0.5751	1000	ug/L	93%		75-125	1	20	1
Chromium	940.3	24.98	1000	ug/L	92%		75-125	2	20	1
Cobalt	941.2	1.103	1000	ug/L	94%		75-125	1	20	1
Copper	960.1	33.37	1000	ug/L	93%		75-125	1	20	1
Lead	944.6	13.43	1000	ug/L	93%		75-125	2	20	1
Molybdenum	953.9	11.47	1000	ug/L	94%		75-125	1	20	1
Nickel	953.3	18.65	1000	ug/L	93%		75-125	1	20	1
Selenium	782.4	2.718	1000	ug/L	78%		75-125	0	20	1
Silver	901.9	ND	1000	ug/L	90%		75-125	1	20	1
Thallium	912.1	ND	1000	ug/L	91%		75-125	1	20	1
Vanadium	948.2	12.24	1000	ug/L	94%		75-125	1	20	1
Zinc	1,347	447.3	1000	ug/L	90%		75-125	6	20	1

## Batch QC

Type: Blank	Lab ID: QC909140	Batch: 261475
Matrix: Water	Method: EPA 7470A	Prep Method: METHOD

QC909140 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Mercury	ND		ug/L	0.40	0.094	02/16/21	02/16/21

Type: Lab Control Sample	Lab ID: QC909141	Batch: 261475
Matrix: Water	Method: EPA 7470A	Prep Method: METHOD

QC909141 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Mercury	4.479	5.000	ug/L	90%		80-120

Type: Matrix Spike	Lab ID: QC909142	Batch: 261475
Matrix (Source ID): Water (440320-001)	Method: EPA 7470A	Prep Method: METHOD

QC909142 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	4.207	ND	5.000	ug/L	84%		75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC909143	Batch: 261475
Matrix (Source ID): Water (440320-001)	Method: EPA 7470A	Prep Method: METHOD

QC909143 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Mercury	4.297	ND	5.000	ug/L	86%		75-125	2	20	1

Type: Matrix Spike	Lab ID: QC909144	Batch: 261475
Matrix (Source ID): Water (440893-001)	Method: EPA 7470A	Prep Method: METHOD

QC909144 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Mercury	5.053	ND	5.000	ug/L	101%	b	75-125	1

Type: Matrix Spike Duplicate	Lab ID: QC909145	Batch: 261475
Matrix (Source ID): Water (440893-001)	Method: EPA 7470A	Prep Method: METHOD

QC909145 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim	DF
Mercury	5.315	ND	5.000	ug/L	106%	b	75-125	5	20	1

## Batch QC

Type: Blank	Lab ID: QC909190	Batch: 261496					
Matrix: Water	Method: EPA 8270C	Prep Method: EPA 3510C					
QC909190 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Carbazole	ND		ug/L	10	0.70	02/16/21	02/17/21
Pyridine	ND		ug/L	10	1.1	02/16/21	02/17/21
N-Nitrosodimethylamine	ND		ug/L	10	0.24	02/16/21	02/17/21
Phenol	ND		ug/L	10	0.38	02/16/21	02/17/21
Aniline	ND		ug/L	10	0.82	02/16/21	02/17/21
bis(2-Chloroethyl)ether	ND		ug/L	25	1.3	02/16/21	02/17/21
2-Chlorophenol	ND		ug/L	10	1.1	02/16/21	02/17/21
1,3-Dichlorobenzene	ND		ug/L	10	1.9	02/16/21	02/17/21
1,4-Dichlorobenzene	ND		ug/L	10	1.8	02/16/21	02/17/21
Benzyl alcohol	ND		ug/L	10	8.0	02/16/21	02/17/21
1,2-Dichlorobenzene	ND		ug/L	10	1.8	02/16/21	02/17/21
2-Methylphenol	ND		ug/L	10	0.75	02/16/21	02/17/21
bis(2-Chloroisopropyl) ether	ND		ug/L	10	1.3	02/16/21	02/17/21
3-,4-Methylphenol	ND		ug/L	10	0.90	02/16/21	02/17/21
N-Nitroso-di-n-propylamine	ND		ug/L	10	0.24	02/16/21	02/17/21
Hexachloroethane	ND		ug/L	10	2.0	02/16/21	02/17/21
Nitrobenzene	ND		ug/L	25	1.2	02/16/21	02/17/21
Isophorone	ND		ug/L	10	1.2	02/16/21	02/17/21
2-Nitrophenol	ND		ug/L	10	0.97	02/16/21	02/17/21
2,4-Dimethylphenol	ND		ug/L	10	1.2	02/16/21	02/17/21
Benzoic acid	ND		ug/L	50	0.37	02/16/21	02/17/21
bis(2-Chloroethoxy)methane	ND		ug/L	10	1.2	02/16/21	02/17/21
2,4-Dichlorophenol	ND		ug/L	10	1.4	02/16/21	02/17/21
1,2,4-Trichlorobenzene	ND		ug/L	10	1.9	02/16/21	02/17/21
Naphthalene	ND		ug/L	10	1.3	02/16/21	02/17/21
4-Chloroaniline	ND		ug/L	10	0.40	02/16/21	02/17/21
Hexachlorobutadiene	ND		ug/L	10	2.1	02/16/21	02/17/21
4-Chloro-3-methylphenol	ND		ug/L	10	0.77	02/16/21	02/17/21
2-Methylnaphthalene	ND		ug/L	10	1.5	02/16/21	02/17/21
Hexachlorocyclopentadiene	ND		ug/L	25	1.9	02/16/21	02/17/21
2,4,6-Trichlorophenol	ND		ug/L	10	0.56	02/16/21	02/17/21
2,4,5-Trichlorophenol	ND		ug/L	10	1.1	02/16/21	02/17/21
2-Chloronaphthalene	ND		ug/L	10	1.4	02/16/21	02/17/21
2-Nitroaniline	ND		ug/L	50	0.50	02/16/21	02/17/21
Dimethylphthalate	ND		ug/L	10	0.83	02/16/21	02/17/21
Acenaphthylene	ND		ug/L	10	1.2	02/16/21	02/17/21
2,6-Dinitrotoluene	ND		ug/L	10	0.55	02/16/21	02/17/21
3-Nitroaniline	ND		ug/L	10	0.55	02/16/21	02/17/21
Acenaphthene	ND		ug/L	10	1.2	02/16/21	02/17/21
2,4-Dinitrophenol	ND		ug/L	50	0.56	02/16/21	02/17/21
4-Nitrophenol	ND		ug/L	10	0.76	02/16/21	02/17/21
Dibenzofuran	ND		ug/L	10	1.1	02/16/21	02/17/21

### Batch QC

QC909190 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
2,4-Dinitrotoluene	ND		ug/L	10	0.41	02/16/21	02/17/21
Diethylphthalate	ND		ug/L	10	0.70	02/16/21	02/17/21
Fluorene	ND		ug/L	10	1.0	02/16/21	02/17/21
4-Chlorophenyl-phenylether	ND		ug/L	10	1.2	02/16/21	02/17/21
4-Nitroaniline	ND		ug/L	10	0.67	02/16/21	02/17/21
4,6-Dinitro-2-methylphenol	ND		ug/L	50	0.39	02/16/21	02/17/21
N-Nitrosodiphenylamine	ND		ug/L	10	0.99	02/16/21	02/17/21
1,2-diphenylhydrazine (as azobenzene)	ND		ug/L	10	1.0	02/16/21	02/17/21
4-Bromophenyl-phenylether	ND		ug/L	10	1.1	02/16/21	02/17/21
Hexachlorobenzene	ND		ug/L	10	0.84	02/16/21	02/17/21
Pentachlorophenol	ND		ug/L	25	1.3	02/16/21	02/17/21
Phenanthrene	ND		ug/L	10	0.81	02/16/21	02/17/21
Anthracene	ND		ug/L	10	0.95	02/16/21	02/17/21
Di-n-butylphthalate	ND		ug/L	10	0.91	02/16/21	02/17/21
Fluoranthene	ND		ug/L	10	0.76	02/16/21	02/17/21
Benzidine	ND		ug/L	50	1.3	02/16/21	02/17/21
Pyrene	ND		ug/L	10	0.89	02/16/21	02/17/21
Butylbenzylphthalate	ND		ug/L	10	0.86	02/16/21	02/17/21
3,3'-Dichlorobenzidine	ND		ug/L	25	0.64	02/16/21	02/17/21
Benzo(a)anthracene	ND		ug/L	10	0.65	02/16/21	02/17/21
Chrysene	ND		ug/L	10	0.73	02/16/21	02/17/21
bis(2-Ethylhexyl)phthalate	ND		ug/L	10	0.99	02/16/21	02/17/21
Di-n-octylphthalate	ND		ug/L	10	1.1	02/16/21	02/17/21
Benzo(b)fluoranthene	ND		ug/L	10	0.58	02/16/21	02/17/21
Benzo(k)fluoranthene	ND		ug/L	10	0.79	02/16/21	02/17/21
Benzo(a)pyrene	ND		ug/L	10	0.68	02/16/21	02/17/21
Indeno(1,2,3-cd)pyrene	ND		ug/L	10	0.87	02/16/21	02/17/21
Dibenz(a,h)anthracene	ND		ug/L	10	0.80	02/16/21	02/17/21
Benzo(g,h,i)perylene	ND		ug/L	10	0.96	02/16/21	02/17/21
<b>Surrogates</b>		<b>Limits</b>					
2-Fluorophenol	42%		%REC	20-140		02/16/21	02/17/21
Phenol-d6	27%		%REC	20-140		02/16/21	02/17/21
2,4,6-Tribromophenol	59%		%REC	20-140		02/16/21	02/17/21
Nitrobenzene-d5	56%		%REC	20-140		02/16/21	02/17/21
2-Fluorobiphenyl	56%		%REC	20-140		02/16/21	02/17/21
Terphenyl-d14	86%		%REC	20-140		02/16/21	02/17/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC909191			Batch: 261496		
Matrix: Water	Method: EPA 8270C			Prep Method: EPA 3510C		
QC909191 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Phenol	10.89	40.00	ug/L	27%		13-120
2-Chlorophenol	19.45	40.00	ug/L	49%		31-120
1,4-Dichlorobenzene	18.35	40.00	ug/L	46%		24-120
3-,4-Methylphenol	18.37	40.00	ug/L	46%		29-120
N-Nitroso-di-n-propylamine	21.62	40.00	ug/L	54%		32-120
2,4-Dimethylphenol	21.69	40.00	ug/L	54%		25-120
1,2,4-Trichlorobenzene	19.22	40.00	ug/L	48%		26-120
4-Chloro-3-methylphenol	22.57	40.00	ug/L	56%		39-120
2,4,5-Trichlorophenol	23.24	40.00	ug/L	58%		38-120
Acenaphthene	23.47	40.00	ug/L	59%		33-120
4-Nitrophenol	12.18	40.00	ug/L	30%		12-120
2,4-Dinitrotoluene	25.32	40.00	ug/L	63%		46-120
Pentachlorophenol	22.04	40.00	ug/L	55%		37-120
Pyrene	29.14	40.00	ug/L	73%		47-120
Chrysene	33.18	40.00	ug/L	83%		48-120
Benzo(b)fluoranthene	37.37	40.00	ug/L	93%		46-120
<b>Surrogates</b>						
2-Fluorophenol	14.61	40.00	ug/L	37%		20-140
Phenol-d6	10.20	40.00	ug/L	25%		20-140
2,4,6-Tribromophenol	25.95	40.00	ug/L	65%		20-140
Nitrobenzene-d5	21.12	40.00	ug/L	53%		20-140
2-Fluorobiphenyl	20.78	40.00	ug/L	52%		20-140
Terphenyl-d14	29.59	40.00	ug/L	74%		20-140

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC909192	Batch: 261496
Matrix: Water	Method: EPA 8270C	Prep Method: EPA 3510C

QC909192 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Phenol	10.77	40.00	ug/L	27%		13-120	1	62
2-Chlorophenol	21.04	40.00	ug/L	53%		31-120	8	62
1,4-Dichlorobenzene	20.02	40.00	ug/L	50%		24-120	9	64
3-,4-Methylphenol	19.30	40.00	ug/L	48%		29-120	5	62
N-Nitroso-di-n-propylamine	24.02	40.00	ug/L	60%		32-120	11	65
2,4-Dimethylphenol	24.24	40.00	ug/L	61%		25-120	11	64
1,2,4-Trichlorobenzene	20.72	40.00	ug/L	52%		26-120	7	63
4-Chloro-3-methylphenol	24.62	40.00	ug/L	62%		39-120	9	58
2,4,5-Trichlorophenol	26.97	40.00	ug/L	67%		38-120	15	59
Acenaphthene	23.72	40.00	ug/L	59%		33-120	1	52
4-Nitrophenol	16.00	40.00	ug/L	40%		12-120	27	63
2,4-Dinitrotoluene	31.34	40.00	ug/L	78%		46-120	21	41
Pentachlorophenol	26.29	40.00	ug/L	66%		37-120	18	42
Pyrene	32.62	40.00	ug/L	82%		47-120	11	43
Chrysene	33.07	40.00	ug/L	83%		48-120	0	46
Benzo(b)fluoranthene	33.28	40.00	ug/L	83%		46-120	12	47
<b>Surrogates</b>								
2-Fluorophenol	13.97	40.00	ug/L	35%		20-140		
Phenol-d6	10.17	40.00	ug/L	25%		20-140		
2,4,6-Tribromophenol	30.20	40.00	ug/L	75%		20-140		
Nitrobenzene-d5	22.72	40.00	ug/L	57%		20-140		
2-Fluorobiphenyl	21.93	40.00	ug/L	55%		20-140		
Terphenyl-d14	33.00	40.00	ug/L	82%		20-140		

## Batch QC

Type: Blank Matrix: Soil	Lab ID: QC909223 Method: EPA 8260B			Batch: 261504 Prep Method: EPA 5030B			
QC909223 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	19	J	ug/Kg	100	6.4	02/17/21	02/17/21
Freon 12	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Chloromethane	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Vinyl Chloride	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Bromomethane	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
Chloroethane	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
Trichlorofluoromethane	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
Acetone	ND		ug/Kg	100	50	02/17/21	02/17/21
Freon 113	ND		ug/Kg	5.0	0.7	02/17/21	02/17/21
1,1-Dichloroethene	ND		ug/Kg	5.0	0.2	02/17/21	02/17/21
Methylene Chloride	ND		ug/Kg	5.0	0.7	02/17/21	02/17/21
MTBE	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
trans-1,2-Dichloroethene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,1-Dichloroethane	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
2-Butanone	ND		ug/Kg	100	3.2	02/17/21	02/17/21
cis-1,2-Dichloroethene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
2,2-Dichloropropane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Chloroform	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Bromoform	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Bromochloromethane	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,1,1-Trichloroethane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
1,1-Dichloropropene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Carbon Tetrachloride	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
1,2-Dichloroethane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Benzene	ND		ug/Kg	5.0	0.2	02/17/21	02/17/21
Trichloroethene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
1,2-Dichloropropane	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
Bromodichloromethane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Dibromomethane	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
4-Methyl-2-Pentanone	ND		ug/Kg	5.0	1.9	02/17/21	02/17/21
cis-1,3-Dichloropropene	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
Toluene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
trans-1,3-Dichloropropene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,1,2-Trichloroethane	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
1,3-Dichloropropane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Tetrachloroethene	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
Dibromochloromethane	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,2-Dibromoethane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Chlorobenzene	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
1,1,1,2-Tetrachloroethane	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Ethylbenzene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
m,p-Xylenes	ND		ug/Kg	10	0.8	02/17/21	02/17/21
o-Xylene	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21

### Batch QC

QC909223 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Bromoform	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
Isopropylbenzene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,1,2,2-Tetrachloroethane	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
1,2,3-Trichloropropane	ND		ug/Kg	5.0	0.7	02/17/21	02/17/21
Propylbenzene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
Bromobenzene	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
1,3,5-Trimethylbenzene	ND		ug/Kg	5.0	0.4	02/17/21	02/17/21
2-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
4-Chlorotoluene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
tert-Butylbenzene	ND		ug/Kg	5.0	0.3	02/17/21	02/17/21
1,2,4-Trimethylbenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
sec-Butylbenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
para-Isopropyl Toluene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
1,3-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
1,4-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
n-Butylbenzene	ND		ug/Kg	5.0	0.7	02/17/21	02/17/21
1,2-Dichlorobenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
1,2-Dibromo-3-Chloropropane	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
1,2,4-Trichlorobenzene	ND		ug/Kg	5.0	0.9	02/17/21	02/17/21
Hexachlorobutadiene	ND		ug/Kg	5.0	0.6	02/17/21	02/17/21
Naphthalene	ND		ug/Kg	5.0	0.9	02/17/21	02/17/21
1,2,3-Trichlorobenzene	ND		ug/Kg	5.0	0.5	02/17/21	02/17/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	100%	%REC	70-130	1.3	02/17/21	02/17/21	
1,2-Dichloroethane-d4	104%	%REC	70-145		02/17/21	02/17/21	
Toluene-d8	99%	%REC	70-145		02/17/21	02/17/21	
Bromofluorobenzene	89%	%REC	70-145	1.5	02/17/21	02/17/21	

Type: Lab Control Sample	Lab ID: QC909224	Batch: 261504
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC909224 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	52.96	50.00	ug/Kg	106%		70-131
MTBE	50.09	50.00	ug/Kg	100%		69-130
Benzene	49.81	50.00	ug/Kg	100%		70-130
Trichloroethene	49.35	50.00	ug/Kg	99%		70-130
Toluene	51.43	50.00	ug/Kg	103%		70-130
Chlorobenzene	52.08	50.00	ug/Kg	104%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	47.99	50.00	ug/Kg	96%		70-130
1,2-Dichloroethane-d4	45.41	50.00	ug/Kg	91%		70-145
Toluene-d8	50.98	50.00	ug/Kg	102%		70-145
Bromofluorobenzene	51.00	50.00	ug/Kg	102%		70-145

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC909225	Batch: 261504
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC909225 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	54.10	50.00	ug/Kg	108%		70-131	2	33
MTBE	52.18	50.00	ug/Kg	104%		69-130	4	30
Benzene	51.12	50.00	ug/Kg	102%		70-130	3	30
Trichloroethene	49.46	50.00	ug/Kg	99%		70-130	0	30
Toluene	51.81	50.00	ug/Kg	104%		70-130	1	30
Chlorobenzene	52.03	50.00	ug/Kg	104%		70-130	0	30
<b>Surrogates</b>								
Dibromofluoromethane	51.28	50.00	ug/Kg	103%		70-130		
1,2-Dichloroethane-d4	49.02	50.00	ug/Kg	98%		70-145		
Toluene-d8	49.91	50.00	ug/Kg	100%		70-145		
Bromofluorobenzene	50.38	50.00	ug/Kg	101%		70-145		

Type: Lab Control Sample	Lab ID: QC909227	Batch: 261504
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC909227 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	504.9	500.0	ug/Kg	101%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	46.50	50.00	ug/Kg	93%		70-130
1,2-Dichloroethane-d4	47.26	50.00	ug/Kg	95%		70-145
Toluene-d8	49.47	50.00	ug/Kg	99%		70-145
Bromofluorobenzene	46.10	50.00	ug/Kg	92%		70-145

Type: Lab Control Sample Duplicate	Lab ID: QC909228	Batch: 261504
Matrix: Soil	Method: EPA 8260B	Prep Method: EPA 5030B

QC909228 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	492.2	500.0	ug/Kg	98%		70-130	3	20
<b>Surrogates</b>								
Dibromofluoromethane	46.90	50.00	ug/Kg	94%		70-130		
1,2-Dichloroethane-d4	46.78	50.00	ug/Kg	94%		70-145		
Toluene-d8	48.95	50.00	ug/Kg	98%		70-145		
Bromofluorobenzene	45.50	50.00	ug/Kg	91%		70-145		

## Batch QC

Type: Blank	Lab ID: QC909351	Batch: 261550
Matrix: Water	Method: EPA 8015M	Prep Method: EPA 3510C

QC909351 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
DRO C10-C28	ND		mg/L	0.046		02/17/21	02/18/21
ORO C28-C44	ND		mg/L	0.046		02/17/21	02/18/21
<b>Surrogates</b>							<b>Limits</b>
n-Triacontane	117%		%REC	35-130		02/17/21	02/18/21

Type: Lab Control Sample	Lab ID: QC909352	Batch: 261550
Matrix: Water	Method: EPA 8015M	Prep Method: EPA 3510C

QC909352 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	0.7995	1.000	mg/L	80%		42-120
<b>Surrogates</b>						
n-Triacontane	0.02177	0.02000	mg/L	109%		35-130

Type: Lab Control Sample Duplicate	Lab ID: QC909353	Batch: 261550
Matrix: Water	Method: EPA 8015M	Prep Method: EPA 3510C

QC909353 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim
Diesel C10-C28	0.8650	1.000	mg/L	87%		42-120	8	36
<b>Surrogates</b>								
n-Triacontane	0.02316	0.02000	mg/L	116%		35-130		

## Batch QC

Type: Blank	Lab ID: QC909448	Batch: 261585					
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B					
<b>QC909448 Analyte</b>							
QC909448 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
3-Chloropropene	ND		ug/L	5.0	0.4	02/18/21	02/18/21
TPH Gasoline	ND		ug/L	50	20	02/18/21	02/18/21
Freon 12	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Chloromethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Vinyl Chloride	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Bromomethane	ND		ug/L	5.0	0.7	02/18/21	02/18/21
Chloroethane	ND		ug/L	5.0	0.5	02/18/21	02/18/21
Trichlorofluoromethane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Acetone	ND		ug/L	100	50	02/18/21	02/18/21
Freon 113	ND		ug/L	5.0	0.4	02/18/21	02/18/21
1,1-Dichloroethene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Methylene Chloride	ND		ug/L	5.0	0.2	02/18/21	02/18/21
MTBE	ND		ug/L	5.0	0.2	02/18/21	02/18/21
trans-1,2-Dichloroethene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,1-Dichloroethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
2-Butanone	ND		ug/L	100	1.0	02/18/21	02/18/21
cis-1,2-Dichloroethene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
2,2-Dichloropropane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Chloroform	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Bromochloromethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,1,1-Trichloroethane	ND		ug/L	5.0	0.4	02/18/21	02/18/21
1,1-Dichloropropene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Carbon Tetrachloride	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,2-Dichloroethane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Benzene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Trichloroethene	ND		ug/L	5.0	0.4	02/18/21	02/18/21
1,2-Dichloropropane	ND		ug/L	5.0	0.4	02/18/21	02/18/21
Bromodichloromethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Dibromomethane	ND		ug/L	5.0	0.4	02/18/21	02/18/21
4-Methyl-2-Pentanone	ND		ug/L	5.0	0.5	02/18/21	02/18/21
cis-1,3-Dichloropropene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Toluene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
trans-1,3-Dichloropropene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
1,1,2-Trichloroethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,3-Dichloropropane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Tetrachloroethene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Dibromochloromethane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
1,2-Dibromoethane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Chlorobenzene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
1,1,1,2-Tetrachloroethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Ethylbenzene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
m,p-Xylenes	ND		ug/L	10	0.5	02/18/21	02/18/21

## Batch QC

QC909448 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
o-Xylene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Styrene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Bromoform	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Isopropylbenzene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
1,1,2,2-Tetrachloroethane	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,2,3-Trichloropropane	ND		ug/L	5.0	0.2	02/18/21	02/18/21
Propylbenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Bromobenzene	ND		ug/L	5.0	0.5	02/18/21	02/18/21
1,3,5-Trimethylbenzene	ND		ug/L	5.0	0.2	02/18/21	02/18/21
2-Chlorotoluene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
4-Chlorotoluene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
tert-Butylbenzene	ND		ug/L	5.0	0.4	02/18/21	02/18/21
1,2,4-Trimethylbenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
sec-Butylbenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
para-Isopropyl Toluene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,3-Dichlorobenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,4-Dichlorobenzene	ND		ug/L	5.0	0.4	02/18/21	02/18/21
n-Butylbenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,2-Dichlorobenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
1,2-Dibromo-3-Chloropropane	ND		ug/L	5.0	0.1	02/18/21	02/18/21
1,2,4-Trichlorobenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
Hexachlorobutadiene	ND		ug/L	5.0	0.5	02/18/21	02/18/21
Naphthalene	0.6	J	ug/L	5.0	0.3	02/18/21	02/18/21
1,2,3-Trichlorobenzene	ND		ug/L	5.0	0.3	02/18/21	02/18/21
cis-1,4-Dichloro-2-butene	ND		ug/L	5.0	0.6	02/18/21	02/18/21
trans-1,4-Dichloro-2-butene	ND		ug/L	5.0	0.5	02/18/21	02/18/21
Xylene (total)	ND		ug/L	5.0		02/18/21	02/18/21
<b>Surrogates</b>				<b>Limits</b>			
Dibromofluoromethane	96%		%REC	70-140		02/18/21	02/18/21
1,2-Dichloroethane-d4	101%		%REC	70-140		02/18/21	02/18/21
Toluene-d8	102%		%REC	70-140		02/18/21	02/18/21
Bromofluorobenzene	94%		%REC	70-140		02/18/21	02/18/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC909449	Batch: 261585
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC909449 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	51.52	50.00	ug/L	103%		70-135
MTBE	52.91	50.00	ug/L	106%		70-130
Benzene	52.29	50.00	ug/L	105%		70-130
Trichloroethene	52.92	50.00	ug/L	106%		70-130
Toluene	49.32	50.00	ug/L	99%		70-130
Chlorobenzene	50.00	50.00	ug/L	100%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	51.13	50.00	ug/L	102%		70-140
1,2-Dichloroethane-d4	49.95	50.00	ug/L	100%		70-140
Toluene-d8	50.51	50.00	ug/L	101%		70-140
Bromofluorobenzene	48.57	50.00	ug/L	97%		70-140

Type: Matrix Spike	Lab ID: QC909450	Batch: 261585
Matrix (Source ID): Water (440545-002)	Method: EPA 8260B	Prep Method: EPA 5030B

QC909450 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
1,1-Dichloroethene	1,004	ND	1000	ug/L	100%		70-130	20
MTBE	1,138	ND	1000	ug/L	114%		75-130	20
Benzene	1,057	ND	1000	ug/L	106%		70-130	20
Trichloroethene	1,034	ND	1000	ug/L	103%		63-130	20
Toluene	982.3	ND	1000	ug/L	98%		70-130	20
Chlorobenzene	1,013	ND	1000	ug/L	101%		70-130	20
<b>Surrogates</b>								
Dibromofluoromethane	1,038		1000	ug/L	104%		70-140	20
1,2-Dichloroethane-d4	1,006		1000	ug/L	101%		70-140	20
Toluene-d8	1,016		1000	ug/L	102%		70-140	20
Bromofluorobenzene	972.1		1000	ug/L	97%		70-140	20

## Batch QC

Type: Matrix Spike Duplicate Matrix (Source ID): Water (440545-002)	Lab ID: QC909451 Method: EPA 8260B	Batch: 261585 Prep Method: EPA 5030B
--	---------------------------------------	---

QC909451 Analyte	Result	Source Sample Result						RPD	Lim	DF
			Spiked	Units	Recovery	Qual	Limits			
1,1-Dichloroethene	967.1	ND	1000	ug/L	97%		70-130	4	30	20
MTBE	1,098	ND	1000	ug/L	110%		75-130	4	30	20
Benzene	1,053	ND	1000	ug/L	105%		70-130	0	30	20
Trichloroethene	1,037	ND	1000	ug/L	104%		63-130	0	30	20
Toluene	980.1	ND	1000	ug/L	98%		70-130	0	30	20
Chlorobenzene	1,008	ND	1000	ug/L	101%		70-130	0	30	20
<b>Surrogates</b>										
Dibromofluoromethane	1,036		1000	ug/L	104%		70-140			20
1,2-Dichloroethane-d4	990.4		1000	ug/L	99%		70-140			20
Toluene-d8	1,009		1000	ug/L	101%		70-140			20
Bromofluorobenzene	973.5		1000	ug/L	97%		70-140			20

Type: Lab Control Sample Matrix: Water	Lab ID: QC909495 Method: EPA 8260B	Batch: 261585 Prep Method: EPA 5030B
---	---------------------------------------	---

QC909495 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	507.0	500.0	ug/L	101%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	46.22	50.00	ug/L	92%		70-140
1,2-Dichloroethane-d4	47.54	50.00	ug/L	95%		70-140
Toluene-d8	52.14	50.00	ug/L	104%		70-140
Bromofluorobenzene	48.45	50.00	ug/L	97%		70-140

Type: Lab Control Sample Duplicate Matrix: Water	Lab ID: QC909496 Method: EPA 8260B	Batch: 261585 Prep Method: EPA 5030B
---	---------------------------------------	---

QC909496 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim
TPH Gasoline	506.1	500.0	ug/L	101%		70-130	0	20
<b>Surrogates</b>								
Dibromofluoromethane	47.57	50.00	ug/L	95%		70-140		
1,2-Dichloroethane-d4	49.79	50.00	ug/L	100%		70-140		
Toluene-d8	51.25	50.00	ug/L	103%		70-140		
Bromofluorobenzene	48.02	50.00	ug/L	96%		70-140		

- \* Value is outside QC limits
- J Estimated value
- ND Not Detected
- b See narrative



Enthalpy Analytical  
931 West Barkley Ave  
Orange, CA 92868  
(714) 771-6900

[enthalpy.com](http://enthalpy.com)

Lab Job Number: 441485  
Report Level: II  
Report Date: 03/17/2021

**Analytical Report prepared for:**

Alex Martinez  
ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597

Project: 0520818 - Caltrain Hayward Park

*Authorized for release by:*

A handwritten signature in black ink that appears to read "Richard Villafania".

Richard Villafania, Project Manager  
[richard.villafania@enthalpy.com](mailto:richard.villafania@enthalpy.com)

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, CDC ELITE Member



## Sample Summary

---

Alex Martinez	Lab Job #:	441485
ERM	Project No:	0520818
1277 Treat Blvd.	Location:	Caltrain Hayward Park
Suite 500	Date Received:	02/27/21
Walnut Creek, CA 94597		

---

Sample ID	Lab ID	Collected	Matrix
HPK-MW-01-20210226	441485-001	02/26/21 17:35	Water
HPK-MW-02-20210226	441485-002	02/26/21 16:50	Water
HPK-MW-03-20210226	441485-003	02/26/21 16:00	Water
HPK-MW-04-20210226	441485-004	02/26/21 14:35	Water
HPK-MW-05-20210226	441485-005	02/26/21 13:00	Water
HPK-MW-06-20210226	441485-006	02/26/21 11:40	Water
HPK-MW-07-20210226	441485-007	02/26/21 13:45	Water
HPK-MW-08-20210226	441485-008	02/26/21 10:45	Water
HPK-MW-09-20210226	441485-009	02/26/21 09:25	Water
TB-20210226	441485-010	02/26/21 00:00	Water

## Case Narrative

ERM  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
Alex Martinez

Lab Job Number: 441485  
Project No: 0520818  
Location: Caltrain Hayward Park  
Date Received: 02/27/21

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 03/01/21. The samples were received cold and intact.

**TPH-Extractables by GC (EPA 8015B):**

Diesel C10-C28 was detected between the MDL and the RL in the method blank for batch 262324. No other analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

Response exceeding the instrument's linear range was observed for 1,2-dibromoethane in HPK-MW-09-20210226 (lab # 441485-009); affected data was qualified with "E". Methylene chloride was detected between the MDL and the RL in the method blank for batch 262524; this analyte was not detected in the sample at or above the RL. Methylene chloride was detected between the MDL and the RL in the method blank for batch 262403; this analyte was not detected in the sample at or above the RL. HPK-MW-05-20210226 (lab # 441485-005) was diluted due to foaming. HPK-MW-06-20210226 (lab # 441485-006), HPK-MW-08-20210226 (lab # 441485-008), and HPK-MW-09-20210226 (lab # 441485-009) were diluted due to high non-target analytes. No other analytical problems were encountered.

# **Environmental Resources Management**

# **CHAIN OF CUSTODY RECORD**

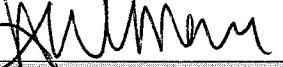
1277 Treat Boulevard, Suite 500 • Walnut Creek, CA • 94597 • (925) 946-0455 • FAX (925) 946-9968

441485

**NO:**

5498

Page \_\_\_\_\_ of \_\_\_\_\_

PROJECT #		PROJECT NAME		# OF CONTAINERS	MATRIX	REQUESTED PARAMETERS							
052081B		Caltrain Hayward Park				S	W	G					
SAMPLER: (PRINT NAME)		(SIGNATURE)				SOIL	WATER	GAS					
Amanda Messmann													
RECEIVING LABORATORY													
Enthalpy / John Goyette													
SAMPLER I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICY (Y/N)	SAMPLING VOLUME					
PK-MN-01-20210226	2/26/21	1735			Low Flow	None	Y	1L/40ML	5	X	X	X	
PK-MN-02-20210226		1650											
PK-MN-03-20210226		1600											
PK-MN-04-20210226		1435											
PK-MN-05-20210226		1300											
PK-MN-06-20210226		1140											
PK-MN-07-20210226		1345											
PK-MN-08-20210226		1045											
PK-MN-09-20210226		0925											
TB-20210226					HCL	40ML		3				X	
RELINQUISHED BY (SIGNATURE)				DATE	TIME	RECEIVED BY			DATE	TIME	FIELD REMARKS		
				2/26/21	1920				2/26/21	0920	Standard TAT		
RELINQUISHED BY (SIGNATURE)				DATE	TIME	RECEIVED BY			DATE	TIME			
				3/1/21	1350				3/2/21	1135			
RELINQUISHED BY (SIGNATURE)				DATE	TIME	RECEIVED BY			DATE	TIME			
REMARKS ON SAMPLE RECEIPT								ERM REMARKS				SEND REPORT TO:	
<input type="checkbox"/> BOTTLE INTACT <input type="checkbox"/> CUSTODY SEALS <input type="checkbox"/> CHILLED <input type="checkbox"/> PRESERVED <input type="checkbox"/> SEALS INTACT <input type="checkbox"/> SEE REMARKS												clint.harms@erm.com alex.martinez@erm.com	

**SAMPLE RECEIPT CHECKLIST**

Section 1: Login # 441485  
Date Received: 2/27/21

Client: SRM  
Project: 0520808

**Section 2: Shipping info (if applicable)**

Are custody seals present?  No, or  Yes. If yes, where?  on cooler,  on samples,  on package  
 Date: \_\_\_\_\_ How many \_\_\_\_\_  Signature,  Initials,  None

Were custody seals intact upon arrival?  Yes  No  N/A

Samples received in a cooler?  Yes, how many? 2  No (skip Section 3 below)

If no cooler Sample Temp (°C): \_\_\_\_\_ using IR Gun #  B, or  C

Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened 2/27/21 By (print) JG (sign) RS

**Section 3:**

**Important : Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) \_\_\_\_\_

Bubble Wrap,  Foam blocks,  Bags,  None,  Cloth material,  Cardboard,  Styrofoam,  Paper towels  
 Samples received on ice directly from the field. Cooling process had begun

Type of ice used:  Wet,  Blue/Gel,  None Temperature blank(s) included?  Yes,  No

Temperature measured using  Thermometer ID: \_\_\_\_\_, or IR Gun #  B  C

Cooler Temp (°C): #1: 2.1, #2: 1.9, #3: \_\_\_\_\_, #4: \_\_\_\_\_, #5: \_\_\_\_\_, #6: \_\_\_\_\_, #7: \_\_\_\_\_

**Section 4:**

Were custody papers dry, filled out properly, and the project identifiable

Were Method 5035 sampling containers present?

If YES, what time were they transferred to freezer?

Did all bottles arrive unbroken/unopened?

Are there any missing / extra samples?

Are samples in the appropriate containers for indicated tests?

Are sample labels present, in good condition and complete?

Does the container count match the COC?

Do the sample labels agree with custody papers?

Was sufficient amount of sample sent for tests requested?

Did you change the hold time in LIMS for unpreserved VOAs?

Did you change the hold time in LIMS for preserved terracores?

Are bubbles > 6mm present in VOA samples?

Was the client contacted concerning this sample delivery?

If YES, who was called? By \_\_\_\_\_ Date: \_\_\_\_\_

**Section 5:**

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)

Did you check preservatives for all bottles for each sample?

Did you document your preservative check?

pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_, pH strip lot# \_\_\_\_\_

Preservative added:

H<sub>2</sub>SO<sub>4</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_

HCl lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_

HNO<sub>3</sub> lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_

NaOH lot# \_\_\_\_\_ added to samples \_\_\_\_\_ on/at \_\_\_\_\_

**Section 6:**

Explanations/Comments: Two TB VOA's presented bubbles >6mm.

Date Logged in 3/1/21

By (print) MA6 for ZLA (sign) Z

Date Labeled 3/1/21

By (print) MA6 (sign) Z



# ENTHALPY ANALYTICAL

## SAMPLE ACCEPTANCE CHECKLIST

### Section 1

Client: ERM  
Date Received: 3/2/21

Project: CALIFORNIA SPECIFIC

Sampler's Name Present:  Yes  No

### Section 2

Sample(s) received in a cooler?  Yes, How many? 2  No (skip section 2) Sample Temp (°C) \_\_\_\_\_  
(No Cooler) \_\_\_\_\_

Sample Temp (°C), One from each cooler: #1: 3.7 #2: 3.5 #3: \_\_\_\_\_ #4: \_\_\_\_\_  
(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: GCS

### Section 3

Was the cooler packed with:  Ice  Ice Packs  Bubble Wrap  Styrofoam

Paper  None  Other \_\_\_\_\_

Cooler Temp (°C): #1: 0.7 #2: 1.1 #3: \_\_\_\_\_ #4: \_\_\_\_\_

### Section 4

	YES	NO	N/A
Was a COC received?	/		
Are sample IDs present?	/		
Are sampling dates & times present?	/		
Is a relinquished signature present?	/		
Are the tests required clearly indicated on the COC?	/		
Are custody seals present? If custody seals are present, were they intact?		/	/
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)		/	
Did all samples arrive intact? If no, indicate in Section 4 below.	/		
Did all bottle labels agree with COC? (ID, dates and times)	/		
Were the samples collected in the correct containers for the required tests? Are the containers labeled with the correct preservatives?	/		
Is there headspace in the VOA vials greater than 5-6 mm in diameter?	/		<u>3mm</u>
Was a sufficient amount of sample submitted for the requested tests?	/		

### Section 5 Explanations/Comments

HEADSPACE >5.6 mm noted on TB-W210226.

### Section 6

For discrepancies, how was the Project Manager notified?  Verbal PM Initials: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Email (email sent to/on): \_\_\_\_\_ / \_\_\_\_\_

Project Manager's response:

Completed By: \_\_\_\_\_

Date: 3/2/21

Enthalpy Analytical, a subsidiary of Montrose Environmental Group, Inc.

931 W. Barkley Ave, Orange, CA 92868 • T: (714) 771-6900 • F: (714) 538-1209

[www.enthalpy.com/socal](http://www.enthalpy.com/socal)

Sample Acceptance Checklist – Rev 4, 8/8/2017



**800-322-5555**  
**www.gls-us.com**

**Ship From**

ENTHALPY ANALYTICAL  
 BERKELEY SERVICE CENTER  
 2323 5TH STREET  
 BERKELEY, CA 94710

**Tracking #:** 552430182

**CPS**

**Ship To**

ENTHALPY ANALYTICAL (ORG)  
 SAMPLE RECEIVING  
 931 W BARKLEY AVE.  
 ORANGE, CA 92868

**ORANGE**

**COD:** \$0.00

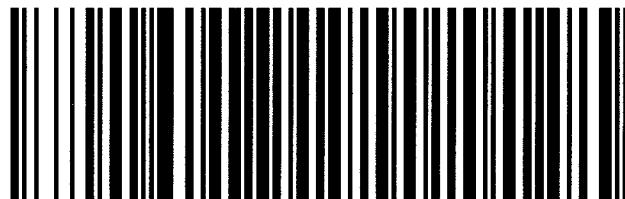
**Weight:** 0 lb(s)

**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

**S92868A**



37356921

Print Date: 3/1/2021 2:19 PM

Package 1 of 2

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

0-8/3-7



**800-322-5555**  
**www.gls-us.com**

**Ship From**

ENTHALPY ANALYTICAL  
 BERKELEY SERVICE CENTER  
 2323 5TH STREET  
 BERKELEY, CA 94710

**Tracking #:** 552430183

**CPS**

**Ship To**

ENTHALPY ANALYTICAL (ORG)  
 SAMPLE RECEIVING  
 931 W BARKLEY AVE.  
 ORANGE, CA 92868

**ORANGE**

**COD:** \$0.00

**Weight:** 0 lb(s)

**Reference:**

**Delivery Instructions:**

**Signature Type:** STANDARD

**S92868A**



37356922

**ORC CA927-CI1**

Print Date: 3/1/2021 2:19 PM

Package 2 of 2

**LABEL INSTRUCTIONS:**

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.

Step 2: Fold this page in half.

Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gls-us.com](http://www.gls-us.com).

1-1 / 3.5

## Richard Villafania

---

**From:** Clint Harms <Clint.Harms@erm.com> on behalf of Clint Harms  
**Sent:** Wednesday, March 10, 2021 10:34 AM  
**To:** richard.villafania@enthalpy.com  
**Subject:** [EXTERNAL SENDER] RE: 0520818 Caltrain Hayward Park - Enthalpy Data (441485) (Invoice CINV-020566)

**Importance:** High

Hi – Would it be possible to run a full scan VOC by 8260 on sample MW-9 if there is enough sample left?

Clinton Harms  
Principal Consultant

**ERM**  
980 9<sup>th</sup> Street | Suite 750 | Sacramento California | 95814  
T +1 916 999 8923 | M +1 916 768 4516  
E [Clint.harms@erm.com](mailto:Clint.harms@erm.com) | W [www.erm.com](http://www.erm.com)

---

**From:** Richard Villafania <richard.villafania@enthalpy.com>  
**Sent:** Tuesday, March 9, 2021 9:21 AM  
**To:** Clint Harms <Clint.Harms@erm.com>  
**Subject:** 0520818 Caltrain Hayward Park - Enthalpy Data (441485) (Invoice CINV-020566)

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Clint,

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

Please find attached the following files:

- Invoice
- PDF Deliverable
- EQuIS EFWEDD EDD (441485\_equis\_efwedd\_ermw.zip)

Email was also sent to: [Richard.Villafania@enthalpy.com](mailto:Richard.Villafania@enthalpy.com), [alex.martinez@erm.com](mailto:alex.martinez@erm.com), [ermnaaccountspayable@erm.com](mailto:ermnaaccountspayable@erm.com)

---

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately at (925) 946-0455 and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: <http://www.erm.com>. To find out how ERM manages personal data, please review our [Privacy Policy](#)

## Analysis Results for 441485

Alex Martinez  
 ERM  
 1277 Treat Blvd.  
 Suite 500  
 Walnut Creek, CA 94597

Lab Job #: 441485  
 Project No: 0520818  
 Location: Caltrain Hayward Park  
 Date Received: 02/27/21

Sample ID: HPK-MW-01-20210226	Lab ID: 441485-001	Collected: 02/26/21 17:35
Matrix: Water		

441485-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	360	B	ug/L	100	46	1	262324	03/02/21	03/04/21	MES
ORO C28-C44	ND		ug/L	300	46	1	262324	03/02/21	03/04/21	MES
Surrogates	Limits									
n-Triacontane	71%		%REC	35-130		1	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	150		ug/L	50	23	1	262524	03/04/21	03/04/21	LYZ
MTBE	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262524	03/04/21	03/04/21	LYZ
Surrogates	Limits									
Dibromofluoromethane	99%		%REC	70-140	2.4	1	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	109%		%REC	70-140	2.5	1	262524	03/04/21	03/04/21	LYZ
Toluene-d8	103%		%REC	70-140		1	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	101%		%REC	70-140	1.8	1	262524	03/04/21	03/04/21	LYZ

## Analysis Results for 441485

Sample ID: HPK-MW-02-20210226	Lab ID: 441485-002	Collected: 02/26/21 16:50
Matrix: Water		

441485-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	1,000		ug/L	96	44	0.96	262324	03/02/21	03/04/21	MES
ORO C28-C44	170	J	ug/L	290	44	0.96	262324	03/02/21	03/04/21	MES
Surrogates	<b>Limits</b>									
n-Triacontane	78%		%REC	35-130		0.96	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	ND		ug/L	50	23	1	262524	03/04/21	03/04/21	LYZ
MTBE	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262524	03/04/21	03/04/21	LYZ
Surrogates	<b>Limits</b>									
Dibromofluoromethane	102%		%REC	70-140	2.4	1	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	111%		%REC	70-140	2.5	1	262524	03/04/21	03/04/21	LYZ
Toluene-d8	99%		%REC	70-140		1	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	101%		%REC	70-140	1.8	1	262524	03/04/21	03/04/21	LYZ

## Analysis Results for 441485

<b>Sample ID:</b> HPK-MW-03-20210226	<b>Lab ID:</b> 441485-003	<b>Collected:</b> 02/26/21 16:00
<b>Matrix:</b> Water		

441485-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	<b>1,400</b>		ug/L	480	220	4.8	262324	03/02/21	03/04/21	MES
ORO C28-C44	ND		ug/L	1,400	220	4.8	262324	03/02/21	03/04/21	MES
<b>Surrogates</b> <span style="float: right;"><b>Limits</b></span>										
n-Triacontane	DO	%REC		35-130		4.8	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	<b>25</b>	J	ug/L	50	23	1	262403	03/03/21	03/03/21	LYZ
MTBE	ND		ug/L	1.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262403	03/03/21	03/03/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262403	03/03/21	03/03/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262403	03/03/21	03/03/21	LYZ
<b>Surrogates</b> <span style="float: right;"><b>Limits</b></span>										
Dibromofluoromethane	98%		%REC	70-140	2.4	1	262403	03/03/21	03/03/21	LYZ
1,2-Dichloroethane-d4	110%		%REC	70-140	2.5	1	262403	03/03/21	03/03/21	LYZ
Toluene-d8	99%		%REC	70-140		1	262403	03/03/21	03/03/21	LYZ
Bromofluorobenzene	102%		%REC	70-140	1.8	1	262403	03/03/21	03/03/21	LYZ

## Analysis Results for 441485

<b>Sample ID:</b> HPK-MW-04-20210226	<b>Lab ID:</b> 441485-004	<b>Collected:</b> 02/26/21 14:35
<b>Matrix:</b> Water		

441485-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	<b>810</b>		ug/L	490	220	4.9	262324	03/02/21	03/04/21	MES
ORO C28-C44	ND		ug/L	1,500	220	4.9	262324	03/02/21	03/04/21	MES
Surrogates	<b>Limits</b>									
n-Triacontane	DO	%REC		35-130		4.9	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	<b>25</b>	J	ug/L	50	23	1	262524	03/04/21	03/04/21	LYZ
MTBE	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262524	03/04/21	03/04/21	LYZ
Surrogates	<b>Limits</b>									
Dibromofluoromethane	98%		%REC	70-140	2.4	1	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	107%		%REC	70-140	2.5	1	262524	03/04/21	03/04/21	LYZ
Toluene-d8	102%		%REC	70-140		1	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	98%		%REC	70-140	1.8	1	262524	03/04/21	03/04/21	LYZ

## Analysis Results for 441485

Sample ID: HPK-MW-05-20210226	Lab ID: 441485-005	Collected: 02/26/21 13:00
Matrix: Water		

441485-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	1,900		ug/L	95	44	0.95	262324	03/02/21	03/04/21	MES
ORO C28-C44	180	J	ug/L	290	44	0.95	262324	03/02/21	03/04/21	MES
Surrogates	<b>Limits</b>									
n-Triacontane	67%		%REC	35-130		0.95	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	ND		ug/L	500	230	10	262403	03/03/21	03/03/21	LYZ
MTBE	ND		ug/L	10	1.9	10	262403	03/03/21	03/03/21	LYZ
Benzene	ND		ug/L	10	1.8	10	262403	03/03/21	03/03/21	LYZ
Toluene	ND		ug/L	50	2.4	10	262403	03/03/21	03/03/21	LYZ
Ethylbenzene	ND		ug/L	50	2.1	10	262403	03/03/21	03/03/21	LYZ
o-Xylene	ND		ug/L	50	2.9	10	262403	03/03/21	03/03/21	LYZ
m,p-Xylenes	ND		ug/L	100	4.5	10	262403	03/03/21	03/03/21	LYZ
Surrogates	<b>Limits</b>									
Dibromofluoromethane	91%		%REC	70-140	24	10	262403	03/03/21	03/03/21	LYZ
1,2-Dichloroethane-d4	101%		%REC	70-140	25	10	262403	03/03/21	03/03/21	LYZ
Toluene-d8	104%		%REC	70-140		10	262403	03/03/21	03/03/21	LYZ
Bromofluorobenzene	99%		%REC	70-140	18	10	262403	03/03/21	03/03/21	LYZ

## Analysis Results for 441485

Sample ID: HPK-MW-06-20210226	Lab ID: 441485-006	Collected: 02/26/21 11:40
Matrix: Water		

441485-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	1,500		ug/L	100	46	1	262324	03/02/21	03/04/21	MES
ORO C28-C44	100	J	ug/L	300	46	1	262324	03/02/21	03/04/21	MES
Surrogates	<b>Limits</b>									
n-Triacontane	106%		%REC	35-130		1	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	320		ug/L	250	120	5	262524	03/04/21	03/04/21	LYZ
MTBE	ND		ug/L	5.0	1.0	5	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	5.0	0.9	5	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	25	1.2	5	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	25	1.1	5	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	25	1.5	5	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	50	2.3	5	262524	03/04/21	03/04/21	LYZ
Surrogates	<b>Limits</b>									
Dibromofluoromethane	102%		%REC	70-140	12	5	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	110%		%REC	70-140	13	5	262524	03/04/21	03/04/21	LYZ
Toluene-d8	98%		%REC	70-140		5	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	99%		%REC	70-140	9.2	5	262524	03/04/21	03/04/21	LYZ

## Analysis Results for 441485

Sample ID: HPK-MW-07-20210226	Lab ID: 441485-007	Collected: 02/26/21 13:45
Matrix: Water		

441485-007 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	630	B	ug/L	480	220	4.8	262324	03/02/21	03/04/21	MES
ORO C28-C44	ND		ug/L	1,400	220	4.8	262324	03/02/21	03/04/21	MES
<b>Surrogates</b> <span style="float: right;"><b>Limits</b></span>										
n-Triacontane	DO	%REC		35-130		4.8	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	26	J	ug/L	50	23	1	262524	03/04/21	03/04/21	LYZ
MTBE	0.3	J	ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262524	03/04/21	03/04/21	LYZ
<b>Surrogates</b> <span style="float: right;"><b>Limits</b></span>										
Dibromofluoromethane	88%		%REC	70-140	2.4	1	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	99%		%REC	70-140	2.5	1	262524	03/04/21	03/04/21	LYZ
Toluene-d8	106%		%REC	70-140		1	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	103%		%REC	70-140	1.8	1	262524	03/04/21	03/04/21	LYZ

## Analysis Results for 441485

Sample ID: HPK-MW-08-20210226	Lab ID: 441485-008	Collected: 02/26/21 10:45
Matrix: Water		

441485-008 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	530	B	ug/L	99	46	0.99	262324	03/02/21	03/04/21	MES
ORO C28-C44	76	J	ug/L	300	46	0.99	262324	03/02/21	03/04/21	MES
Surrogates	<b>Limits</b>									
n-Triacontane	81%		%REC	35-130		0.99	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	200		ug/L	100	46	2	262524	03/04/21	03/04/21	LYZ
MTBE	ND		ug/L	2.0	0.4	2	262524	03/04/21	03/04/21	LYZ
Benzene	ND		ug/L	2.0	0.4	2	262524	03/04/21	03/04/21	LYZ
Toluene	ND		ug/L	10	0.5	2	262524	03/04/21	03/04/21	LYZ
Ethylbenzene	ND		ug/L	10	0.4	2	262524	03/04/21	03/04/21	LYZ
o-Xylene	ND		ug/L	10	0.6	2	262524	03/04/21	03/04/21	LYZ
m,p-Xylenes	ND		ug/L	20	0.9	2	262524	03/04/21	03/04/21	LYZ
Surrogates	<b>Limits</b>									
Dibromofluoromethane	100%		%REC	70-140	4.8	2	262524	03/04/21	03/04/21	LYZ
1,2-Dichloroethane-d4	108%		%REC	70-140	5.1	2	262524	03/04/21	03/04/21	LYZ
Toluene-d8	98%		%REC	70-140		2	262524	03/04/21	03/04/21	LYZ
Bromofluorobenzene	100%		%REC	70-140	3.7	2	262524	03/04/21	03/04/21	LYZ



## Analysis Results for 441485

Sample ID: HPK-MW-09-20210226 Lab ID: 441485-009 Collected: 02/26/21 09:25  
Matrix: Water

441485-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015B										
Prep Method: EPA 3510C										
Diesel C10-C28	3,300		ug/L	1,000	460	10	262324	03/02/21	03/04/21	MES
ORO C28-C44	ND		ug/L	3,000	460	10	262324	03/02/21	03/04/21	MES
<b>Surrogates</b>		<b>Limits</b>								
n-Triacontane		DO	%REC	35-130		10	262324	03/02/21	03/04/21	MES
Method: EPA 8260B										
Prep Method: EPA 5030B										
TPH Gasoline	46,000		ug/L	13,000	5,100	250	262669	03/05/21	03/05/21	LYZ
Freon 12	ND		ug/L	130	83	250	262669	03/05/21	03/05/21	LYZ
Chloromethane	ND		ug/L	130	68	250	262669	03/05/21	03/05/21	LYZ
Vinyl Chloride	ND		ug/L	130	45	250	262669	03/05/21	03/05/21	LYZ
Bromomethane	ND		ug/L	250	170	250	262669	03/05/21	03/05/21	LYZ
Chloroethane	ND		ug/L	250	110	250	262669	03/05/21	03/05/21	LYZ
Trichlorofluoromethane	ND		ug/L	130	43	250	262669	03/05/21	03/05/21	LYZ
Acetone	ND		ug/L	13,000	13,000	250	262669	03/05/21	03/05/21	LYZ
Freon 113	ND		ug/L	130	88	250	262669	03/05/21	03/05/21	LYZ
1,1-Dichloroethene	ND		ug/L	130	75	250	262669	03/05/21	03/05/21	LYZ
Methylene Chloride	ND		ug/L	2,500	50	250	262669	03/05/21	03/05/21	LYZ
MTBE	ND		ug/L	130	48	250	262669	03/05/21	03/05/21	LYZ
trans-1,2-Dichloroethene	ND		ug/L	130	83	250	262669	03/05/21	03/05/21	LYZ
1,1-Dichloroethane	ND		ug/L	130	80	250	262669	03/05/21	03/05/21	LYZ
2-Butanone	ND		ug/L	1,300	240	250	262669	03/05/21	03/05/21	LYZ
cis-1,2-Dichloroethene	ND		ug/L	130	68	250	262669	03/05/21	03/05/21	LYZ
2,2-Dichloropropane	ND		ug/L	130	80	250	262669	03/05/21	03/05/21	LYZ
Chloroform	ND		ug/L	130	45	250	262669	03/05/21	03/05/21	LYZ
Bromochloromethane	ND		ug/L	130	73	250	262669	03/05/21	03/05/21	LYZ
1,1,1-Trichloroethane	ND		ug/L	130	95	250	262669	03/05/21	03/05/21	LYZ
1,1-Dichloropropene	ND		ug/L	130	63	250	262669	03/05/21	03/05/21	LYZ
Carbon Tetrachloride	ND		ug/L	130	68	250	262669	03/05/21	03/05/21	LYZ
1,2-Dichloroethane	4,900		ug/L	500	200	1000	262524	03/04/21	03/04/21	ILK
Benzene	ND		ug/L	130	45	250	262669	03/05/21	03/05/21	LYZ
Trichloroethene	ND		ug/L	130	98	250	262669	03/05/21	03/05/21	LYZ
1,2-Dichloropropane	ND		ug/L	130	90	250	262669	03/05/21	03/05/21	LYZ
Bromodichloromethane	180		ug/L	130	78	250	262669	03/05/21	03/05/21	LYZ
Dibromomethane	570		ug/L	130	110	250	262669	03/05/21	03/05/21	LYZ
4-Methyl-2-Pentanone	ND		ug/L	1,300	120	250	262669	03/05/21	03/05/21	LYZ
cis-1,3-Dichloropropene	ND		ug/L	130	63	250	262669	03/05/21	03/05/21	LYZ
Toluene	ND		ug/L	130	60	250	262669	03/05/21	03/05/21	LYZ
trans-1,3-Dichloropropene	ND		ug/L	130	58	250	262669	03/05/21	03/05/21	LYZ
1,1,2-Trichloroethane	ND		ug/L	130	65	250	262669	03/05/21	03/05/21	LYZ
1,3-Dichloropropane	ND		ug/L	130	48	250	262669	03/05/21	03/05/21	LYZ

## Analysis Results for 441485

441485-009 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Tetrachloroethene	ND		ug/L	130	50	250	262669	03/05/21	03/05/21	LYZ
Dibromochloromethane	<b>750</b>		ug/L	130	53	250	262669	03/05/21	03/05/21	LYZ
1,2-Dibromoethane	<b>59,000</b>	E	ug/L	130	53	250	262669	03/05/21	03/05/21	LYZ
Chlorobenzene	ND		ug/L	130	48	250	262669	03/05/21	03/05/21	LYZ
1,1,1,2-Tetrachloroethane	ND		ug/L	130	63	250	262669	03/05/21	03/05/21	LYZ
Ethylbenzene	ND		ug/L	130	53	250	262669	03/05/21	03/05/21	LYZ
m,p-Xylenes	ND		ug/L	250	110	250	262669	03/05/21	03/05/21	LYZ
o-Xylene	ND		ug/L	130	73	250	262669	03/05/21	03/05/21	LYZ
Styrene	ND		ug/L	130	55	250	262669	03/05/21	03/05/21	LYZ
Bromoform	<b>5,000</b>		ug/L	250	50	250	262669	03/05/21	03/05/21	LYZ
Propylbenzene	ND		ug/L	130	78	250	262669	03/05/21	03/05/21	LYZ
Isopropylbenzene	ND		ug/L	130	60	250	262669	03/05/21	03/05/21	LYZ
1,1,2,2-Tetrachloroethane	ND		ug/L	130	63	250	262669	03/05/21	03/05/21	LYZ
1,2,3-Trichloropropane	ND		ug/L	130	40	250	262669	03/05/21	03/05/21	LYZ
Bromobenzene	ND		ug/L	250	130	250	262669	03/05/21	03/05/21	LYZ
1,3,5-Trimethylbenzene	ND		ug/L	130	60	250	262669	03/05/21	03/05/21	LYZ
2-Chlorotoluene	ND		ug/L	130	83	250	262669	03/05/21	03/05/21	LYZ
4-Chlorotoluene	ND		ug/L	130	78	250	262669	03/05/21	03/05/21	LYZ
tert-Butylbenzene	ND		ug/L	130	100	250	262669	03/05/21	03/05/21	LYZ
1,2,4-Trimethylbenzene	ND		ug/L	130	70	250	262669	03/05/21	03/05/21	LYZ
sec-Butylbenzene	ND		ug/L	130	80	250	262669	03/05/21	03/05/21	LYZ
para-Isopropyl Toluene	ND		ug/L	130	80	250	262669	03/05/21	03/05/21	LYZ
1,3-Dichlorobenzene	ND		ug/L	130	85	250	262669	03/05/21	03/05/21	LYZ
1,4-Dichlorobenzene	ND		ug/L	130	110	250	262669	03/05/21	03/05/21	LYZ
n-Butylbenzene	ND		ug/L	130	63	250	262669	03/05/21	03/05/21	LYZ
1,2-Dichlorobenzene	ND		ug/L	130	65	250	262669	03/05/21	03/05/21	LYZ
1,2-Dibromo-3-Chloropropane	ND		ug/L	500	30	250	262669	03/05/21	03/05/21	LYZ
1,2,4-Trichlorobenzene	ND		ug/L	130	68	250	262669	03/05/21	03/05/21	LYZ
Hexachlorobutadiene	ND		ug/L	500	130	250	262669	03/05/21	03/05/21	LYZ
Naphthalene	ND		ug/L	500	63	250	262669	03/05/21	03/05/21	LYZ
1,2,3-Trichlorobenzene	ND		ug/L	130	70	250	262669	03/05/21	03/05/21	LYZ
Isopropyl Ether (DIPE)	ND		ug/L	130	50	250	262669	03/05/21	03/05/21	LYZ
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	130	58	250	262669	03/05/21	03/05/21	LYZ
tert-Butyl Alcohol (TBA)	ND		ug/L	1,300	1,300	250	262669	03/05/21	03/05/21	LYZ
Methyl tert-Amyl Ether (TAME)	ND		ug/L	250	48	250	262669	03/05/21	03/05/21	LYZ
<b>Surrogates</b>		<b>Limits</b>								
Dibromofluoromethane	97%	%REC	70-140		250	262669	03/05/21	03/05/21	LYZ	
1,2-Dichloroethane-d4	102%	%REC	70-140		250	262669	03/05/21	03/05/21	LYZ	
Toluene-d8	103%	%REC	70-140		250	262669	03/05/21	03/05/21	LYZ	
Bromofluorobenzene	101%	%REC	70-140		250	262669	03/05/21	03/05/21	LYZ	

## Analysis Results for 441485

Sample ID: TB-20210226	Lab ID: 441485-010	Collected: 02/26/21
	Matrix: Water	

441485-010 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8260B										
Prep Method: EPA 5030B										
MTBE	ND		ug/L	1.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Benzene	ND		ug/L	1.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Toluene	ND		ug/L	5.0	0.2	1	262403	03/03/21	03/03/21	LYZ
Ethylbenzene	ND		ug/L	5.0	0.2	1	262403	03/03/21	03/03/21	LYZ
o-Xylene	ND		ug/L	5.0	0.3	1	262403	03/03/21	03/03/21	LYZ
m,p-Xylenes	ND		ug/L	10	0.5	1	262403	03/03/21	03/03/21	LYZ
<b>Surrogates</b>										
<b>Limits</b>										
Dibromofluoromethane	92%	%REC	70-140	2.4	1	262403	03/03/21	03/03/21	LYZ	
1,2-Dichloroethane-d4	104%	%REC	70-140	2.5	1	262403	03/03/21	03/03/21	LYZ	
Toluene-d8	103%	%REC	70-140		1	262403	03/03/21	03/03/21	LYZ	
Bromofluorobenzene	101%	%REC	70-140	1.8	1	262403	03/03/21	03/03/21	LYZ	

B Contamination found in associated Method Blank

DO Diluted Out

E Response exceeds instrument's linear range

J Estimated value

ND Not Detected

## Batch QC

Type: Blank	Lab ID: QC911381	Batch: 262324
Matrix: Water	Method: EPA 8015B	Prep Method: EPA 3510C

QC911381 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Diesel C10-C28	67	J	ug/L	100	46	03/01/21	03/02/21
ORO C28-C44	ND		ug/L	300	46	03/01/21	03/02/21
<b>Surrogates</b>							<b>Limits</b>
n-Triacontane	106%		%REC	35-130		03/01/21	03/02/21

Type: Lab Control Sample	Lab ID: QC911382	Batch: 262324
Matrix: Water	Method: EPA 8015B	Prep Method: EPA 3510C

QC911382 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	782.9	1000	ug/L	78%		42-120
<b>Surrogates</b>						
n-Triacontane	20.98	20.00	ug/L	105%		35-130

Type: Lab Control Sample Duplicate	Lab ID: QC911383	Batch: 262324
Matrix: Water	Method: EPA 8015B	Prep Method: EPA 3510C

QC911383 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	Lim
Diesel C10-C28	812.5	1000	ug/L	81%		42-120	4	36
<b>Surrogates</b>								
n-Triacontane	20.65	20.00	ug/L	103%		35-130		

## Batch QC

Type: Blank Matrix: Water	Lab ID: QC911635 Method: EPA 8260B			Batch: 262403 Prep Method: EPA 5030B			
QC911635 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	ND		ug/L	50	23	03/03/21	03/03/21
Freon 12	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Chloromethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Vinyl Chloride	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Bromomethane	ND		ug/L	1.0	0.7	03/03/21	03/03/21
Chloroethane	ND		ug/L	0.5	0.5	03/03/21	03/03/21
Trichlorofluoromethane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Acetone	ND		ug/L	50	50	03/03/21	03/03/21
Freon 113	ND		ug/L	0.5	0.4	03/03/21	03/03/21
1,1-Dichloroethene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Methylene Chloride	2.2	J	ug/L	10	0.2	03/03/21	03/03/21
MTBE	ND		ug/L	0.5	0.2	03/03/21	03/03/21
trans-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,1-Dichloroethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
2-Butanone	ND		ug/L	5.0	1.0	03/03/21	03/03/21
cis-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
2,2-Dichloropropane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Chloroform	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Bromoform	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Bromochloromethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,1,1-Trichloroethane	ND		ug/L	0.5	0.4	03/03/21	03/03/21
1,1-Dichloropropene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Carbon Tetrachloride	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,2-Dichloroethane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Benzene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Trichloroethene	ND		ug/L	0.5	0.4	03/03/21	03/03/21
1,2-Dichloropropane	ND		ug/L	0.5	0.4	03/03/21	03/03/21
Bromodichloromethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Dibromomethane	ND		ug/L	0.5	0.4	03/03/21	03/03/21
4-Methyl-2-Pentanone	ND		ug/L	5.0	0.5	03/03/21	03/03/21
cis-1,3-Dichloropropene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Toluene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
trans-1,3-Dichloropropene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
1,1,2-Trichloroethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,3-Dichloropropane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Tetrachloroethene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Dibromochloromethane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
1,2-Dibromoethane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Chlorobenzene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Ethylbenzene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
m,p-Xylenes	ND		ug/L	1.0	0.5	03/03/21	03/03/21
o-Xylene	ND		ug/L	0.5	0.3	03/03/21	03/03/21

## Batch QC

QC911635 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Bromoform	ND		ug/L	1.0	0.2	03/03/21	03/03/21
Propylbenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Isopropylbenzene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,2,3-Trichloropropane	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Bromobenzene	ND		ug/L	1.0	0.5	03/03/21	03/03/21
1,3,5-Trimethylbenzene	ND		ug/L	0.5	0.2	03/03/21	03/03/21
2-Chlorotoluene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
4-Chlorotoluene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
tert-Butylbenzene	ND		ug/L	0.5	0.4	03/03/21	03/03/21
1,2,4-Trimethylbenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
sec-Butylbenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
para-Isopropyl Toluene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,3-Dichlorobenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,4-Dichlorobenzene	ND		ug/L	0.5	0.4	03/03/21	03/03/21
n-Butylbenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,2-Dichlorobenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	0.1	03/03/21	03/03/21
1,2,4-Trichlorobenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Hexachlorobutadiene	ND		ug/L	2.0	0.5	03/03/21	03/03/21
Naphthalene	ND		ug/L	2.0	0.3	03/03/21	03/03/21
1,2,3-Trichlorobenzene	ND		ug/L	0.5	0.3	03/03/21	03/03/21
Isopropyl Ether (DIPE)	ND		ug/L	0.5	0.2	03/03/21	03/03/21
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	0.5	0.2	03/03/21	03/03/21
tert-Butyl Alcohol (TBA)	ND		ug/L	5.2	5.2	03/03/21	03/03/21
Methyl tert-Amyl Ether (TAME)	ND		ug/L	0.5	0.2	03/03/21	03/03/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	99%		%REC	70-140	2.4	03/03/21	03/03/21
1,2-Dichloroethane-d4	108%		%REC	70-140	2.5	03/03/21	03/03/21
Toluene-d8	99%		%REC	70-140		03/03/21	03/03/21
Bromofluorobenzene	99%		%REC	70-140	1.8	03/03/21	03/03/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC911636	Batch: 262403
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911636 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	44.04	50.00	ug/L	88%		70-135
MTBE	55.59	50.00	ug/L	111%		70-130
Benzene	47.64	50.00	ug/L	95%		70-130
Trichloroethene	48.37	50.00	ug/L	97%		70-130
Toluene	46.30	50.00	ug/L	93%		70-130
Chlorobenzene	46.13	50.00	ug/L	92%		70-130
Ethylbenzene	46.82	50.00	ug/L	94%		70-130
m,p-Xylenes	94.84	100.0	ug/L	95%		70-130
o-Xylene	47.54	50.00	ug/L	95%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	50.39	50.00	ug/L	101%		70-140
1,2-Dichloroethane-d4	52.51	50.00	ug/L	105%		70-140
Toluene-d8	49.65	50.00	ug/L	99%		70-140
Bromofluorobenzene	53.83	50.00	ug/L	108%		70-140

Type: Lab Control Sample Duplicate	Lab ID: QC911637	Batch: 262403
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911637 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	44.53	50.00	ug/L	89%		70-135	1	30
MTBE	54.61	50.00	ug/L	109%		70-130	2	30
Benzene	46.84	50.00	ug/L	94%		70-130	2	30
Trichloroethene	46.86	50.00	ug/L	94%		70-130	3	30
Toluene	44.68	50.00	ug/L	89%		70-130	4	30
Chlorobenzene	45.54	50.00	ug/L	91%		70-130	1	30
Ethylbenzene	46.12	50.00	ug/L	92%		70-130	2	30
m,p-Xylenes	93.96	100.0	ug/L	94%		70-130	1	30
o-Xylene	47.19	50.00	ug/L	94%		70-130	1	30
<b>Surrogates</b>								
Dibromofluoromethane	52.33	50.00	ug/L	105%		70-140		
1,2-Dichloroethane-d4	54.88	50.00	ug/L	110%		70-140		
Toluene-d8	50.22	50.00	ug/L	100%		70-140		
Bromofluorobenzene	52.40	50.00	ug/L	105%		70-140		

## Batch QC

Type: Lab Control Sample	Lab ID: QC911768	Batch: 262403
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911768 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	466.5	500.0	ug/L	93%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	49.29	50.00	ug/L	99%		70-140
1,2-Dichloroethane-d4	52.91	50.00	ug/L	106%		70-140
Toluene-d8	49.54	50.00	ug/L	99%		70-140
Bromofluorobenzene	50.92	50.00	ug/L	102%		70-140

Type: Lab Control Sample Duplicate	Lab ID: QC911769	Batch: 262403
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911769 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	429.4	500.0	ug/L	86%		70-130	8	20
<b>Surrogates</b>								
Dibromofluoromethane	50.33	50.00	ug/L	101%		70-140		
1,2-Dichloroethane-d4	54.29	50.00	ug/L	109%		70-140		
Toluene-d8	49.92	50.00	ug/L	100%		70-140		
Bromofluorobenzene	49.35	50.00	ug/L	99%		70-140		

## Batch QC

Type: Blank	Lab ID: QC911928			Batch: 262524			
Matrix: Water	Method: EPA 8260B			Prep Method: EPA 5030B			
QC911928 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	ND		ug/L	50	23	03/04/21	03/04/21
Freon 12	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Chloromethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Vinyl Chloride	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Bromomethane	ND		ug/L	1.0	0.7	03/04/21	03/04/21
Chloroethane	ND		ug/L	0.5	0.5	03/04/21	03/04/21
Trichlorofluoromethane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Acetone	ND		ug/L	50	50	03/04/21	03/04/21
Freon 113	ND		ug/L	0.5	0.4	03/04/21	03/04/21
1,1-Dichloroethene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Methylene Chloride	0.9	J	ug/L	10	0.2	03/04/21	03/04/21
MTBE	ND		ug/L	0.5	0.2	03/04/21	03/04/21
trans-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,1-Dichloroethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
2-Butanone	ND		ug/L	5.0	1.0	03/04/21	03/04/21
cis-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
2,2-Dichloropropane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Chloroform	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Bromoform	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Bromochloromethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,1,1-Trichloroethane	ND		ug/L	0.5	0.4	03/04/21	03/04/21
1,1-Dichloropropene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Carbon Tetrachloride	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,2-Dichloroethane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Benzene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Trichloroethene	ND		ug/L	0.5	0.4	03/04/21	03/04/21
1,2-Dichloropropane	ND		ug/L	0.5	0.4	03/04/21	03/04/21
Bromodichloromethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Dibromomethane	ND		ug/L	0.5	0.4	03/04/21	03/04/21
4-Methyl-2-Pentanone	ND		ug/L	5.0	0.5	03/04/21	03/04/21
cis-1,3-Dichloropropene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Toluene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
trans-1,3-Dichloropropene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
1,1,2-Trichloroethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,3-Dichloropropane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Tetrachloroethene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Dibromochloromethane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
1,2-Dibromoethane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Chlorobenzene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Ethylbenzene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
m,p-Xylenes	ND		ug/L	1.0	0.5	03/04/21	03/04/21
o-Xylene	ND		ug/L	0.5	0.3	03/04/21	03/04/21

## Batch QC

QC911928 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Bromoform	ND		ug/L	1.0	0.2	03/04/21	03/04/21
Propylbenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Isopropylbenzene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,2,3-Trichloropropane	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Bromobenzene	ND		ug/L	1.0	0.5	03/04/21	03/04/21
1,3,5-Trimethylbenzene	ND		ug/L	0.5	0.2	03/04/21	03/04/21
2-Chlorotoluene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
4-Chlorotoluene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
tert-Butylbenzene	ND		ug/L	0.5	0.4	03/04/21	03/04/21
1,2,4-Trimethylbenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
sec-Butylbenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
para-Isopropyl Toluene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,3-Dichlorobenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,4-Dichlorobenzene	ND		ug/L	0.5	0.4	03/04/21	03/04/21
n-Butylbenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,2-Dichlorobenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	0.1	03/04/21	03/04/21
1,2,4-Trichlorobenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Hexachlorobutadiene	ND		ug/L	2.0	0.5	03/04/21	03/04/21
Naphthalene	ND		ug/L	2.0	0.3	03/04/21	03/04/21
1,2,3-Trichlorobenzene	ND		ug/L	0.5	0.3	03/04/21	03/04/21
Isopropyl Ether (DIPE)	ND		ug/L	0.5	0.2	03/04/21	03/04/21
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	0.5	0.2	03/04/21	03/04/21
tert-Butyl Alcohol (TBA)	ND		ug/L	5.2	5.2	03/04/21	03/04/21
Methyl tert-Amyl Ether (TAME)	ND		ug/L	0.5	0.2	03/04/21	03/04/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	100%		%REC	70-140	2.4	03/04/21	03/04/21
1,2-Dichloroethane-d4	107%		%REC	70-140	2.5	03/04/21	03/04/21
Toluene-d8	99%		%REC	70-140		03/04/21	03/04/21
Bromofluorobenzene	100%		%REC	70-140	1.8	03/04/21	03/04/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC911929	Batch: 262524
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911929 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	47.38	50.00	ug/L	95%		70-135
MTBE	55.38	50.00	ug/L	111%		70-130
Benzene	48.93	50.00	ug/L	98%		70-130
Trichloroethene	49.07	50.00	ug/L	98%		70-130
Toluene	46.41	50.00	ug/L	93%		70-130
Chlorobenzene	47.28	50.00	ug/L	95%		70-130
Ethylbenzene	48.29	50.00	ug/L	97%		70-130
m,p-Xylenes	99.37	100.0	ug/L	99%		70-130
o-Xylene	49.50	50.00	ug/L	99%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	53.32	50.00	ug/L	107%		70-140
1,2-Dichloroethane-d4	56.37	50.00	ug/L	113%		70-140
Toluene-d8	49.18	50.00	ug/L	98%		70-140
Bromofluorobenzene	52.15	50.00	ug/L	104%		70-140

Type: Lab Control Sample Duplicate	Lab ID: QC911930	Batch: 262524
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911930 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	42.97	50.00	ug/L	86%		70-135	10	30
MTBE	55.17	50.00	ug/L	110%		70-130	0	30
Benzene	46.55	50.00	ug/L	93%		70-130	5	30
Trichloroethene	47.59	50.00	ug/L	95%		70-130	3	30
Toluene	44.87	50.00	ug/L	90%		70-130	3	30
Chlorobenzene	45.79	50.00	ug/L	92%		70-130	3	30
Ethylbenzene	46.19	50.00	ug/L	92%		70-130	4	30
m,p-Xylenes	94.45	100.0	ug/L	94%		70-130	5	30
o-Xylene	46.98	50.00	ug/L	94%		70-130	5	30
<b>Surrogates</b>								
Dibromofluoromethane	51.15	50.00	ug/L	102%		70-140		
1,2-Dichloroethane-d4	52.43	50.00	ug/L	105%		70-140		
Toluene-d8	49.08	50.00	ug/L	98%		70-140		
Bromofluorobenzene	52.42	50.00	ug/L	105%		70-140		

## Batch QC

Type: Lab Control Sample	Lab ID: QC911931	Batch: 262524
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911931 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	427.5	500.0	ug/L	86%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	51.18	50.00	ug/L	102%		70-140
1,2-Dichloroethane-d4	53.52	50.00	ug/L	107%		70-140
Toluene-d8	49.73	50.00	ug/L	99%		70-140
Bromofluorobenzene	49.74	50.00	ug/L	99%		70-140

Type: Lab Control Sample Duplicate	Lab ID: QC911932	Batch: 262524
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC911932 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	432.5	500.0	ug/L	87%		70-130	1	20
<b>Surrogates</b>								
Dibromofluoromethane	50.58	50.00	ug/L	101%		70-140		
1,2-Dichloroethane-d4	53.34	50.00	ug/L	107%		70-140		
Toluene-d8	49.56	50.00	ug/L	99%		70-140		
Bromofluorobenzene	50.47	50.00	ug/L	101%		70-140		

## Batch QC

Type: Blank Matrix: Water	Lab ID: QC912337 Method: EPA 8260B	Batch: 262669 Prep Method: EPA 5030B					
QC912337 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Freon 12	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Chloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Vinyl Chloride	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromomethane	ND		ug/L	1.0	0.7	03/05/21	03/05/21
Chloroethane	ND		ug/L	1.0	0.5	03/05/21	03/05/21
Trichlorofluoromethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Acetone	ND		ug/L	50	50	03/05/21	03/05/21
Freon 113	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,1-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Methylene Chloride	ND		ug/L	10	0.2	03/05/21	03/05/21
MTBE	ND		ug/L	0.5	0.2	03/05/21	03/05/21
trans-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,1-Dichloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
2-Butanone	ND		ug/L	5.0	1.0	03/05/21	03/05/21
cis-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
2,2-Dichloropropane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Chloroform	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromochloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,1,1-Trichloroethane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,1-Dichloropropene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Carbon Tetrachloride	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dichloroethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Benzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Trichloroethene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,2-Dichloropropane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
Bromodichloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Dibromomethane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
4-Methyl-2-Pentanone	ND		ug/L	5.0	0.5	03/05/21	03/05/21
cis-1,3-Dichloropropene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Toluene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
trans-1,3-Dichloropropene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,2-Trichloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,3-Dichloropropane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Tetrachloroethene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Dibromochloromethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,2-Dibromoethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Chlorobenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Ethylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
m,p-Xylenes	ND		ug/L	1.0	0.5	03/05/21	03/05/21
o-Xylene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Styrene	ND		ug/L	0.5	0.2	03/05/21	03/05/21

### Batch QC

QC912337 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Bromoform	ND		ug/L	1.0	0.2	03/05/21	03/05/21
Propylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Isopropylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2,3-Trichloropropane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromobenzene	ND		ug/L	1.0	0.5	03/05/21	03/05/21
1,3,5-Trimethylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
2-Chlorotoluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
4-Chlorotoluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
tert-Butylbenzene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,2,4-Trimethylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
sec-Butylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
para-Isopropyl Toluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,3-Dichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,4-Dichlorobenzene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
n-Butylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	0.1	03/05/21	03/05/21
1,2,4-Trichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Hexachlorobutadiene	ND		ug/L	2.0	0.5	03/05/21	03/05/21
Naphthalene	ND		ug/L	2.0	0.3	03/05/21	03/05/21
1,2,3-Trichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Isopropyl Ether (DIPE)	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	0.5	0.2	03/05/21	03/05/21
tert-Butyl Alcohol (TBA)	ND		ug/L	5.2	5.2	03/05/21	03/05/21
Methyl tert-Amyl Ether (TAME)	ND		ug/L	1.0	0.2	03/05/21	03/05/21
<b>Surrogates</b>		<b>Limits</b>					
Dibromofluoromethane	97%	%REC	70-140		03/05/21		03/05/21
1,2-Dichloroethane-d4	100%	%REC	70-140		03/05/21		03/05/21
Toluene-d8	102%	%REC	70-140		03/05/21		03/05/21
Bromofluorobenzene	100%	%REC	70-140		03/05/21		03/05/21

## Batch QC

Type: Lab Control Sample	Lab ID: QC912338	Batch: 262669
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC912338 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
1,1-Dichloroethene	57.86	50.00	ug/L	116%		70-135
MTBE	56.02	50.00	ug/L	112%		70-130
Benzene	60.83	50.00	ug/L	122%		70-130
Trichloroethene	57.54	50.00	ug/L	115%		70-130
Toluene	57.79	50.00	ug/L	116%		70-130
Chlorobenzene	56.05	50.00	ug/L	112%		70-130
Ethylbenzene	55.41	50.00	ug/L	111%		70-130
m,p-Xylenes	116.1	100.0	ug/L	116%		70-130
o-Xylene	52.96	50.00	ug/L	106%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	51.27	50.00	ug/L	103%		70-140
1,2-Dichloroethane-d4	50.87	50.00	ug/L	102%		70-140
Toluene-d8	50.10	50.00	ug/L	100%		70-140
Bromofluorobenzene	49.22	50.00	ug/L	98%		70-140

Type: Lab Control Sample Duplicate	Lab ID: QC912339	Batch: 262669
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC912339 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
1,1-Dichloroethene	53.06	50.00	ug/L	106%		70-135	9	30
MTBE	53.26	50.00	ug/L	107%		70-130	5	30
Benzene	57.04	50.00	ug/L	114%		70-130	6	30
Trichloroethene	55.48	50.00	ug/L	111%		70-130	4	30
Toluene	54.36	50.00	ug/L	109%		70-130	6	30
Chlorobenzene	52.47	50.00	ug/L	105%		70-130	7	30
Ethylbenzene	52.06	50.00	ug/L	104%		70-130	6	30
m,p-Xylenes	107.7	100.0	ug/L	108%		70-130	7	30
o-Xylene	49.77	50.00	ug/L	100%		70-130	6	30
<b>Surrogates</b>								
Dibromofluoromethane	49.77	50.00	ug/L	100%		70-140		
1,2-Dichloroethane-d4	48.75	50.00	ug/L	97%		70-140		
Toluene-d8	50.71	50.00	ug/L	101%		70-140		
Bromofluorobenzene	50.37	50.00	ug/L	101%		70-140		

## Batch QC

Type: Blank	Lab ID: QC912340	Batch: 262669					
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B					
<b>QC912340 Analyte</b>							
QC912340 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
TPH Gasoline	ND		ug/L	50	20	03/05/21	03/05/21
Freon 12	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Chloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Vinyl Chloride	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromomethane	ND		ug/L	1.0	0.7	03/05/21	03/05/21
Chloroethane	ND		ug/L	1.0	0.5	03/05/21	03/05/21
Trichlorofluoromethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Acetone	ND		ug/L	50	50	03/05/21	03/05/21
Freon 113	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,1-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Methylene Chloride	ND		ug/L	10	0.2	03/05/21	03/05/21
MTBE	ND		ug/L	0.5	0.2	03/05/21	03/05/21
trans-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,1-Dichloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
2-Butanone	ND		ug/L	5.0	1.0	03/05/21	03/05/21
cis-1,2-Dichloroethene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
2,2-Dichloropropane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Chloroform	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromoform	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Bromochloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,1,1-Trichloroethane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,1-Dichloropropene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Carbon Tetrachloride	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dichloroethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Benzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Trichloroethene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,2-Dichloropropane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
Bromodichloromethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Dibromomethane	ND		ug/L	0.5	0.4	03/05/21	03/05/21
4-Methyl-2-Pentanone	ND		ug/L	5.0	0.5	03/05/21	03/05/21
cis-1,3-Dichloropropene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Toluene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
trans-1,3-Dichloropropene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,2-Trichloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,3-Dichloropropane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Tetrachloroethene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Dibromochloromethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,2-Dibromoethane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Chlorobenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,1,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Ethylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
m,p-Xylenes	ND		ug/L	1.0	0.5	03/05/21	03/05/21
o-Xylene	ND		ug/L	0.5	0.3	03/05/21	03/05/21

### Batch QC

QC912340 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Styrene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromoform	ND		ug/L	1.0	0.2	03/05/21	03/05/21
Propylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Isopropylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
1,1,2,2-Tetrachloroethane	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2,3-Trichloropropane	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Bromobenzene	ND		ug/L	1.0	0.5	03/05/21	03/05/21
1,3,5-Trimethylbenzene	ND		ug/L	0.5	0.2	03/05/21	03/05/21
2-Chlorotoluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
4-Chlorotoluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
tert-Butylbenzene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
1,2,4-Trimethylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
sec-Butylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
para-Isopropyl Toluene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,3-Dichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,4-Dichlorobenzene	ND		ug/L	0.5	0.4	03/05/21	03/05/21
n-Butylbenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	0.1	03/05/21	03/05/21
1,2,4-Trichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Hexachlorobutadiene	ND		ug/L	2.0	0.5	03/05/21	03/05/21
Naphthalene	ND		ug/L	2.0	0.3	03/05/21	03/05/21
1,2,3-Trichlorobenzene	ND		ug/L	0.5	0.3	03/05/21	03/05/21
Isopropyl Ether (DIPE)	ND		ug/L	0.5	0.2	03/05/21	03/05/21
Ethyl tert-Butyl Ether (ETBE)	ND		ug/L	0.5	0.2	03/05/21	03/05/21
tert-Butyl Alcohol (TBA)	ND		ug/L	5.2	5.2	03/05/21	03/05/21
Methyl tert-Amyl Ether (TAME)	ND		ug/L	1.0	0.2	03/05/21	03/05/21
<b>Surrogates</b>					<b>Limits</b>		
Dibromofluoromethane	94%		%REC	70-140		03/05/21	03/05/21
1,2-Dichloroethane-d4	96%		%REC	70-140		03/05/21	03/05/21
Toluene-d8	104%		%REC	70-140		03/05/21	03/05/21
Bromofluorobenzene	99%		%REC	70-140		03/05/21	03/05/21

Type: Lab Control Sample	Lab ID: QC912341	Batch: 262669
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC912341 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
TPH Gasoline	441.6	500.0	ug/L	88%		70-130
<b>Surrogates</b>						
Dibromofluoromethane	48.12	50.00	ug/L	96%		70-140
1,2-Dichloroethane-d4	49.93	50.00	ug/L	100%		70-140
Toluene-d8	52.55	50.00	ug/L	105%		70-140
Bromofluorobenzene	50.16	50.00	ug/L	100%		70-140

## Batch QC

Type: Lab Control Sample Duplicate	Lab ID: QC912342	Batch: 262669
Matrix: Water	Method: EPA 8260B	Prep Method: EPA 5030B

QC912342 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
TPH Gasoline	433.2	500.0	ug/L	87%		70-130	2	20
<b>Surrogates</b>								
Dibromofluoromethane	47.51	50.00	ug/L	95%		70-140		
1,2-Dichloroethane-d4	49.31	50.00	ug/L	99%		70-140		
Toluene-d8	52.48	50.00	ug/L	105%		70-140		
Bromofluorobenzene	49.71	50.00	ug/L	99%		70-140		

J Estimated value

ND Not Detected

**APPENDIX E      WELL DEVELOPMENT LOGS**



**Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA**

Well ID:	MW-1	Start Surge Time:	1502						
Date	2/23/21	Stop Surge Time:	1517						
Field Personnel:	Alex Martinez	Purge Volume (gal):	~1.50						
Depth to Water (ft):	7.50	Bailey Purge (gal)	1						
Depth to Bottom (ft):	10.00	0-5 gallons pumped							
Well Diameter: (in):	2	Attempted to pump again, immediately went dry. water level @ dry is 9.27 ft. bgs							
Screen Interval (ft):	7	10 casing volumes not possible.							
Slot Size (in):	0.010	Recharge rate is ~ 1 ft every 15-20 min.							
Water Column (ft):	2.50								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.43								
Ten Casing Volumes (gal)	4.30								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (gpm)	Notes (color, odor, etc.)
1521	21.28	10.6	3.68	7.17	20	>1000	8.60	—	Bailey
1531	19.69	11.2	3.59	7.41	33	>1000	4.80	—	
1533		5 stopped	Purge						
1121							8.18		
1122	21.22	11.4	1.89	6.76	-74	>1000	—	0.05	Organic / trash odors
1130	20.85	10.8	1.93	6.95	-43	>1000			
		Pumped Dry					9.35		
1405							8.90		
1407	—	Pumped Dry							
+1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%				



**Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA**



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

Well ID:	MW-3	Start Surge Time:	0855						
Date	2/23/21	Stop Surge Time:	0910						
Field Personnel:	Alex Martinez	Purge Volume (gal):	8						
Depth to Water (ft):	6.57	Bailer purge (gal) ~ 3							
Depth to Bottom (ft):	10.03	ceased bailing to allow for mat recharge							
Well Diameter: (in):	2	6.97 ft. bailed after recharge							
Screen Interval (ft):	7	1.5 gallons pumped after recharge							
Slot Size (in):	0.010	2.5 gallons pumped.							
Water Column (ft):	3.46	2124							
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.59	1 gallon pumped before dry.							
Ten Casing Volumes (gal)	5.88								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (gpm)	Notes (color, odor, etc.)
0914	19.42	1.79	4.02	7.70	72	>1000	9.05	-	From bailer, very turbid
0920	19.07	1.78	3.90	7.61	66	>1000	9.50	-	" " . Slow recharge
0931	19.41	1.77	3.35	7.64	56	>1000	9.63	-	
0942	19.23	1.79	3.39	7.64	59	>1000	9.57	-	
0943		S + o p p e d	P u r g e .						
1558							6.97	0.70	
1603	20.56	1.98	4.05	7.67	71	893	-	0.50	
1611	21.42	1.86	3.89	7.69	57	>1000	-	" "	
1714		S + o p p e d	P u m p i n g				9.35		
0742							6.93		
0747	17.04	1.77	6.00	7.44	74	489	-	0.41	
0752	17.16	1.75	5.23	7.30	78	560	-	0.15	Slightly cloudy
0756 0757	15.41	1.79	5.25	7.51	92	696	-	"	
0810	16.35	1.98	3.49	7.41	88	828	-	"	
0818	17.02	2.00	3.88	7.35	84	483	-	"	
0819		P u m p s t a r t e d					9.50		
1152							6.90		
1155	20.54	2.18	1.91	7.62	64	381	-	0.20	
1158	20.30	1.92	3.58	7.47	67	630	-	"	Turbidity increased
1201	19.98	2.16	3.50	7.49	63	>1000			in WL
	P u m p e d	Dry							
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

Well ID:	MW-4	Start Surge Time:	1023						
Date	2/23/21	Stop Surge Time:	1038						
Field Personnel:	Alex Martinez	Purge Volume (gal):	8						
Depth to Water (ft):	7.32	Bailer purge (gal):	4						
Depth to Bottom (ft):	11.95	2/24 - 2 gallons pumped before dry.							
Well Diameter: (in):	2	- 2 gallons pumped after recharge							
Screen Interval (ft):	9	Recharge ~ about 1 inch / 1.5 minutes							
Slot Size (in):	0.010								
Water Column (ft):	4.63								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.79								
Ten Casing Volumes (gal)	7.90								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (lpm)	Notes (color, odor, etc.)
1040	20.70	4.88	4.56	7.74	76	>1000	-	-	Via purge; brown
1046	20.40	4.95	2.89	7.77	40	>1000	11.03	-	
1054	19.97	5.30	3.08	7.81	-19	>1000	11.35	-	
1059	Stopped Purge						11.37	-	Trashy/synthetic odors present.
0823							7.90	-0.30	
0826	18.41	5.83	2.49	7.43	-8	379	-	..	Slightly turbid, yellowish water, faint od.
0835	19.07	5.58	3.31	7.50	13	667	-	..	"
0841	19.24	5.67	3.56	7.65	-19	527	-	..	"
0845	Pump stopped						10.95	-	
1247							8.73	-	
1248									
1251	20.43	5.78	3.36	7.53	-36	724	-	0.15	↓
1254	19.98	5.86	3.96	7.52	-6	>1000	-	..	..
1257	20.50	5.72	2.79	7.45	-11	977	-	..	Increased turbidity as WL drops
1257	Pumped dry								
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

Well ID:	Mw-5	Start Surge Time:	0800						
Date	2/23/21	Stop Surge Time:	0815						
Field Personnel:	Alex Martinez	Purge Volume (gal):	11.50						
Depth to Water (ft):	4.10	- Parged Dry @ 0847-							
Depth to Bottom (ft):	9.77	- Approx. 3 gal initially purged, 2 gallons purged for official development.							
Well Diameter: (in):	2	- 2.5 gallons pumped after first recharge.							
Screen Interval (ft):	7	- 3 gallons before purge dry.							
Slot Size (in):	0.010	2124							
Water Column (ft):	5.67	1 gallon pumped after recharge.							
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.96								
Ten Casing Volumes (gal)	9.64								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (lpm)	Notes (color, odor, etc.)
0830	17.62	11.0	3.63	7.79	123	>1000	-	0.16	Brown
0839	17.91	11.3	2.77	7.83	67	>1000	-	"	
0845	18.84	11.6	2.49	7.74	41	>1000	-	0.50	
0847	Purged Dry								
1537									Brownish hue
1541	20.57	10.6	4.99	7.86	11	336	-	0.60	
1549	21.52	10.4	4.79	7.85	54	608	-	0.180	
1553	Stop pump		pumping				4.10	" "	
0715	16.62	11.0	5.25	7.64	23	400	5.07	0.30	Yellow/brown hue
0720	18.29	11.2	4.74	7.48	66	267	-	0.15	"
0727	17.06	11.2	3.79	7.56	70	726	-	0.20	"
0737	17.19	11.5	2.62	7.36	43	808	9.53		
0738	Stop pump		after 3 gal						
1135							7.04		
1137	21.68	10.7	2.88	7.84	58	350	-	0.20	
1143	20.90	10.6	3.17	7.83	47	531	-		Increased turbidity
1147	20.40	11.4	3.	7.77	34	800			Water drops.
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

Well ID:	MW-6	Start Surge Time:	1105						
Date	2/23/21	Stop Surge Time:	1120						
Field Personnel:	Alex Martinez	Purge Volume (gal):	9						
Depth to Water (ft):	7.35	Bailey Purge (gal):	4						
Depth to Bottom (ft):	11.87	2/24 3 gallons pumped after dry.							
Well Diameter: (in):	2	2 gallons pumped after recharge.							
Screen Interval (ft):	9								
Slot Size (in):	0.010								
Water Column (ft):	4.52								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.77								
Ten Casing Volumes (gal)	7.70								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (gpm)	Notes (color, odor, etc.)
1120	20.24	27.8	3.38	7.07	90	>1000	-	-	Bailey purge; brown
1125	19.57	28.2	2.78	6.88	81	>1000	10.75	-	
1130	19.28	29.9	3.04	6.84	120	>1000	11.20	-	
1140	19.30	31.8	3.98	6.94	112	>1000	11.45		
							11.50		
0849							7.45		
0855	19.05	32.1	3.73	6.77	93	264	-	0.30	
0902	18.94	32.5	3.28	6.71	111	517	-	~0.15	
0907	19.02	34.4	3.25	6.60	111	343	-	"	
0915	20.03	34.1	1.78	6.53	111	390	-	"	
0917									
1320							7.96		
1325	19.72	35.1	3.45	6.52	31	207	-	0.25	
1329	20.40	34.5	3.21	6.56	60	480	-	"	
1333	20.65	35.2	3.05	6.50	86	374	-	"	
1335	20.24	35.6	3.03	6.50	86	206	-	"	
1337	20.62	35.4	2.56	6.48	86	213	-	"	
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



**Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA**

Well ID:	MW-7	Start Surge Time:	1141						
Date	2/23/21	Stop Surge Time:	1158						
Field Personnel:	Alex Martinez	Purge Volume (gal):	17 total						
Bailer purge (gal) 4.0									
Depth to Water (ft):	7.77								
Depth to Bottom (ft):	12.00								
Well Diameter: (in):	2								
Screen Interval (ft):	9								
Slot Size (in):	0.010								
Water Column (ft):	4.23								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.72								
Ten Casing Volumes (gal)	7.20								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (bpm)	Notes (color, odor, etc.)
1154	20.13	50.1	2.97	6.52	-47	>1000	-	-	Bailer purge
1158	19.97	49.9	2.69	6.34	-49	>1000	9.50	-	
1242	23.89	48.7	1.74	6.26	-56	>1000	-	0.266	
1245	22.41	49.0	1.72	6.26	-52	>1000	-	0.180	0.780
1248	21.81	49.1	2.02	6.22	-48	775	-	0.185	
1251	21.73	49.0	1.71	6.25	-52	501	-	"	
1256	21.92	48.9	2.29	6.15	-41	287	-	"	
1303	21.52	48.8	1.74	6.14	-43	623	-	"	
1310	21.58	48.5	1.42	6.22	-46	142	-	"	
1314	21.52	48.6	1.49	6.24	-51	856	-	"	
1320	22.12	47.4	1.34	6.15	-46	31.3	-	"	
1322	22.04	48.7	1.32	6.17	-48.6	22.0	-	"	
1324	21.97	48.6	1.22	6.19	-48.2	30.2	-	"	
1327	21.57	48.6	1.27	6.16	-48.6	47.2	-	"	Clear, slightly turbid.
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

Well ID:	MW-8		Start Surge Time:	1417					
Date	2/23/21		Stop Surge Time:	1429					
Field Personnel:	Alex Martinez		Purge Volume (gal):	14					
Depth to Water (ft):	4.02		Bailey Purge (gal):	5					
Depth to Bottom (ft):	11.89		1.5 gallons purged via pump before dry.						
Well Diameter: (in):	2		2/24						
Screen Interval (ft):	9		7.5 gallons pumped.						
Slot Size (in):	0.010		Turbidity > 300 NTUs, but much clearer after 10 casing volumes purged.						
Water Column (ft):	7.87								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	1.34								
Ten Casing Volumes (gal)	11.34								
Time (min)	Temp (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (lpm)	Notes (color, odor, etc.)
1432	18.36	2.02	6.65	7.42	55	>1000	7.10	—	
1436	18.37	2.15	5.76	7.35	55	>1000	10.10	0.48	
1444									
1448	18.81	2.94	4.28	7.41	72	>1000	—	“	
1454	s + c p p e d	p u m p		6.5 gallons total					
0924						3.73			
0930	18.18	2.47	3.71	7.24	116	595	—	~0.40	Slightly cloudy / brown
0938	18.23	2.13	3.99	7.19	111	492	—	~0.15	“
0944	17.79	2.17	4.35	7.22	133	586	—	“	“
0951	18.32	2.53	4.56	7.19	135	1000	—	4	Increase in turbidity
0959	18.75	3.23	3.65	7.16	129	392	—	“	
1007	18.99	3.24	3.55	7.09	140	464	—	“	
1013	19.20	4.05	3.23	7.07	143	476	—	“	Slightly cloudy
1019	19.26	4.12	3.79	7.12	149	949	—	“	
1024	19.37	4.51	3.28	7.09	153	321	—	“	
1027	19.05	4.38	3.09	7.07	157	383	—	—	
1028		P u m p e d		dry					
	+1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			



Well Development Form  
Caltrain HPK  
401 Concar Drive, San Mateo, CA

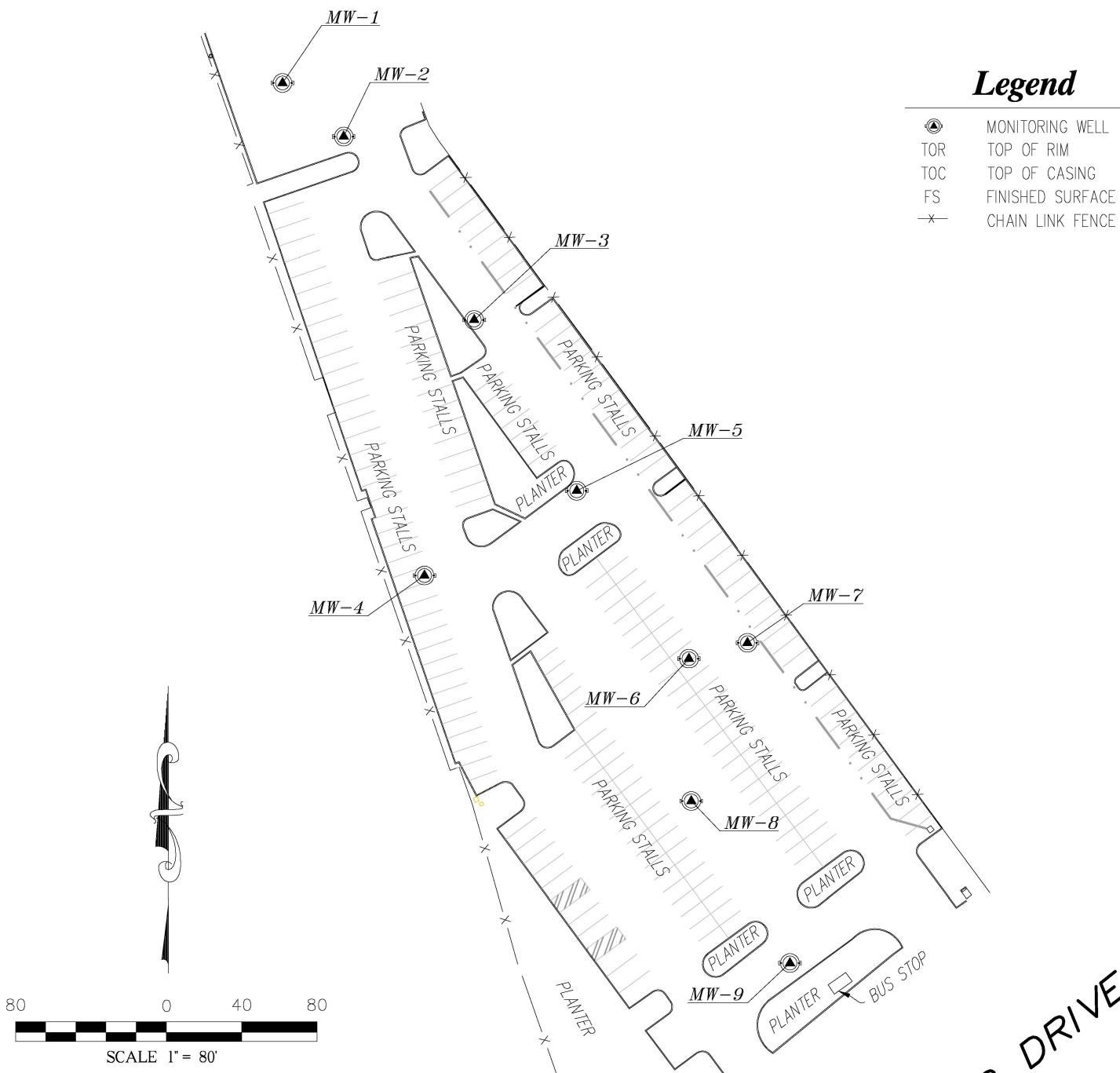
Well ID:	MW-9	Start Surge Time:	1340						
Date	2/23/21	Stop Surge Time:	1355						
Field Personnel:	Alex Martinez	Purge Volume (gal):	8						
		Total							
Depth to Water (ft):	6.19	Bailer Purge:	3.5 gal						
Depth to Bottom (ft):	9.84								
Well Diameter: (in):	2	2/24 Pumped	3 gallons						
Screen Interval (ft):	7								
Slot Size (in):	0.016		1.5 gallons pumped after recharge.						
Water Column (ft):	3.65								
Well Volume (gal/ft)	0.17								
One Casing Volume (gal)	0.62								
Ten Casing Volumes (gal)	6.20								
Time	Temp	Conductivity	Dissolved Oxygen (mg/l)	pH	ORP	Turbidity (NTUs)	Depth to Water (ft)	Pump Rate (gpm)	Notes (color, odor, etc.)
1356	17.72	6.46	5.76	7.35	77	>1000	8.48	-	Bailing
1402	18.97	6.12	3.05	7.07	-37	>1000	9.17	-	Light shear present.
1407	18.52	5.89	2.95	6.93	-41	>1000	9.48	-	
1413	18.93	5.66	3.26	6.93	-40	>1000	9.53	-	
1415	5 t c p p = 2	P u r g e							
1031							6.67		
1035	18.84	5.06	2.94	6.60	-15	>1000	-	0.25	+ petroleum odor, cloudy
1044	18.85	5.28	2.51	6.71	-41	689	-	"	
1047	18.91	5.21	2.00	6.65	-46	>1000	-	"	
1052	18.60	9.98	2.02	6.56	-34	585	-	0.15	
1053	P u m p e d	O r y							
1306							7.10	0.25	
1307	20.51	4.62	3.08	6.61	-26	>1000	-	"	
1312	19.61	4.84	3.12	6.66	-36	>1000	-	"	
1315	19.90	9.98	8.80	6.57	-42	>1000	-	"	
	+/- 1 °C	+/- 5%	<0.3 mg/L or +/- 10%	+/- 0.1 unit	+/- 10mV	> 20 NTUs or +/- 10%			

## APPENDIX F      SURVEY DATA

# SITE PLAN

## MONITORING WELL LOCATIONS

### HAYWARD PARK CALTRAIN STATION 401 CONCAR DRIVE, SAN MATEO CA


**DATE OF SURVEY**

FEBRUARY 24, 2021

**BENCH MARK**

THE ELEVATIONS SHOWN HEREON ARE BASED UPON STATIC GPS OBSERVATION, HOLDING THE CSRC DATA POINT "WINT"; ELEVATION = 13.89 FEET (NAVD 88)

**COORDINATES**

THE COORDINATES SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM (CCS 83), ZONE 3, 1983 DATUM, DEFINED BY SECTIONS 8801 TO 8819 OF THE CALIFORNIA PUBLIC RESOURCES CODE, BASED UPON STATIC GPS OBSERVATION, HOLDING THE CSRC DATA POINT "WINT"

**PREPARED FOR**  
**EMR**

1277 TREAT BLVD., SUITE 500  
WALNUT CREEK, CA 94597  
PHONE: (925) 482-3318 OFFICE  
(925) 946-9968 FAX

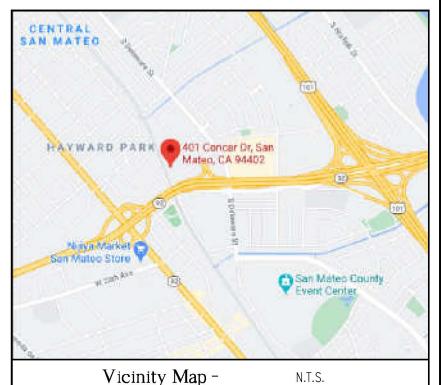
NO.	DATE	REVISIONS	BY
			CAL VADA
			SURVEYING, INC.
			411 Jenks Cir., Suite 205, Corona, CA 92880
			Phone: 951-280-9960 Fax: 951-280-9960
			Toll Free: 800-CALVADA www.calvada.com
			JOB NO. 21141
			SUBMITTAL DATE: 02/29/2021_BO
			SHEET 1 OF 1

SURVEYED FEBRUARY 24, 2021

MONITORING WELLS								
WELL	NORTHING (FEET)	EASTING (FEET)	LATITUDE (DD)	LONGITUDE (DD)	TOR (ELEVATION)	FS (ELEVATION)	TOC (ELEVATION)	RISER HT
MW-1	2029334.49	6037081.90	37.5542047	-122.3097716	11.54	11.49	11.32	-0.17
MW-2	2029306.03	6037114.41	37.5541283	-122.3096576	11.39	11.38	11.15	-0.23
MW-3	2029208.85	6037183.66	37.5538651	-122.3094123	11.14	11.13	10.76	-0.37
MW-4	2029073.19	6037157.26	37.5534912	-122.3094943	12.50	12.46	12.23	-0.23
MW-5	2029118.18	6037238.11	37.5536190	-122.3092184	10.89	10.89	10.53	-0.36
MW-6	2029029.07	6037297.66	37.5533775	-122.3090071	10.46	10.43	10.16	-0.27
MW-7	2029037.47	6037328.74	37.5534022	-122.3089005	10.09	10.08	9.69	-0.39
MW-8	2028953.49	6037298.90	37.5531700	-122.3089978	10.89	10.88	10.38	-0.50
MW-9	2028867.63	6037351.29	37.5529370	-122.3088114	10.64	10.63	10.44	-0.19

RISER HT = RISER HEIGHT  
RISER HEIGHT DEFINITION: THE MEASURED DISTANCE FROM GROUND SURFACE TO TOP OF WELL CASING.

DD: DECIMAL DEGREES



**APPENDIX G      WELL SAMPLING DATA SHEETS**

# ERM

## Daily Field Report



Environmental  
Resources  
Management  
1277 Treat Blvd.  
Suite 500  
Walnut Creek, CA 94597  
(925) 946-0455

Project Name: Caltrain Hayward Park  
 Site Address: 401 Concar Dr.  
 City, State: San Mateo  
 Field Person: D. Messmann  
 Activities: Groundwater sampling

Date: 2.26.21  
 Project #: 0520818  
 PM/PIC: Clint Harms

Weather: clear, sunny  
 Temp: 45°F Baro: 10 Rainfall: 0

### Site Visitors

Name	Onsite	Offsite	Purpose
Amanda	ERM		

Time	Summarize Field Activities
0625	Arrive onsite
	Wait for ice & DJ water
0650	Safety Tailgate - vehicle traffic, public interaction / RR preservative in bottleware, hand injuries
	Site walk to open & gauge wells
0900	Troubleshoot turbidity at Alex - two separate pieces of equipment but only 1 piping pump. Sample MW-09. Problem alleviated. changed display settings on Horiba screen.
1000	Set up @ MW-08. Sample time 1045.
1100	Set up @ MW-07. Sample time 1140
1215	Offsite to use restroom
1230	Setup @ MW-05. Sample time 1300
1321	Setup @ MW-07. Sample at 1345
1405	Pump purge water
1410	Set up @ MW-04. Sample time 1435
1500	Offsite to use restroom & get fresh ice
1532	Set up @ MW-03. Sample time 1600
1620	Set up @ MW-02. Sample time 1650
1715	Set up @ MW-01. Sample time 1735
	- Unable to stabilize turbidity readings, spoke w/ Alex to get approval to gather sample. Water table low & recharge slow
1810	Offsite to Entropy, Berkeley.

1925 Samples dropped in after hours box. Lab contact notified.

ERM	Applicability:		Form	Document Number:	Version:
	North America			NAM-1501-FM1	4
Title:	Site Safety Meeting Form			Last Revision Date:	4/9/18

Project Name/ Location:	CalTrain Hayward Park		Phone:		
Project Number:	0520918.04	Date:	2.26.21	Time:	0625
Meeting Leader:	A. Messmann				
Today's Work Tasks(s)	Conducted By:				
GWS	A. Messmann				

1. Review relevant sections of the Health and Safety Plan (HASP), Job Hazard Analyses (JHAs) for planned tasks, and any other applicable procedures. Discuss potential hazards of planned work and control measures to be used to eliminate or reduce risks (including PPE). Pay specific attention to overlapping/simultaneous operations.
2. Review emergency response procedures including emergency phone numbers, location of emergency equipment (fire extinguishers, first aid kit, AED, eyewashes, safety showers, etc.), exit routes, muster points, methods of conducting head count at muster point, and identity of first responders trained in first aid/CPR.
3. Does everyone fully understand the task(s)? Are there any changes that need to be assessed? Use SNAP cards to assess risks associated with changed or unplanned tasks.
4. Remind the team that everyone on the job site is empowered to stop work if something is unsafe or if there are any questions or concerns regarding safety.

What tools and equipment are required for today's tasks? Have they been inspected and are they in good condition?

YSI, water level meter, tubing, peri pump, socket wrench, boltware

What training/qualifications/experience is necessary for today's assigned tasks?

F50 / Hazwoper / 1st Aid

List any new or Short Service personnel on site today:

MA

Discuss any recent incidents, near misses, field inspection findings, or other safety observations (or observations from similar tasks performed at other sites):

MA

ERM	Applicability:	<b>Form</b>	Document Number:	Version:
	North America		NAM-1501-FM1	4
Title:	<b>Site Safety Meeting Form</b>		Last Revision Date:	4/9/18

Additional Safety Meeting Topics (check those discussed)				
<input checked="" type="checkbox"/>	What client safety rules or procedures are applicable to today's activities?			
<input checked="" type="checkbox"/>	How will you communicate with others on site? How will you communicate with the PIC and PM? <i>Alex / clint</i>			
<input checked="" type="checkbox"/>	What are the potential impacts of planned activities to visitors, nearby workers, or the public?			
<input checked="" type="checkbox"/>	Who do you contact if you have questions or before deviating from written procedures?			
<input checked="" type="checkbox"/>	What happens and who do you contact if there is an injury or other emergency? If working at an active facility, how will you be alerted of an emergency and what will you do?			
<input checked="" type="checkbox"/>	Where is nearest medical facility and how would we get an injured employee there? If medical help is more than five minutes away, is at least one person on site trained in first aid/CPR? How do you contact them?			
<input checked="" type="checkbox"/>	Do you have any medical condition or allergy that the project team needs to be aware of? Write this down and keep it in your pocket for reference in the event of an emergency.			
<input checked="" type="checkbox"/>	Are any work permits required?			
<input checked="" type="checkbox"/>	Has anything unexpected or out-of-the-ordinary occurred on this job recently to share?			
<input checked="" type="checkbox"/>	Is there anything different about today's operations as compared to yesterday or previous days?			
<input checked="" type="checkbox"/>	What is the worst that could happen if something goes wrong today? <i>Struck by</i>			
<input checked="" type="checkbox"/>	What activities occurring today could result in hand injuries? Is everyone aware that the use of fixed open-blade knives is not permitted?			
<input checked="" type="checkbox"/>	What natural hazards are present (including plants, animals, and insects)?			
<input checked="" type="checkbox"/>	What areas of the site have slip/trip/fall hazards? Can these be avoided? Are everyone's work boots in good shape?			
<input checked="" type="checkbox"/>	Is everyone fit for duty today (i.e., in a physical, mental, and emotional state to perform your work assignment in a manner which <b>does NOT</b> threaten the safety or health of yourself, your co-workers, property, or the public at large)?			
<input type="checkbox"/>	Other items:			
Meeting Attendees (including employees, contractors, and visitors)				
Name	Company	Sign-In*	Sign-Out**	
<i>Amanda Messmann</i>	<i>ERM</i>	<i>ADM</i>	<i>JW</i>	

\* Signature/initials in this space verify that the employee is fit for performing work.

\*\* Signature/initials in this space verify that the employee was uninjured during the workday.



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-01		Start Purge Time:	1719				
Sampling Date:	2.26.21		Stop Purge Time:	1732				
Field Person:	A. Messmann		Purge Rate (lpm):	0.19 LPM				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.5 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1735				
Well Material:	PVC		End Sampling Time:	1749				
Depth to Water (ft):	7.67		Sampling Rate (lpm):	0.19 LPM				
Depth to Bottom (ft) <sup>5</sup> :	10.02		Sample Description:	low flow barged @ D710 Depth: 7.85				
Well Volume (gal):	—							
Well Condition:	Good							
Pump Type:	Pari		Sample Filtered?	Field filter and preserve from (6020) only <input checked="" type="checkbox"/> Am				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Top Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1722	17.59	0.002	6.25	7.05	240	8.60	394	clear / yellow;
1725	17.50	15.4	0.0	6.73	6	8.51	0.0	tubing lowered to
1728	17.75	15.6	0.0	6.73	-15	8.45	318	reach water-table;
1731	19.80	15.4	0.0	6.84	-9	8.29	68.2	purge rate increased due to slow recharge/ lack of available water.
								Tubing currently @ apx 8.5' and TD is 10'.
								Unable to stabilize turbidity. sample taken, no odor or sheen.
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

(1) - Field parameter measurements to be recorded every 3 to 5 minutes.

(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purgung rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample @ 1735



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-02		Start Purge Time:	1625				
Sampling Date:	2.26.21		Stop Purge Time:	1648				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	SLC COC		Purge Volume (gal):	~ 0.6 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1650				
Well Material:	PVC		End Sampling Time:	1705				
Depth to Water (ft):	6.55		Sampling Rate (lpm):	0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.90		Sample Description:	Low flow Ganged at 0715 Depth 6.80				
Well Volume (gal):								
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve Iron (6020) only				
Tubing Material:	44" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.5 <sup>1</sup> (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1629	20.67	2.59	0.0	7.29	238	6.55	3.3	clear / yellow; pump speed reduced to
1632	20.49	3.17	3.51	7.36	243	6.78	3.0	lowest setting, NO odor or sheen observed
1635	20.35	3.21	2.86	7.40	242	6.88	3.3	
1638	20.11	3.25	2.37	7.44	242	7.10	3.8	
1641	19.65	2.97	0.89	7.42	242	7.14	5.0	
1644	19.04	3.23	0.30	7.33	243	7.14	4.8	
1647	18.73	3.25	0.00	7.30	243	7.14	4.7	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%

- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1650



**LOW-FLOW GROUNDWATER SAMPLING FORM**  
**Caltrain Hayward Park**  
**401 Concar Dr**  
**San Mateo, CA**

Well ID:	MW-03		Start Purge Time:	1538				
Sampling Date:	2.26.21		Stop Purge Time:	1557				
Field Person:	A.Messmann		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.75 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1600				
Well Material:	PVC		End Sampling Time:	1612				
Depth to Water (ft):	6.81		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.98		Sample Description:	Low flow Gauged at 0718 Depth: 7.13				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Plastic		Sample Filtered?	Field filter and preserve iron (6020) only (PM)				
Tubing Material:	'4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1539	17.81	1.51	0.08	7.89	203	6.31	7.0	clear/yellow; pump
1542	18.04	1.84	6.95	7.48	214	6.99	5.2	lowered to slowest
1545	17.99	1.79	6.20	7.48	214	7.14	5.0	speed. no odor or
1548	18.01	1.79	5.31	7.44	215	7.15	5.3	shallow observed.
1551	18.09	1.80	6.17	7.45	214	7.15	5.7	yellow hue
1553	18.21	1.82	6.43	7.46	214	7.15	5.5	
1556	18.27	1.83	6.32	7.45	214	7.14	5.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.33 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1600



### LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-03		Start Purge Time:	1538				
Sampling Date:	2.26.21		Stop Purge Time:	1557				
Field Person:	A.MESSMANN		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	Sel COC		Purge Volume (gal):	$\sim 0.75$ gal				
Well Diameter (in):	2"		Begin Sampling Time:	1600				
Well Material:	PVC		End Sampling Time:	1612				
Depth to Water (ft):	6.81		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	9.98		Sample Description:	Low flow Ganged at 0718 Depth: 7', 13'				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Plastic		Sample Filtered?	Field filter and preserve iron (6020) only (Plastic)				
Tubing Material:	'4" LDPE		If Yes, Filter Type:	0.45 µm				
Imp Intake Depth (ft):	6.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1539	17.81	1.51	0.08	7.89	203	6.81	7.0	clear/yellow j/pump
1542	18.04	1.84	4.95	7.48	214	6.99	5.2	lowered to slower
1545	17.99	1.79	6.20	7.43	214	7.14	5.0	speed. no odor or
1548	18.01	1.79	5.31	7.44	215	7.15	5.3	sheen observed.
1551	18.09	1.80	6.17	7.45	214	7.15	5.3	yellow hue
1553	18.21	1.82	6.43	7.46	214	7.15	5.5	
1556	18.27	1.83	6.32	7.45	214	7.14	5.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1600



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-04		Start Purge Time:	1415				
Sampling Date:	02.26.21		Stop Purge Time:	1432				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~ 0.6 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1435				
Well Material:	PVC		End Sampling Time:	1450				
Depth to Water (ft):	7.76		Sampling Rate (lpm):	0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	11.93		Sample Description:	Low-flow Gauged at 0721 Depth 7.71				
Well Volume (gal):	✓							
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	7.5' (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1416	18.01	5.30	1.67	8.03	18	7.80	8.9	clear; peri pump at lowest speed setting;
1419	18.46	5.34	0.86	7.97	104	7.81	20.7	
1422	18.38	5.37	7.10	7.93	134	7.96	16.4	yellow hue; no
1425	18.28	5.40	6.37	7.89	151	8.14	13.6	odor or sheen
1428	18.11	5.44	5.92	7.85	158	8.19	8.1	observed
1431	17.82	5.49	5.97	7.85	156	8.25	0.8	✓
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1435



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-05		Start Purge Time:	1240				
Sampling Date:	A-Messmann		Stop Purge Time:	1259				
Field Person:	226-21		Purge Rate (lpm):	0.18 LPM				
Laboratory Analyses:	SPL COC		Purge Volume (gal):	~ 0.75 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1300				
Well Material:	PVC		End Sampling Time:	1313				
Depth to Water (ft):	3.80		Sampling Rate (lpm):	<del>~0.18</del> 0.18 LPM				
Depth to Bottom (ft) <sup>5</sup> :			Sample Description:	Low-flow Gauged at 0725 Depth 3'.85				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Plastic pump		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6'		(middle of well screen)					
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1244	23.17	10.9	0.0	7.79	95	3.88	42.5	clear; pump at lowest speed setting
1247	22.85	12.3	6.11	7.79	47	4.07	41.8	yellow hue; no odor or sheen
1250	22.48	12.5	0.42	7.80	10	4.20	41.8	odor or sheen
1253	22.03	12.5	0.13	7.82	-12	4.38	41.0	
1255	21.88	12.4	0.0	7.82	-20	4.59	40.7	
1258	21.64	12.7	0.0	7.82	-25	4.67	41.7	↓
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1300



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-06		Start Purge Time:	1117				
Sampling Date:	2.26.21		Stop Purge Time:	1135				
Field Person:	A. Messmann		Purge Rate (lpm):	0.18 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.75 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	1140				
Well Material:	PVC		End Sampling Time:	1208				
Depth to Water (ft):	7.44		Sampling Rate (lpm):	0.18 lpm				
Depth to Bottom (ft) <sup>5</sup> :	11.90		Sample Description:	Low-flow Gauged at 0734 Depth 07.90				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Drip pump		Sample Filtered?	Field filter and preserve iron (6020) only (AM)				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	7.5'		(middle of well screen)					
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1119	15.50	23.7	0.0	7.05	188	7.74	11.4	Clear; had to increase pump speed due to unit turning off.
1122	16.02	37.6	5.50	7.11	183	7.91	8.6	
1125	16.53	37.6	4.44	7.08	188	8.25	8.6	
1128	16.96	38.6	3.54	6.96	191	8.29	8.2	Pump at lowest speed, unable to reduce drawdown. No odor or shear observed. Yellow hue also observed
1131	17.39	37.9	3.34	6.79	194	8.35	8.9	
1134	17.65	38.3	3.0	6.99	195	8.52	9.4	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

## Notes:

(1) - Field parameter measurements to be recorded every 3 to 5 minutes.

(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1140



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-07		Start Purge Time:	1327				
Sampling Date:	2.26.21		Stop Purge Time:	1344				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	See COC		Purge Volume (gal):	~0.5 gal				
Well Diameter (in):	2"		Begin Sampling Time:	1345				
Well Material:	PVC		End Sampling Time:	1358				
Depth to Water (ft):	7.79		Sampling Rate (lpm):	<del>0.54</del> 0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	2.03		Sample Description:	Low-flow Ganged at 0728 Depth 7'54				
Well Volume (gal):	1							
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45-um				
Imp Intake Depth (ft):	7.5" (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1330	19.59	43.7	0.75	6.25	71	7.82	15.8	clear/yellow;
1333	19.56	57.4	0.41	6.07	52	7.94	16.7	no odor or sheen
1336	19.53	58.0	0.19	6.19	46	7.96	16.7	observed
1339	19.43	58.4	0.09	6.22	45	7.96	16.6	
1341	19.38	58.4	0.03	6.23	44	7.98	16.0	
1344	19.36	58.3	0.01	6.23	45	8.09	15.4	↓
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample time 1345



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-09		Start Purge Time:	1018				
Sampling Date:	2.26.21		Stop Purge Time:	1042				
Field Person:	A. Messmann		Purge Rate (lpm):	0.14 lpm				
Laboratory Analyses:	SLL COC		Purge Volume (gal):	$\sim 0.5\text{ gal}$				
Well Diameter (in):	2 <sup>1</sup>		Begin Sampling Time:	1045				
Well Material:	81C		End Sampling Time:	1058				
Depth to Water (ft):	4.08		Sampling Rate (lpm):	0.14 lpm				
Depth to Bottom (ft) <sup>5</sup> :	11.94		Sample Description:	low-flow Gauged at 0742 Depth 4'.08				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Pluri pump		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/> (pm)				
Tubing Material:	1/4" LPPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	7.5 <sup>1</sup> (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
1022	14.78	2.22	0.0	7.11	111	4.14	4.6	Clear; pump at lowest speed;
1025	14.84	2.53	8.91	7.17	85	4.35	6.6	no odor or shear observed. yellow hue
1028	14.93	2.54	5.16	7.18	71	4.49	10.4	
1031	15.00	2.53	3.18	7.18	68	4.62	10.6	
1034	15.00	2.54	0.0	7.20	56	4.80	13.1	
1037	15.03	2.55	0.0	7.20	49	4.94	14.5	
1041	15.04	2.56	0.0	7.20	41	5.10	14.7	
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

- (1) - Field parameter measurements to be recorded every 3 to 5 minutes.
- (2) - Stabilization criteria based on three most recent consecutive measurements.
- (3) - Less than 10 NTUs OR +/- 10%
- (4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- (5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample Time 1045



## LOW-FLOW GROUNDWATER SAMPLING FORM

Caltrain Hayward Park  
401 Concar Dr  
San Mateo, CA

Well ID:	MW-09		Start Purge Time:	0845				
Sampling Date:	2-25-21		Stop Purge Time:	0920				
Field Person:	A. Messmann		Purge Rate (lpm):	140 ml/min / 0.14 L/min				
Laboratory Analyses:	See COC		Purge Volume (gal):	0.5 gal				
Well Diameter (in):	2 "		Begin Sampling Time:	0925				
Well Material:	PVC		End Sampling Time:	0955				
Depth to Water (ft):	6.70		Sampling Rate (lpm):	same as above				
Depth to Bottom (ft) <sup>5</sup> :	9.94		Sample Description:	low flow Gauged at 0737 Depth 06.72				
Well Volume (gal):	/							
Well Condition:	Good							
Pump Type:	Peri		Sample Filtered?	Field filter and preserve iron (6020) only <input checked="" type="checkbox"/>				
Tubing Material:	1/4" LDPE		If Yes, Filter Type:	0.45 um				
Imp Intake Depth (ft):	6.51 (middle of well screen)							
Time <sup>1</sup> (min)	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)	Depth to Water (ft)	Turbidity (NTUs)	Notes (fluorescence, color, odor, etc.)
0848	11.99	6.15	0.0	6.79	66	6.70		clear; Pump at lowest setting; Diesel odor observed; no sheen in water.
0851	12.61	6.14	0.0	6.54	55	6.95		
0854	12.73	6.13	0.0	6.52	53	6.98		
0905	14.04	6.5.70	0.0	6.48	61	7.00		
0908	13.93	5.84	0.0	6.47	55	7.02		
0911	14.29	5.79	0.0	6.48	39	7.06		
0914	14.21	5.78	0.0	6.51	39	7.08		Turbidity measured on separate unit. Reading is at time of sampling.
0917	13.99	5.47	0.0	6.59	37	7.10	360	Sampling. ↳ Issue resolved. will be able to gather turbidity on future well locations
Stabilization Criteria <sup>2</sup>	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10 mV	(see note below) <sup>4</sup>	(see note below) <sup>3</sup>	

**Notes:**

(1) - Field parameter measurements to be recorded every 3 to 5 minutes.

(2) - Stabilization criteria based on three most recent consecutive measurements.

(3) - Less than 10 NTUs OR +/- 10%

(4) - Total drawdown in well target less than 0.1 m (0.33 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

(5) - Do not measure depth to bottom of well until after purging to reduce re-suspending fines that may be resting on the well bottom.

Sample Time 0925

## APPENDIX H      DATA QUALITY REVIEW

**Memo**

<b>To</b>	Alex Martinez
<b>From</b>	Sandra Mulhearn
<b>Date</b>	29 March 2021
<b>Reference</b>	0520818
<b>Subject</b>	Data Review of Caltrain Hayward Park San Mateo 2021 Soil and Groundwater Samples, Enthalpy Analytical Data Packages 440568, 440642, 440717, 440781, and 441485.

The data quality was assessed and any necessary qualifiers were applied following the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, January 2017.

**HOLDING TIME AND PRESERVATION EVALUATION**

All samples were prepared and analyzed within the method-prescribed time period from the date of collection. All sample shipments were received at the laboratory below the method-prescribed temperature preservation requirements of less than 6°C.

**BLANK EVALUATION**

The method blank sample results were non-detected for each of the target analytes with several exceptions. Sample results less than the reporting limit and within 5 times the associated method blank concentration as adjusted for dilution were qualified as non-detect (U). The blank concentrations and qualifiers are presented in Table 1.

No trip blanks were submitted with the soil volatile organic compound analyses. The potential for contamination during travel and storage could not be evaluated.

**CONTINUING CALIBRATION VERIFICATION EVALUATION**

The laboratory reported continuing calibration verification recoveries outside limits for target analytes. Non-detect results associated with high recoveries were not qualified. Detections associated with the high recoveries were qualified as estimated with a high bias (J+). The outliers and qualified data are presented in Table 2.

**BLANK SPIKE EVALUATION**

The laboratory control sample (LCS) recoveries were within the laboratory's limits of acceptance.

**MATRIX SPIKE EVALUATION**

The matrix spike (MS)/matrix spike duplicate (MSD) recoveries and RPDs were within laboratory limits of acceptance with limited exceptions. No data are qualified based upon relative percent difference outliers or if the parent sample is from another project. The outliers are presented in Table 3.

**SURROGATE RECOVERY EVALUATION**

Surrogate recoveries were within laboratory acceptance limits with limited exceptions. No data are qualified as the laboratory indicated the surrogates were diluted out. The outliers are presented in Table 4.

**FIELD DUPLICATE EVALUATION**

No field duplicates were submitted.

**CALIBRATION RANGE EXCEEDANCES**

No field duplicates were submitted.

**OVERALL ASSESSMENT**

No results were rejected. All remaining data, including qualified data, can be used for decision-making purposes. The quality of the data generated during this investigation, excluding the rejected results, is acceptable for the preparation of technically defensible documents.

**Table 1**  
**Blank and Associated Suspect Sample Detections**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Blank ID	Associated Sample	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
440568	Method Blank (QC908461)	see below	TPH Gasoline	35	100	ug/kg	--
	--	MW-5-9	TPH Gasoline	30	69	ug/kg	69 U
	--	MW-6-12	TPH Gasoline	33	74	ug/kg	74 U
440568	Method Blank (QC908464)	None for qualification	TPH Gasoline	2300	5000	ug/kg	--
		None for qualification	Chloromethane	80	250	ug/kg	--
		None for qualification	Bromomethane	98	250	ug/kg	--
440568	Method Blank (QC908659)	None for qualification	TPH Gasoline	2000	5000	ug/kg	--
440568/440642	Method Blank (QC908664)	see below	TPH Gasoline	36	100	ug/kg	--
440642	--	MW-1-9	TPH Gasoline	84	76	ug/kg	76 U
	--	MW-4-7	TPH Gasoline	23	68	ug/kg	68 U
	--	MW-4-11	TPH Gasoline	21	69	ug/kg	69 U
440568/440642/440717	Method Blank (QC908676)	see below	TPH Gasoline	28	100	ug/kg	--
		see below	Bromomethane	0.5	5.0	ug/kg	--

**Table 1**  
**Blank and Associated Suspect Sample Detections**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Blank ID	Associated Sample	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
440717	--	MW-2-4-5	TPH Gasoline	100	79	ug/kg	100 U
	--	MW-2-4-5	Bromomethane	0.3	4.0	ug/kg	4.0 U
	--	MW-7-8	TPH Gasoline	78	68	ug/kg	78 U
	--	MW-7-11-12	TPH Gasoline	62	74	ug/kg	74 U
	--	MW-7-11-12	Bromomethane	0.90	3.7	ug/kg	3.7 U
	--	MW-8-4-5	TPH Gasoline	45	79	ug/kg	79 U
	--	MW-8-9	TPH Gasoline	26	68	ug/kg	68 U
	--	MW-8-11.5	TPH Gasoline	25	70	ug/kg	70 U
440568/ 440642/ 440717	Method Blank (QC908679)	None for qualification	TPH Gasoline	1500	5000	ug/kg	--
		see below	Chloromethane	71	250	ug/kg	--
		see below	Bromomethane	100	250	ug/kg	--
440568	--	MW-5-3	Chloromethane	41	300	ug/kg	300 U
	--		Bromomethane	150	300	ug/kg	300 U
440642	--	MW-3-6	Bromomethane	63	210	ug/kg	210 U
	--	MW-9-4	Bromomethane	97	490	ug/kg	490 U
440717	--	MW-9-7	Bromomethane	49	190	ug/kg	190 U

**Table 1**  
**Blank and Associated Suspect Sample Detections**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Blank ID	Associated Sample	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
440642	Method Blank (QC909260)	see below	DRO C10-C28	1.3	10	mg/kg	--
		see below	ORO C28-C44	3.1	20	mg/kg	--
	--	MW-1-9	DRO C10-C28	1.5	10	mg/kg	10 U
	--	MW-1-9	ORO C28-C44	3.9	20	mg/kg	20 U
	--	MW-3-6	DRO C10-C28	6.0	10	mg/kg	10 U
	--	MW-3-6	ORO C28-C44	6.2	20	mg/kg	20 U
	--	MW-4-7	DRO C10-C28	1.4	10	mg/kg	10 U
	--	MW-4-7	ORO C28-C44	4.2	20	mg/kg	20 U
	--	MW-4-11	DRO C10-C28	1.5	10	mg/kg	10 U
	--	MW-4-11	ORO C28-C44	3.3	20	mg/kg	20 U
440717	Method Blank (QC908927)	None for qualification	TPH Gasoline	1800	5000	ug/kg	--
		see below	Bromomethane	89	250	ug/kg	--
		--	Bromomethane	49	190	ug/kg	190 U
440717	Method Blank (QC908928)	see below	TPH Gasoline	30	100	ug/kg	--
		MW-7-4	TPH Gasoline	40	91	ug/kg	91 U
440781	Method Blank (QC909032)	see below	Selenium	3.2	30	ug/L	--
		None for qualification	Vanadium	2.8	5.0	ug/L	--
		HPK-20210211-2	Selenium	3.1	30	ug/L	30 U
440781	Method Blank (QC909223)	None for qualification	TPH Gasoline	19	100.0	ug/kg	--

**Table 1**  
**Blank and Associated Suspect Sample Detections**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Blank ID	Associated Sample	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
440781	Method Blank (QC909448)	see below	Naphthalene	0.6	5.0	ug/L	--
		HPK-20210211-2	Naphthalene	3.5	25	ug/L	25 U
441485	Method Blank (QC911381)	see below	Diesel C10-C28	67	100	ug/L	--
		HPK-MW-07-20210226	Diesel C10-C28	630	480	ug/L	630 U
441485	Method Blank (QC911635)	None for qualification	Methylene Chloride	2.2	10	ug/L	--
441485	Method Blank (QC911928)	None for qualification	Methylene Chloride	0.9	10	ug/L	--

Lab reports reviewed: 440568, 440642, 440717, 440781, and 441485

**Notes:**

U = Non-detect

µg/L = Micrograms per liter

ug/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

**Table 2**  
**Calibration Verification Recoveries Outside of Acceptable Limits**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Sample ID	Compound	CCV Recovery	Reported Concentration	Units	ERM Qualifier
440568	MW-5-3	Bromomethane	High	150	ug/kg	J+
	MW-6-5	Bromomethane	High	82	ug/kg	J+
440568	MW-6-12	Pentachlorophenol	High	ND	ug/kg	--
	MW-6-5	Pentachlorophenol	High	ND	ug/kg	--
	MW-5-9	Pentachlorophenol	High	ND	ug/kg	--
440642	MW-3-6	Bromomethane	High	63	ug/kg	J+
	MW-9-4	Bromomethane	High	97	ug/kg	J+
440717	MW-2-4-5	Bromomethane	High	0.3	ug/kg	J+
	MW-7-11-12	Bromomethane	High	0.9	ug/kg	J+
	MW-9-7	Bromomethane	High	49	ug/kg	J+
440781	None for qualification	Mercury	High	--	--	--

Lab reports reviewed: 440568, 440642, 440717, 440781, and 441485

**Notes:**

CCV = Continuing calibration verification

J+ = Estimated detect, high bias

ug/kg = Micrograms per kilogram

High = CCV above maximum acceptable limit

**Table 3**  
**Spike Recoveries Outside of Acceptable Limits**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Spike Sample ID	Associated Sample	Compound	Recovery (%)	Limit (%)	RPD	Associated Sample Result	Units	ERM Qualifier
MS/MSD									
440642/ 440717/ 440781	MW-1-9 MS/MSD	MW-1-9	2,4,5-Trichlorophenol	48/79	40-120	49	47	--	--
			4-Nitrophenol	43/79	20-141	60	30	--	--
			2,4-Dinitrotoluene	35/71	33-128	69	50	--	--
			Pentachlorophenol	45/67	28-132	40	30	--	--
			Pyrene	46/77	39-135	51	41	--	--
			Chrysene	44/76	37-135	53	46	--	--
			Benzo(b)fluoranthene	45/78	34-139	54	47	--	--
440781	Batch MS/MSD	None for qualification	Antimony	41/37	75-125	11	41	--	--

Lab reports reviewed: 440568, 440642, 440717, 440781, and 441485

**Notes:**

-- = Not applicable; associated data not affected

MS/MSD = Matrix Spike/Matrix Spike Duplicate

RPD = Relative percent difference

**Table 4**  
**Surrogate Recovery Results out of Acceptable Limits**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Sample ID	Method	Surrogate	Recovery (%)	Limit (%)	Dilution Factor	ERM Qualifier
440642	MW-9-4	8015M	n-Triacontane	DO	70-130	25	--
440781	HPK-20210211-2	8015M	n-Triacontane	DO	35-130	0.038	--
441485	HPK-MW-03-20210226	8015M	n-Triacontane	DO	35-130	4.8	--
	HPK-MW-04-20210226	8015M	n-Triacontane	DO	35-130	4.9	--
	HPK-MW-07-20210226	8015M	n-Triacontane	DO	35-130	4.8	--
	HPK-MW-09-20210226	8015M	n-Triacontane	DO	35-130	10	--

Lab reports reviewed: 440568, 440642, 440717, 440781, and 441485

**Notes:**

DO = Diluted out

**Table 5**  
**Calibration Range Exceedances**  
**Soil and Groundwater Sampling**  
**Caltrain Hayward Park**  
**San Mateo, California**

Lab Package	Sample ID	Compound	Reported Concentration	Units	ERM Qualifier
441485	HPK-MW-09-20210226	1,2-Dibromoethane	59000	ug/L	J

Lab reports reviewed: 440568, 440642, 440717, 440781, and 441485

**Notes:**

ug/L = Micrograms per liter

J = estimated detection

**APPENDIX I        WASTE MANIFEST**

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>Not Required</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>888-423-6060</b>	4. Waste Tracking Number <b>0320204038</b>
5. Generator's Name and Mailing Address <b>peninsula corridor joint powers board 1260 San Carlos Ave San Carlos CA 94070</b> Generator's Phone: <b>650 508-6301</b>		Generator's Site Address (if different than mailing address) <b>peninsula corridor joint powers board 401 Concar Drive San Mateo CA 94402</b>			
6. Transporter 1 Company Name <b>American Integrated Services, Inc.</b>		U.S. EPA ID Number <b>CAR000148338</b>			
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>Potrero Hills Landfill 3575 Potrero Hills Lane Suisun CA 94585</b> Facility's Phone: <b>707 432-4627</b>		U.S. EPA ID Number <b>Not Required</b>			
9. Waste Shipping Name and Description <b>1 Non-Hazardous Waste Solid (Soil)</b>		10. Containers No. <b>04</b>	Type <b>DM</b>	11. Total Quantity <b>2000</b>	12. Unit Wt/Vol. <b>P</b>
2.					
3.					
4.					
13. Special Handling Instructions and Additional Information <b>Wear proper PPE while handling. Weights or volumes are approximate.</b> <b>AIS Job#80006-8-7 / Profile: PHLF-19-019</b>					
4/55					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Officer's Printed/Typed Name <b>Stephen Chao</b>		Signature <i>Stephen Chao</i>		Month <b>5</b>	Day <b>20</b>
15. International Shipments <input type="checkbox"/> Import to U.S.		<input type="checkbox"/> Export from U.S.		Port of entry/exit: _____ Date leaving U.S.: _____	
Transporter Signature (for exports only):					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>MHKO AKN120</b>		Signature <i>MHKO AKN120</i>		Month <b>5</b>	Day <b>20</b>
Transporter 2 Printed/Typed Name		Signature		Month	Day
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity		<input type="checkbox"/> Type		<input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection	
Manifest Reference Number: _____					
17b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator) Month Day Year					
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name		Signature		Month	Day
169-BLC-O 5 11977 (Rev. 9/09)					
GENERATOR'S/SHIPPER'S INITIAL COPY					

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>Not Required</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>888-423-6060</b>	4. Waste Tracking Number <b>0320204039</b>	
5. Generator's Name and Mailing Address peninsula corridor joint powers board 1250 San Carlos Ave San Carlos CA 94070 Generator's Phone: <b>650 508-6301</b>		Generator's Site Address (if different than mailing address) peninsula corridor joint powers board 401 Concar Drive San Mateo CA 94402				
6. Transporter 1 Company Name <b>American Integrated Services, Inc.</b>		U.S. EPA ID Number <b>C A R 0 0 0 1 4 8 3 3 8</b>				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address Potrero Hills Landfill 2675 Potrero Hills Lane Suisun CA 94585 Facility's Phone: <b>707 432-4627</b>		U.S. EPA ID Number <b>Not Required</b>				
<b>GENERATOR</b>	9. Waste Shipping Name and Description <b>1 Non-Hazardous Waste Solid (Concrete Cuttings)</b>		10. Containers No. <b>01</b>	11. Total Quantity <b>450</b>	12. Unit Wt./Vol. <b>P</b>	
	2.					
	3.					
	4.					
13. Special Handling Instructions and Additional Information <b>Wear proper PPE while handling. Weights or volumes are approximate.</b> <b>AIS Job#80006-8-7</b>						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Officer's Printed/Typed Name <b>Stephen Chao</b>		Signature <i>Stephen Chao</i>		Month <b>3</b>	Day <b>17</b>	
15. International Shipments <input type="checkbox"/> Import to U.S.		<input type="checkbox"/> Export from U.S.		Port of entry/exit: _____		
Transporter Signature (for exports only): <b>John Doe</b>		Date leaving U.S.: _____				
<b>TRANSPORTER INT'L</b>	16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <b>John Doe</b>		Signature <i>John Doe</i>		Month <b>3</b>	Day <b>17</b>
	Transporter 2 Printed/Typed Name <b>John Doe</b>		Signature <i>John Doe</i>		Month <b>3</b>	Day <b>17</b>
<b>DESIGNATED FACILITY</b>	17. Discrepancy					
	17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	17b. Alternate Facility (or Generator)      Manifest Reference Number: _____ Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator) Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a Printed/Typed Name _____ Signature _____ Month _____ Day _____ Year _____						
169-BLC-O 5 11977 (Rev. 9/09)						
<b>GENERATOR'S/SHIPPER'S INITIAL COPY</b>						

**APPENDIX J      SANBORN MAPS**

Caltrain San Mateo  
401 Concar Dr  
San Mateo, CA 94402

Inquiry Number: 6332155.3  
January 15, 2021

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

01/15/21

**Site Name:**

Caltrain San Mateo  
401 Concar Dr  
San Mateo, CA 94402  
EDR Inquiry # 6332155.3

**Client Name:**

ERM - West, Inc.  
1277 Treat Blvd  
Walnut Creek, CA 94597  
Contact: Amanda Messmann



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by ERM - West, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

**Certified Sanborn Results:**

**Certification #** 7015-49AD-A0D1

**PO #** NA

**Project** 0520818



Sanborn® Library search results

Certification #: 7015-49AD-A0D1

**Maps Provided:**

1969  
1961  
1956  
1953  
1950

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

**Limited Permission To Make Copies**

ERM - West, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

**Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice. Copyright 2021 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

## **Sanborn Sheet Key**

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



### **1969 Source Sheets**



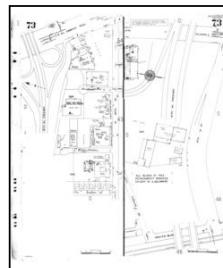
Volume 1, Sheet 44  
1969



Volume 1, Sheet 45  
1969



Volume 1, Sheet 46  
1969

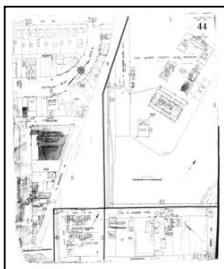


Volume 1, Sheet 73  
1969

### **1961 Source Sheets**



Volume 1, Sheet 8  
1961



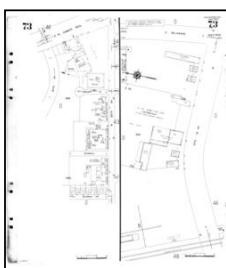
Volume 1, Sheet 44  
1961



Volume 1, Sheet 45  
1961



Volume 1, Sheet 46  
1961

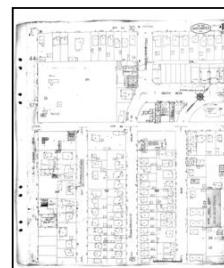


Volume 1, Sheet 73  
1961

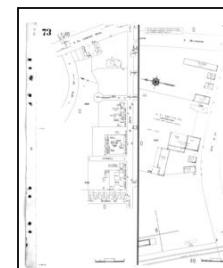
### **1956 Source Sheets**



Volume 1, Sheet 8  
1956



Volume 1, Sheet 45  
1956



Volume 1, Sheet 73  
1956



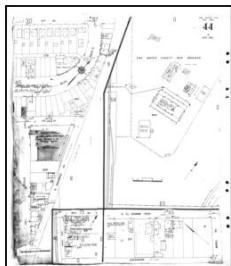
Volume 1, Sheet 46  
1956

## **Sanborn Sheet Key**

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



### **1956 Source Sheets**

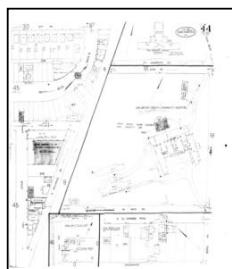


Volume 1, Sheet 44  
1956

### **1953 Source Sheets**



Volume 1, Sheet 8  
1953



Volume 1, Sheet 44  
1953



Volume 1, Sheet 45  
1953

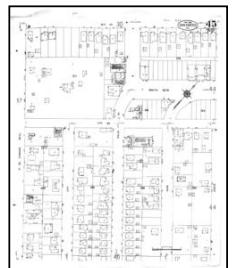


Volume 1, Sheet 46  
1953

### **1950 Source Sheets**



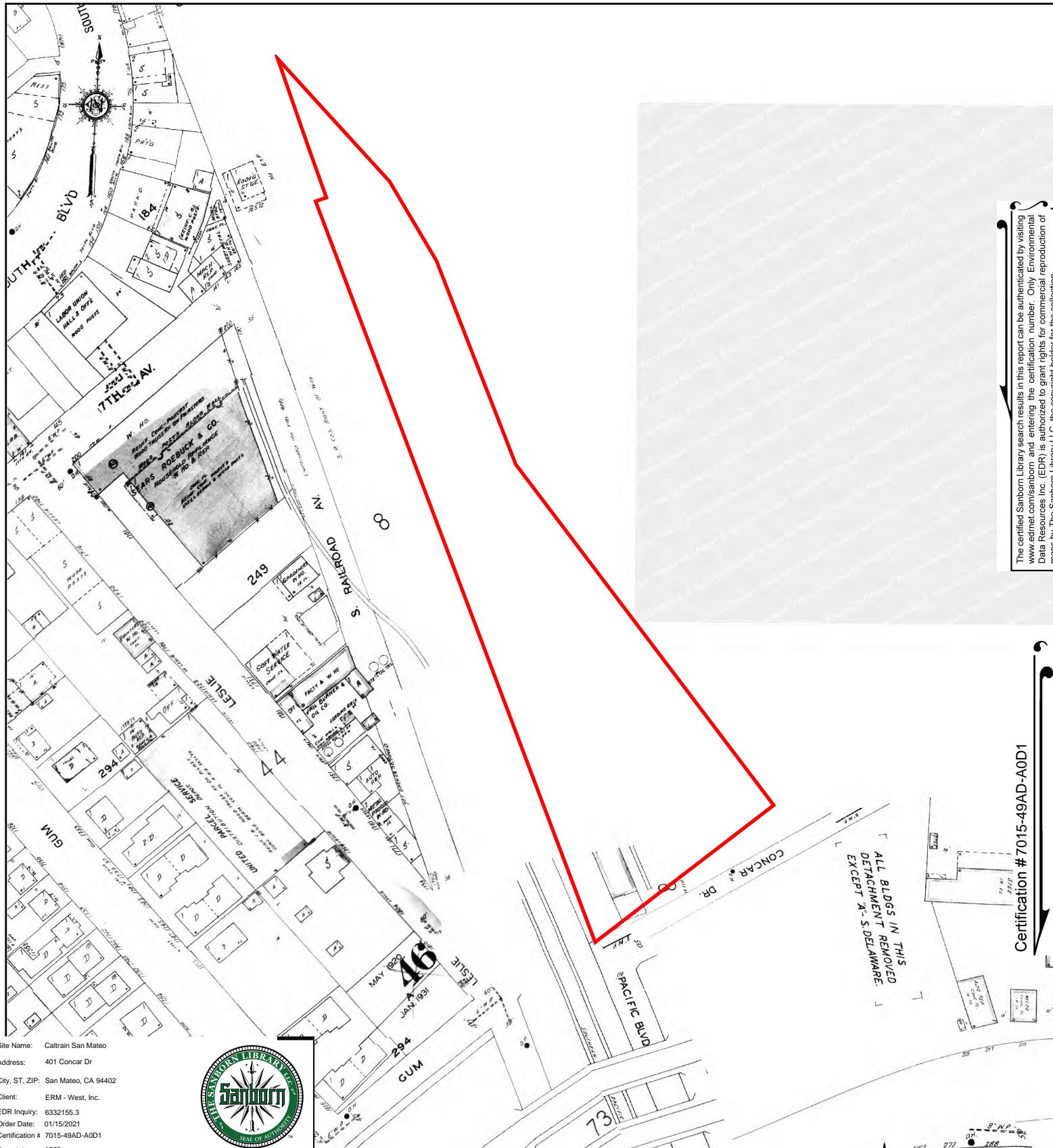
Volume 1, Sheet 44  
1950



Volume 1, Sheet 45  
1950



Volume 1, Sheet 46  
1950



Site Name: Caltrain San Mateo

Address: 401 Concar Dr

City, ST, ZIP: San Mateo, CA 94402

Client: ERM - West, Inc.

EDR Inquiry: 6332155.3

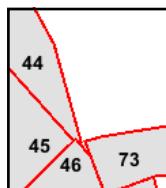
Order Date: 01/15/2021

Certification #: 7015-49AD-A0D1

Copyright 1969



This Certified Sanborn Map combines the following sheets.  
Outlined areas indicate map sheets within the collection.



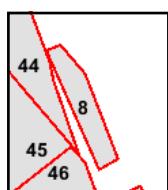
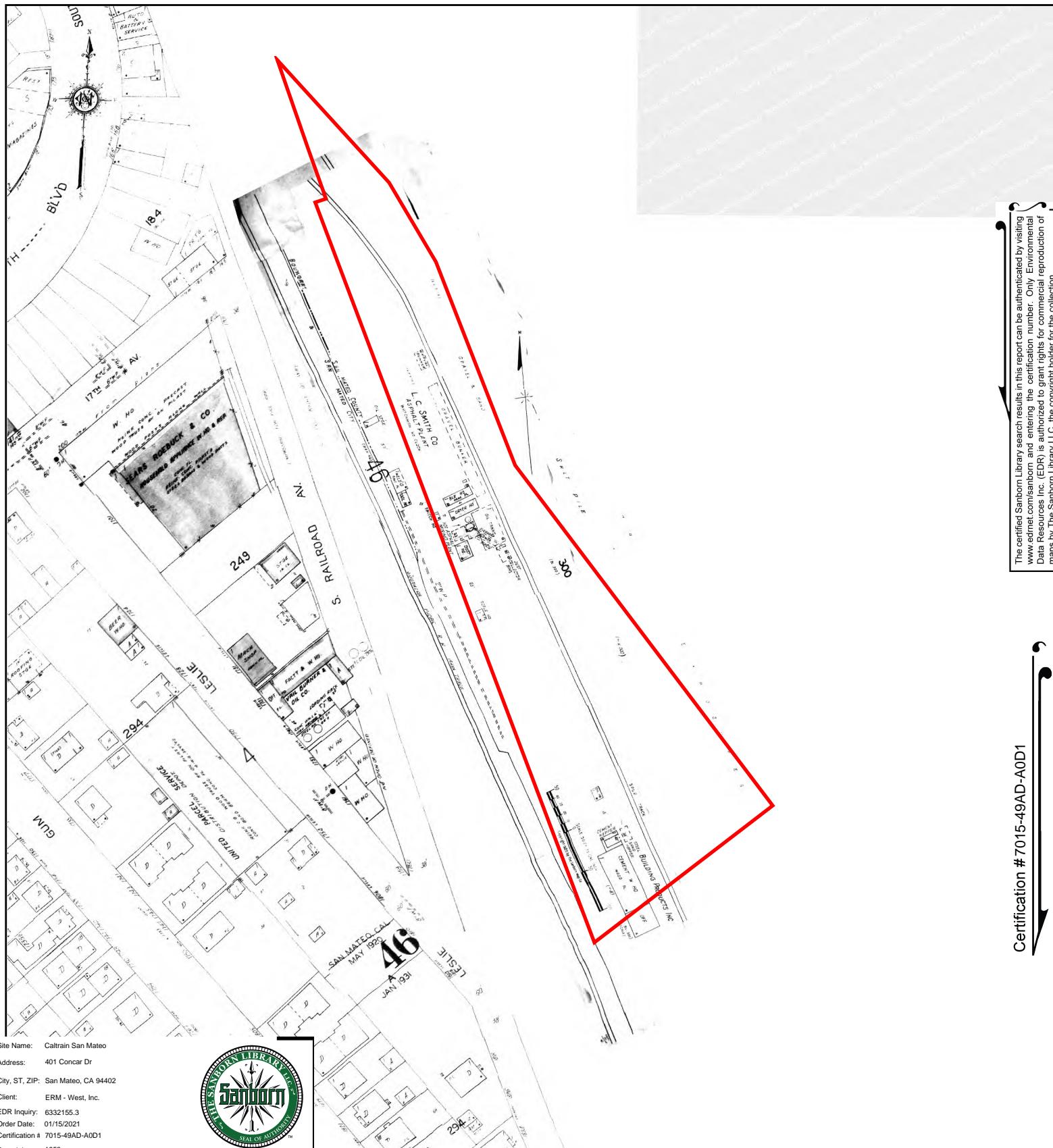
Volume 1, Sheet 73  
Volume 1, Sheet 46  
Volume 1, Sheet 45  
Volume 1, Sheet 44

0 Feet 150 300 600





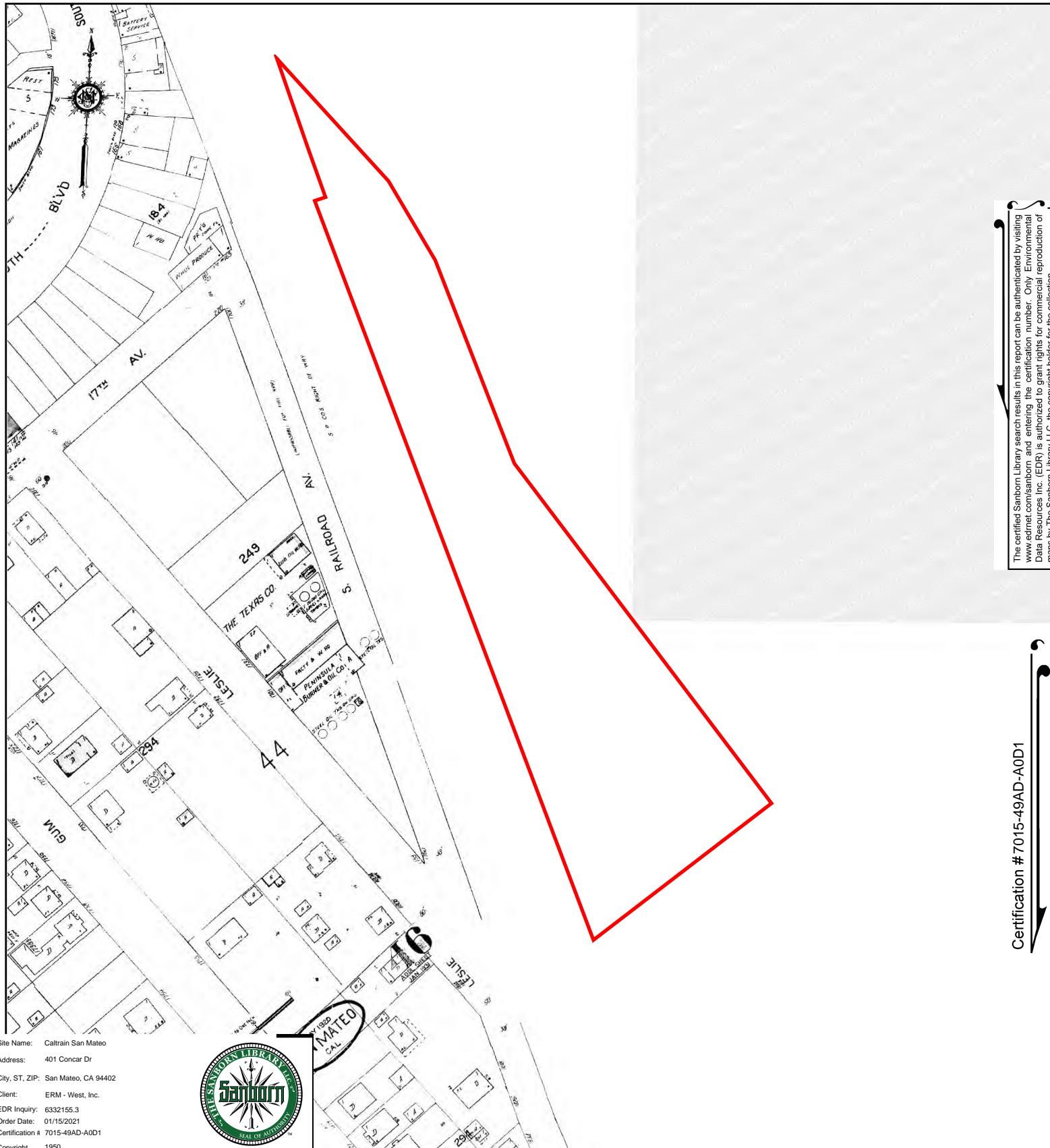




Volume 1, Sheet 46  
Volume 1, Sheet 45  
Volume 1, Sheet 44  
Volume 1, Sheet 8

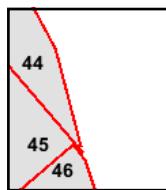
0 Feet 150 300 600





This Certified Sanborn Map combines the following sheets.  
Outlined areas indicate map sheets within the collection.

Volume 1, Sheet 46  
Volume 1, Sheet 45  
Volume 1, Sheet 44



---

**ERM has over 160 offices across the following countries and territories worldwide**

Argentina	New Zealand
Australia	Panama
Belgium	Peru
Brazil	Poland
Canada	Portugal
China	Puerto Rico
Colombia	Romania
France	Russia
Germany	Singapore
Hong Kong	South Africa
India	South Korea
Indonesia	Spain
Ireland	Sweden
Italy	Taiwan
Japan	Thailand
Kazakhstan	UAE
Kenya	UK
Malaysia	US
Mexico	Vietnam
The Netherlands	

**ERM's Walnut Creek Office**

1277 Treat Boulevard  
Suite 500  
Walnut Creek, CA 94597

T: 1-925-946-0455  
F: 1-925-946-9968

[www.erm.com](http://www.erm.com)