

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2229253656
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Plains Pipeline, L.P.	OGRID	34053
Contact Name	Karolanne Hudgens	Contact Telephone	575-200-5517
Contact email	khudgens@paalp.com	Incident # (assigned by OCD)	nAPP2229253656
Contact mailing address	1106 Griffith Drive, Midland, TX 79706		

Location of Release Source

Latitude 32.1388868 Longitude -103.3580480
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Plains Montera 6" Release	Site Type	Pipeline
Date Release Discovered	10/18/2022	API# (if applicable)	

Unit Letter	Section	Township	Range	County
N	10	25S	35E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Tap Rock NM 10 Minerals, LLC)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 21.1 bbls	Volume Recovered (bbls) 21.1 bbls
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

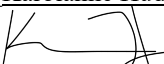
Internal corrosion of crude oil pipeline.

Incident ID	
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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Karolanne Hudgens</u>	Title: <u>HSE Remediation Specialist II</u>
Signature: 	Date: <u>10/20/2022</u>
email: <u>khudgens@paalp.com</u>	Telephone: <u>575-200-5517</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Soil Type	Est. Pore Space
Clay	15%
Sandy Clay	12%
Silt	16%
Loess	25%
Fine Sand	16%
Med. Sand	25%
Coarse Sand	26%
Gravelly Sand	26%
Fine Gravel	26%
Med. Gravel	25%
Coarse Gravel	18%
Compacted Caliche Pad	16%
Loosely Compacted Caliche Pad	20%

Location:

Rule of Thumb

To Calculate The Oil Content of Saturated Soil

Average Pore Space Between Soil Grains Ranges From A **Low of 15%** To A **High of 26%**. Pure Sand Being 26%.**16%** = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

7 = Width in **Feet****5** = Length in **Feet****60** = Depth in **Inches****5** = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

209.44 = Gallons of Oil In Soil**5.0** = Barrels of Oil In Soil**5.0** = Total Estimated Barrels of Oil in Soil*****If different soil types are impacted (I.E. Caliche Pad and Sandy Clay Pasture Area), additional calculation boxes are provided below. If not, please make sure the dimensions are zeroed out before finalizing.*******20%** = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

= Width in **Feet**= Length in **Feet**= Depth in **Inches****0** = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

0.00 = Gallons of Oil In Soil**0.0** = Barrels of Oil In Soil**20%** = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

= Width in **Feet**= Length in **Feet**= Depth in **Inches****0** = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

0.00 = Gallons of Oil In Soil**0.0** = Barrels of Oil In Soil

Incident ID	nAPP2229253656
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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Karolanne Hudgens Title: HSE Remediation Specialist II
Signature: [Signature] Date: 3/21/23
email: khudgens@paalp.com Telephone: 575.200.5517

OCD Only

Received by: Jocelyn Harimon Date: 03/21/2023

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Oil Conservation Division

Incident ID	nAPP2229253656
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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Karolanne Hudgens Title: HSE Remediation Specialist II
 Signature: [Signature] Date: 3/21/23
 email: khudgens@paalp.com Telephone: 575-200-5517

OCD Only

Received by: Jocelyn Harimon Date: 03/21/2023

- ☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

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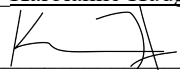
Cause of Release
Internal corrosion of crude oil pipeline.

Incident ID	
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Printed Name: <u>Karolanne Hudgens</u>	Title: <u>HSE Remediation Specialist II</u>
Signature: 	Date: <u>10/20/2022</u>
email: <u>khudgens@paalp.com</u>	Telephone: <u>575-200-5517</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Soil Type	Est. Pore Space
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Silt	16%
Loess	25%
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Med. Sand	25%
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Gravelly Sand	26%
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Loosely Compacted Caliche Pad	20%

Location:

Rule of Thumb

To Calculate The Oil Content of Saturated Soil

Average Pore Space Between Soil Grains Ranges From A **Low of 15%** To A **High of 26%**. Pure Sand Being 26%.

16% = Estimated Pore Space

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7 = Width in **Feet**5 = Length in **Feet**60 = Depth in **Inches**

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There Are 7.48 Gallons Of Oil Per Cubic Foot

209.44 = Gallons of Oil In Soil

5.0 = Barrels of Oil In Soil

5.0 = Total Estimated Barrels of Oil in Soil

If different soil types are impacted (I.E. Caliche Pad and Sandy Clay Pasture Area), additional calculation boxes are provided below. If not, please make sure the dimensions are zeroed out before finalizing.

20% = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

= Width in **Feet**= Length in **Feet**= Depth in **Inches**

0 = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

0.00 = Gallons of Oil In Soil

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Site Assessment/Characterization

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Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 9.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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Oil Conservation Division

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Printed Name: Karolanne Hudgens Title: HSE Remediation Specialist II
Signature: [Signature] Date: 3/21/23
email: khudgens@paalp.com Telephone: 575.200.5517

OCD Only

Received by: _____ Date: _____

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Oil Conservation Division

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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
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- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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Printed Name: Karolanne Hudgens Title: HSE Remediation Specialist II
Signature: [Signature] Date: 3/21/23
email: khudgens@paalp.com Telephone: 575-200-5517

OCD Only

Received by: _____ Date: _____

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Jennifer Nobui Date: 04/24/2023



INTERIM REMEDIATION SUMMARY
AND
PROPOSED SITE INVESTIGATION WORKPLAN

PLAINS ALL AMERICAN PIPELINE, LP

MONTERA 6" PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

PLAINS SRS NO: 2022-077
NMOCD INCIDENT NO: nAPP2229253656

March 14, 2023

Prepared For:

PLAINS ALL AMERICAN PIPELINE, LP
Midland, Texas

Prepared by:

Lighthouse Environmental Services, Inc.
17901 West I-20
Odessa, TX 79763

INTERIM REMEDIATION SUMMARY
AND
PROPOSED SITE INVESTIGATION WORKPLAN
PLAINS ALL AMERICAN PIPELINE, LP

MONTERA 6" PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

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2	Sidewall Sample Laboratory Report

1.0 INTRODUCTION

Lighthouse Environmental Services, Inc. (Lighthouse) respectfully submits this Interim Remediation Summary and Proposed Investigation Work Plan to Plains All American Pipeline, LP (Plains) for submittal to the New Mexico Oil Conservation Division (NMOCD) for the Montera 6" Release (2022-077), hereinafter referred to as the "Site". This work plan summarizes remediation efforts to date and proposes future site investigation activities associated with a crude oil release on the Plains Montera 6" pipeline.

2.0 INITIAL SITE INVESTIGATION AND REMEDIATION SUMMARY

2.1 Background and Purpose

On October 18, 2022, approximately 21.1 barrels (bbls) of crude oil was released from the Plains Montera 6" pipeline due to internal corrosion. The Site is located in Unit Letter N, Section 10, Township 25 South, Range 35 East in Lea County, New Mexico. The GPS coordinates of the Site are N 32.1388868, W 103.3580480. The location of the Site is provided on Figure 1 and Figure 2. The Site is located on land owned by Tap Rock NM 10 Minerals, LLC. Plains submitted Form C-141 Release Notification to the NMOCD and Incident No. nAPP2229253656 was assigned to the Release. The Form C-141 is provided in the appendices of this document.

2.2 Site Characterization

The Site was characterized according to the remediation standards detailed in Table 1 Closure Criteria for Soils Impacted by a Release (Table 1) in the New Mexico Administrative Code (NMAC) Title 19 Chapter 15 Part 29 Section 12 (19.15.29.12).

According to data published by the New Mexico Office of the State Engineer (NMOSE) and the United States Geological Survey (USGS), no water wells are located within one-half (0.5) mile of the Site. The Site is located in an area of low karst potential. Lighthouse did not identify any receptors located within the mandated boundaries and/or distance of the Site as detailed in NMAC 19.15.29.12. Documentation associated with Site Characterization include maps for FEMA Flood Zones, NMOSE Point of Diversion (PODs), National Wetlands Inventory (NWI) and Karst Potential are provided in the appendices of this document. The Site is not located within a FEMA Flood Zone or jurisdictional wetlands and is not positioned in a POD area. In addition, the potential for Karst subsurface influence at the Site is low.

2.3 Soil Remediation

Prior to implementation of field activities, Lighthouse prepared a Site-specific Health and Safety Plan (HASP) addressing the known and potential hazards which could be encountered during the field activities at the Site. The impacted soil area occurs in an open field pipeline ROW. The surrounding land is in oil field and light agricultural use. Figure 3 depicts the impacted soil area (approximately 9,500 ft²). Mechanical excavation was utilized to excavate and stockpile the impacted soil on-site on a plastic sheet liner. The direct areas around pipelines and utilities were excavated with hand tools.

Approximately 2,250 cubic yards of impacted soil was loaded and hauled off-site for disposal. Soil samples were collected from the floor and sidewalls of the excavation area and submitted for laboratory analysis to confirm impacted soil was properly removed. Excavated soil was initially field screened with an organic vapor meter (OVM) before soil samples were collected.

2.4 Sampling and Analysis

During initial remediation activities, 31 soil samples (CS-1 through CS-31) were collected from the excavation floor and eight (8) soil samples were collected from the excavation sidewalls to demonstrate horizontal delineation/cleanup of impacted soil. Soil sample locations are presented in Figure 3.

All soil samples were transported to Eurofins Laboratory in Midland, Texas on ice following strict chain-of-custody protocol. Soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) using EPA Method 8015b modified for Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Oil Range Organics (ORO) and chloride utilizing EPA Method 300.

The analytical results from the soil samples collected from the floor of the excavation are presented in Table 1. The analytical results from the side wall soil samples are presented in Table 2.

Analytical results indicated soil samples CS-2, CS-3, CS-5, CS-7, CS-26, CS-28, CS-29, CS-31, SW-1, SW-3, SW-5, SW-7 and SW-8 exhibited total TPH concentrations below the applicable Table 1 Closure Criteria limit of 100 milligrams per Kilogram (mg/Kg). The remainder of the samples indicated total TPH concentrations above the aforementioned associated limit. All submitted soil samples exhibited chloride concentrations below the Table 1 Closure Criteria limit of 600 mg/Kg.

2.5 Conclusions and Recommendations

Based on the field data and the analytical results obtained during the soil sampling events, Lighthouse recommends advancing soil borings within and surrounding the affected soil area to vertically and horizontally delineate impacted soil. In addition, Lighthouse will utilize a soil boring to determine depth to groundwater, if encountered in the soil boring.

3.0 PROPOSED SITE INVESTIGATION AND REMEDIATION WORKPLAN

3.1 Soil Boring Installation

Lighthouse proposes to advance a total of three (3) soil borings at the Site. One of the soil borings will be utilized to determine depth to groundwater and to accurately establish the remediation criteria according to NMOSE Procedures for implementation of the Spill Rule (19.15.29 NMAC) (IX). The temporary well will be gauged after 72 hours. The borehole will be plugged and abandoned in accordance with the applicable NMOSE regulations.

The soil borings will be installed using air rotary drilling methods by a licensed New Mexico driller. The borings will be sampled continuously using a barrel sampler and soil samples obtained from the boring will be described in the field according to ASTM D2488. Soil samples will be collected at five (5) foot intervals from ground surface to approximately 50 feet below ground surface. Proposed soil boring locations are depicted in Figure 4.

3.2 Soil Sampling

Soil samples will be screened in the field using an organic vapor meter calibrated to an isobutylene standard. Based on the OVM readings, selected soil samples will be collected for laboratory analysis. Soil samples will be placed in labeled, laboratory supplied jars, sealed with a Teflon-lined lid. Samples will then be placed in a sealable, plastic bag and subsequently placed on ice in a cooler for preservation, Chain-of-custody (COC) forms will be completed after collection of the soil samples. The COC will note the sample identification, date and time of sample collection, sample preservation, sample container volume and type (plastic, glass, etc.), the number of containers and the chemical analysis to be performed. COCs will accompany the samples from the time they are collected until they are delivered to the laboratory.

Soil samples will be analyzed for the following parameters:

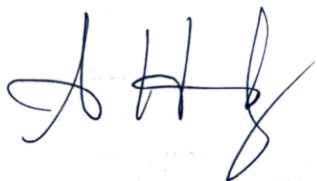
- TPH GRO/DRO/ORO using EPA Method 8015b
- BTEX using EPA Method 8021b
- Chloride using Method EPA 300

Drill cuttings from the borings will be placed on a plastic liner pending final disposition.

Upon completion of delineation activities, a Proposed Remediation Work Plan will be prepared based on the analytical data of the soil samples collected from the borings. In addition, the Closure Criteria will be evaluated based on the determined depth to groundwater potential observed in the temporary monitoring well. Information collected from the soil boring activities will be included in the Proposed Remediation Work Plan. The following soil boring activities are anticipated to take place within 180 days from the approval of this Work Plan and after proper NMOCD notification.

Lighthouse appreciates the opportunity to work with Plains on this important project. If there are any questions or comments, please contact us at (469) 243-9571.

Sincerely,

A handwritten signature in blue ink, appearing to read 'S. Hudgens', with a stylized flourish at the end.

Simon Hudgens

Lighthouse Environmental Services, Inc.

FIGURES

Figure 1 - Topographic Map

Plains All American Pipeline, LP
Montera 6" Release
Lighthouse Project No.: 2125-5742

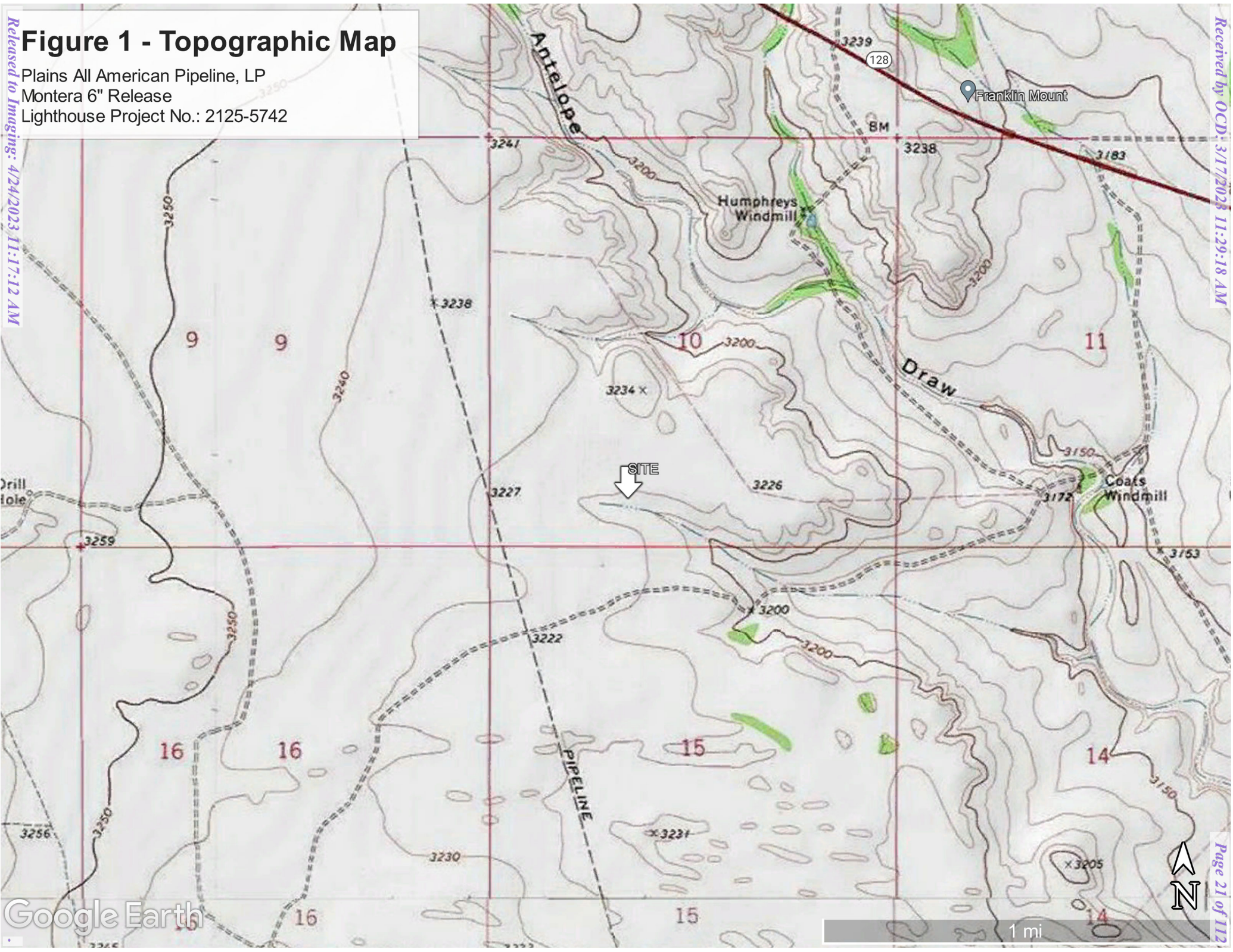


Figure 2 - Aerial Map

Plains All American Pipeline, LP
Montera 6" Release
Lighthouse Project No.: 2125-5742

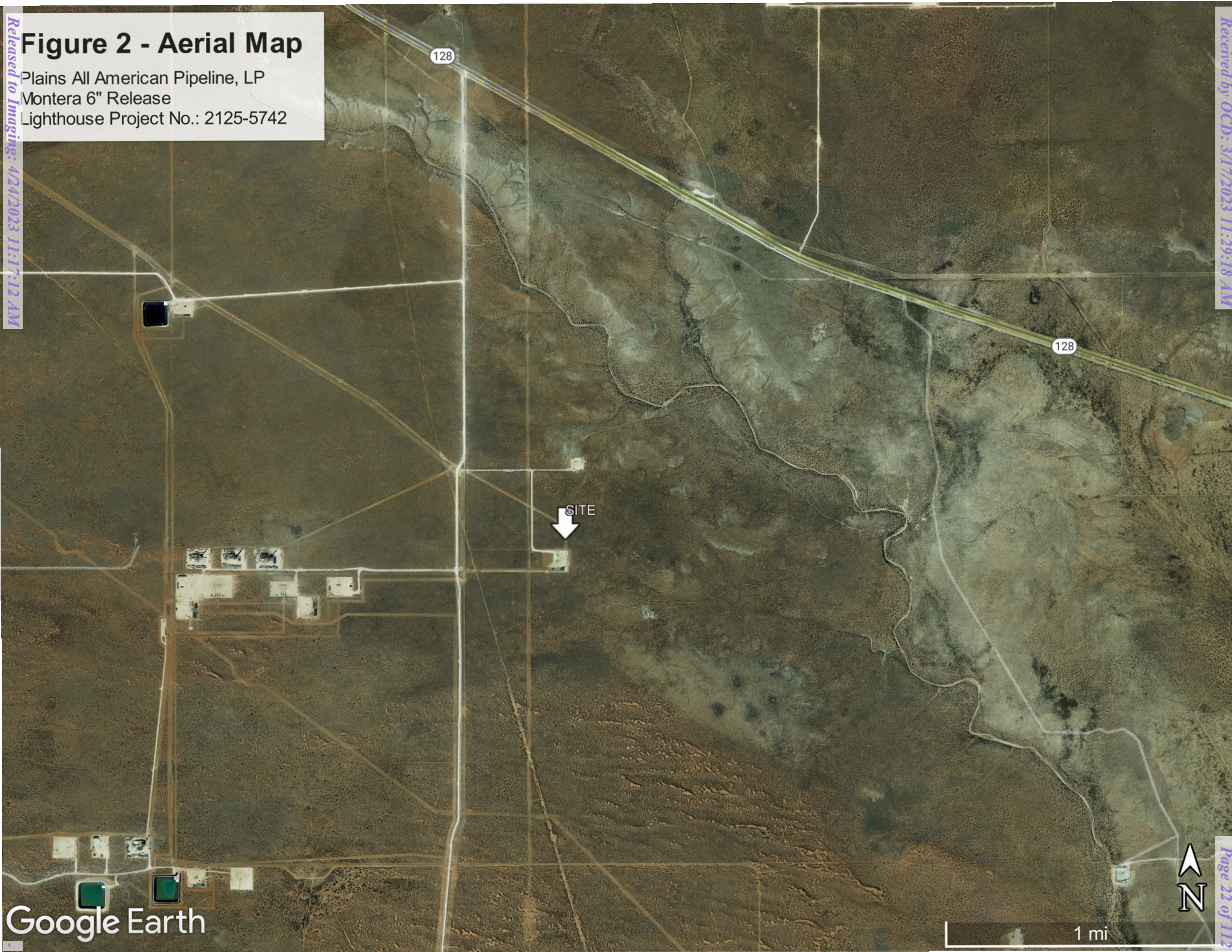


Figure 3 - Sample Location Map

Plains All American Pipeline, LP
Montera 6" Release
Lighthouse Project No.: 2125-5742

Legend

- Confirmation Sample Location
- Extent of Excavation
- Plains Montera 6" Pipeline
- Sidewall Sample Location

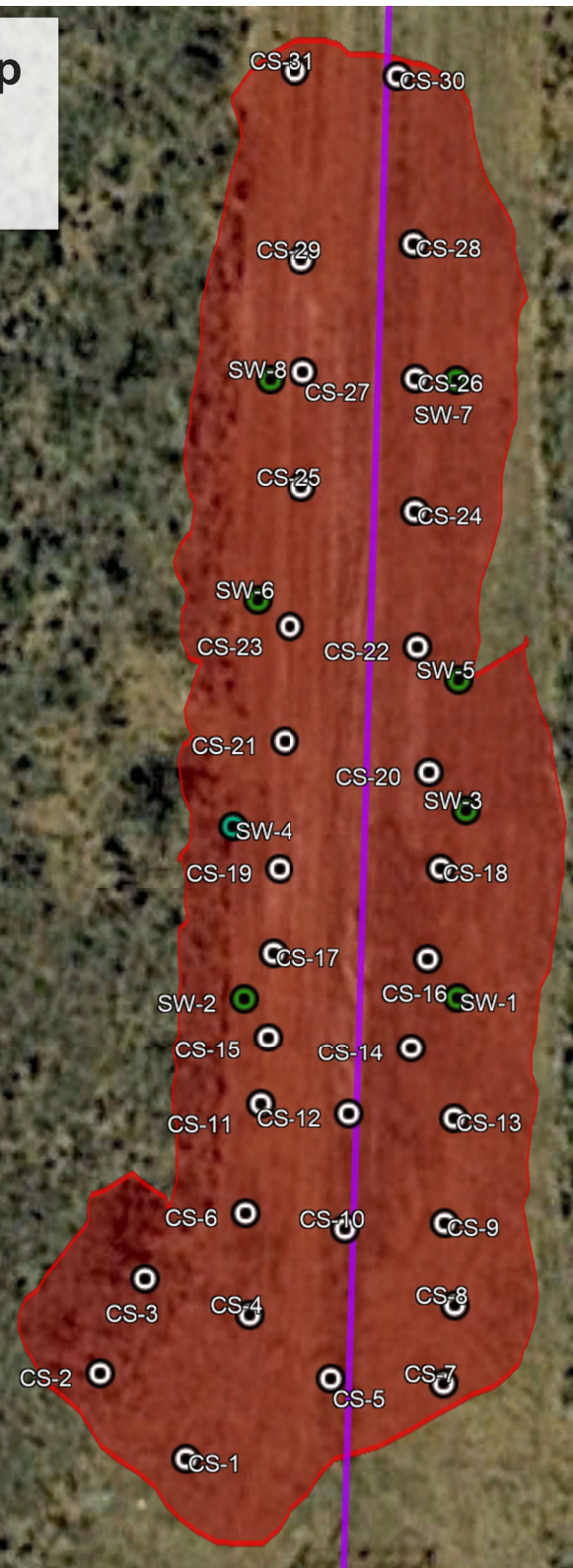


Figure 4 - Proposed Boring Location Map

Plains All American Pipeline, LP
Montera 6" Release
Lighthouse Project Number: 2125-5742

Legend

- Confirmation Sample Location
- Extent of Excavation
- Montera 6" Pipeline
- Proposed Boring Location
- Sidewall Sample Location

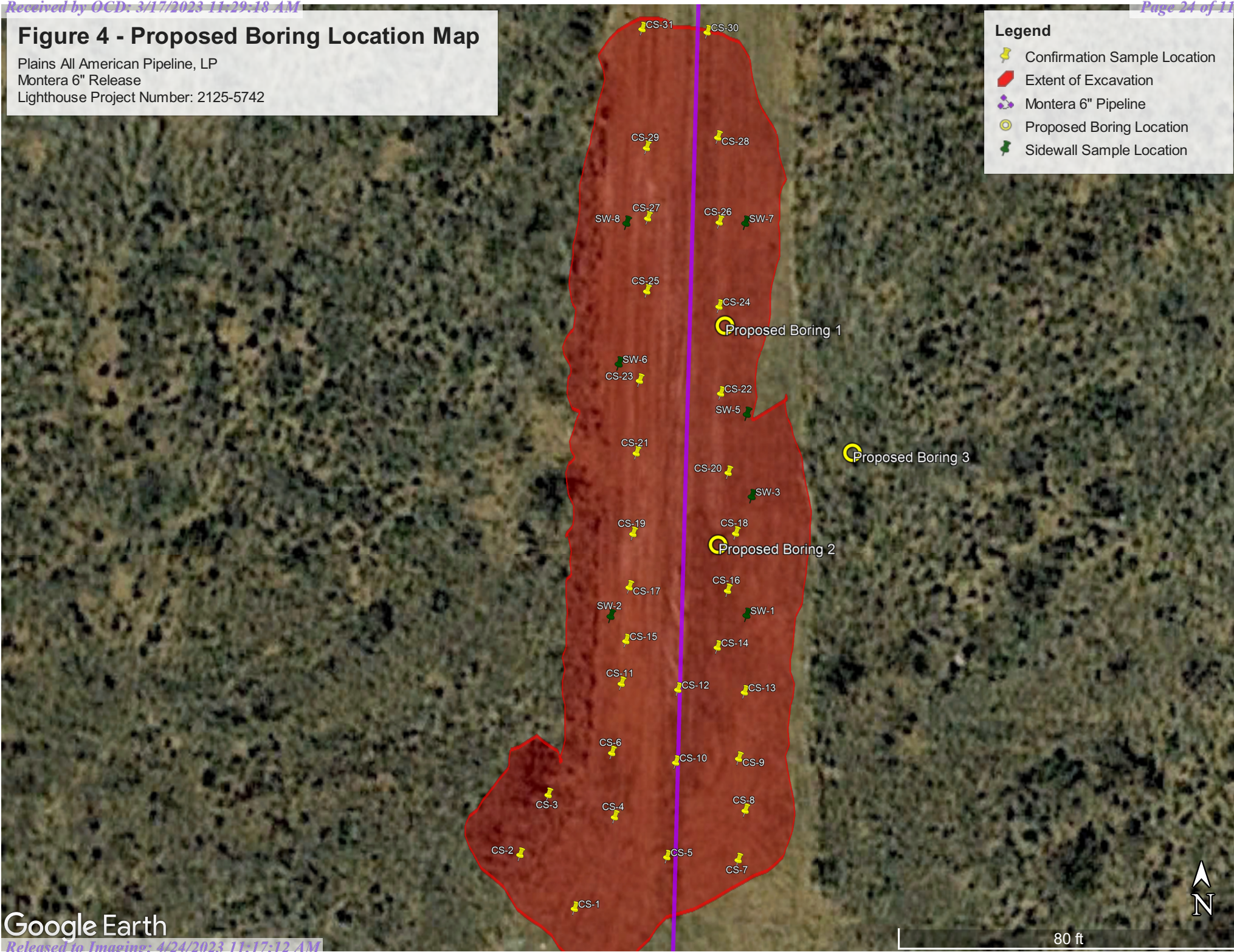


Figure 5 - Karst Topography Map

Plains Montera 6" Release
NMOCD Incident No. nAPP2229253656

Legend

- High
- Low
- Medium
- SITE

SITE



7 mi

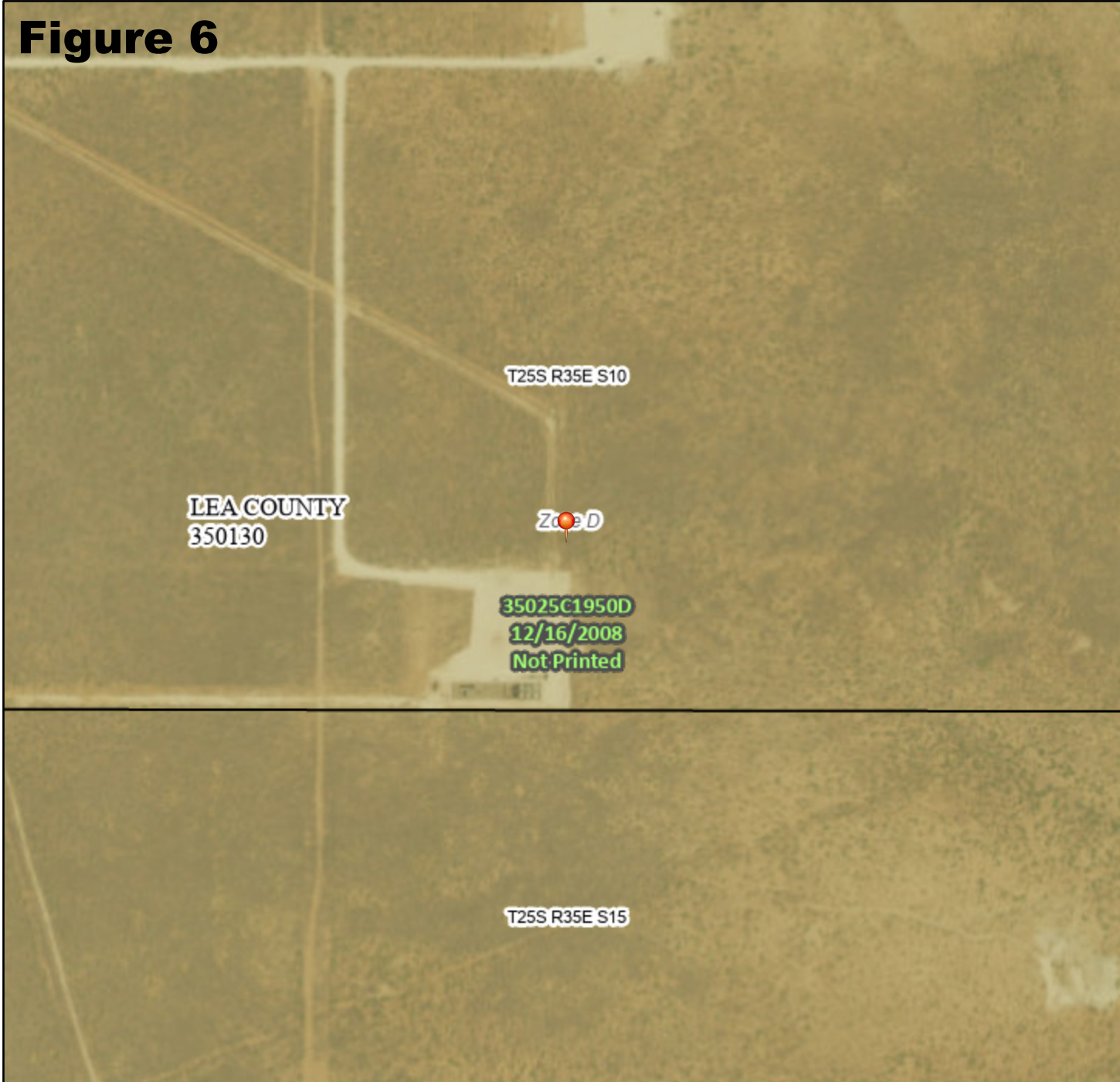
Google Earth

National Flood Hazard Layer FIRMette



103°21'47"W 32°8'35"N

Figure 6



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

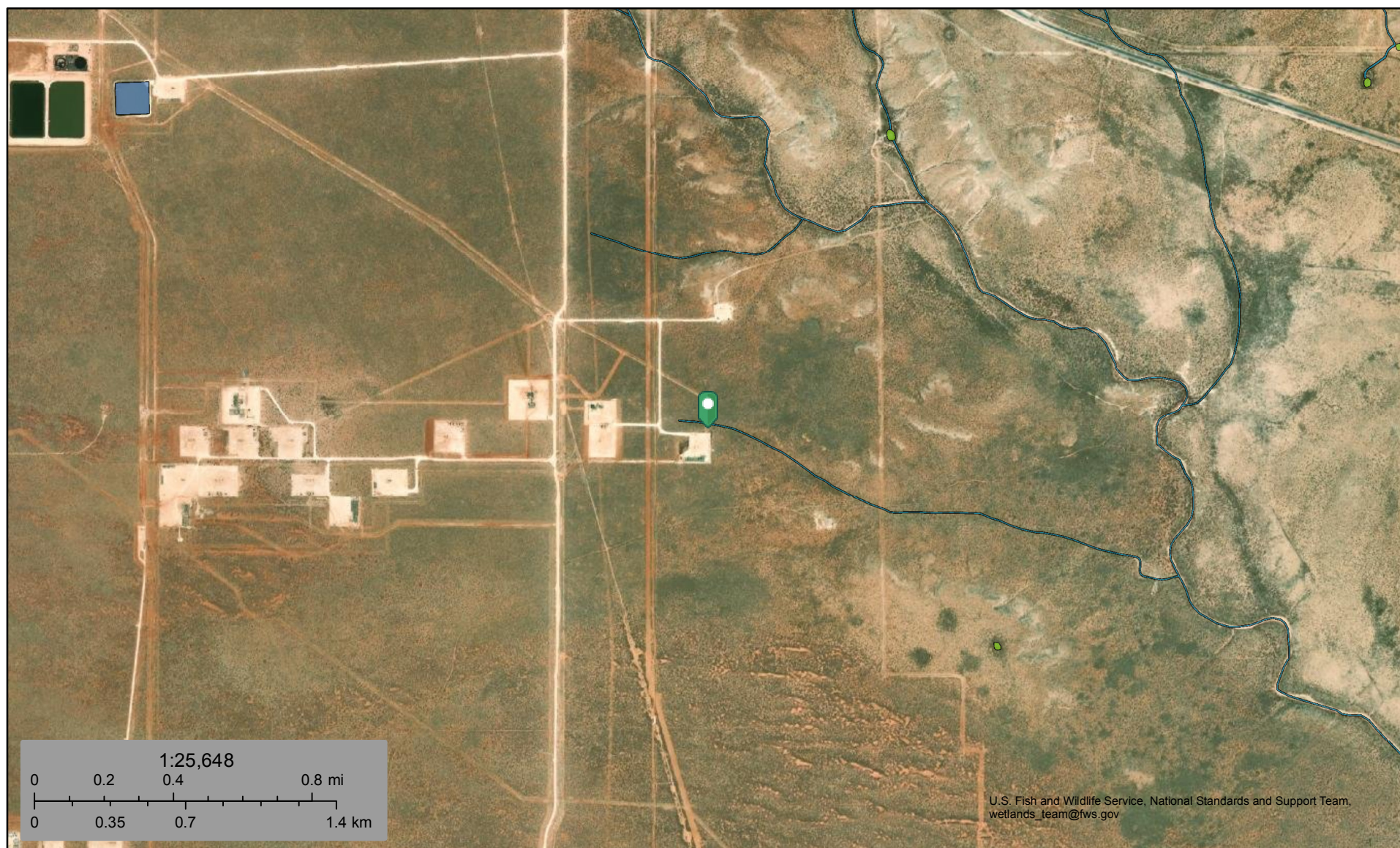
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/14/2023 at 7:23 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.








Figure 7 - Plains Montera 6" Release






February 15, 2023

Wetlands

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland

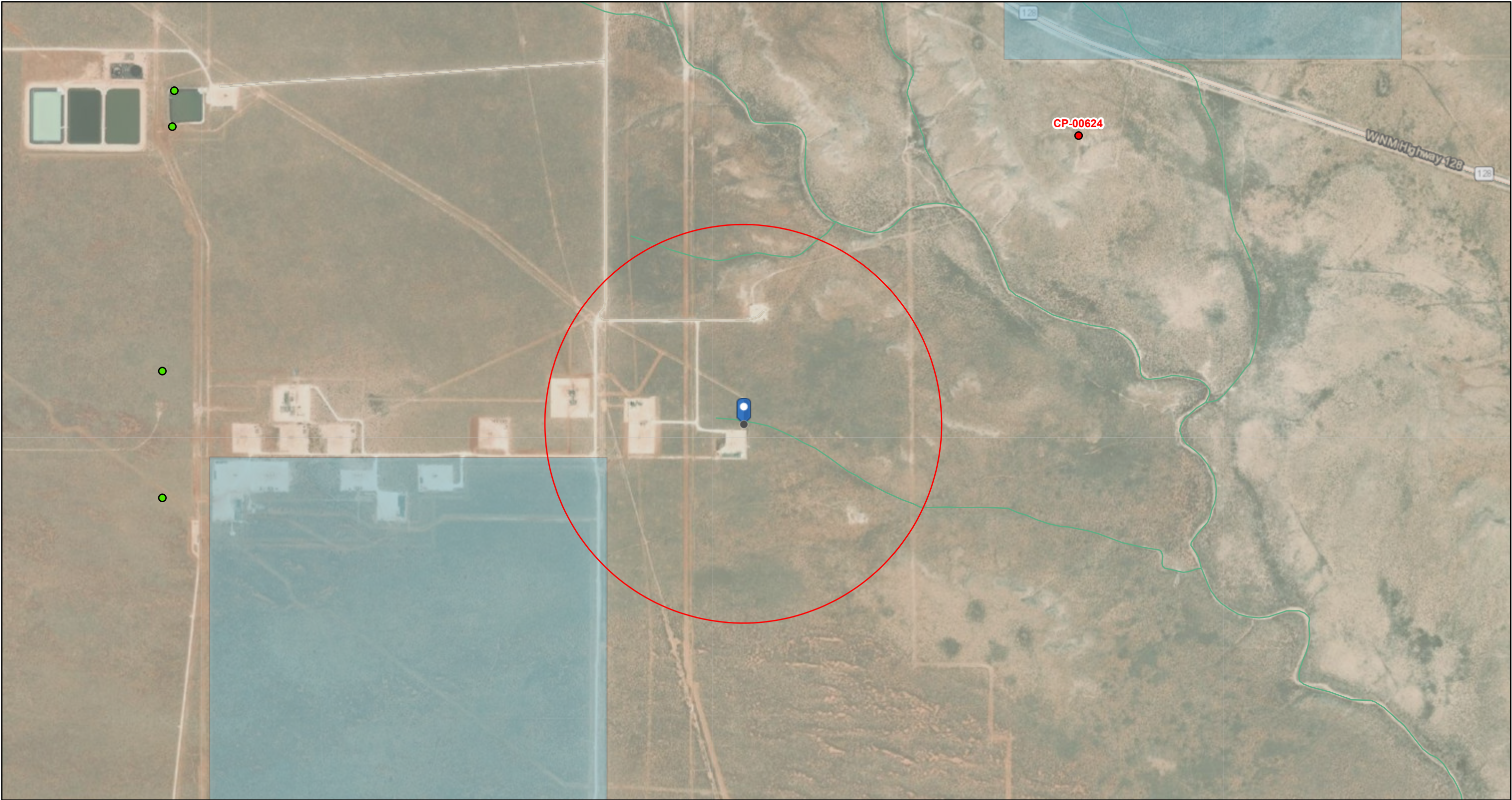
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond

-  Lake
-  Other
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Figure 8

OSE POD Locations Map



2/14/2023, 6:11:34 PM

GIS WATERS PODs

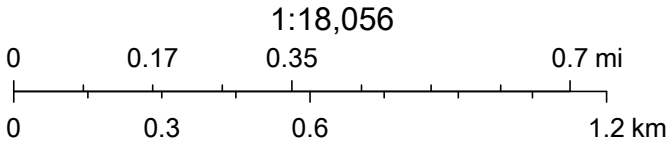
- Pending
- Plugged
- OSE District Boundary

Water Right Regulations

- Closure Area
- New Mexico State Trust Lands
- Both Estates

NHD Flowlines

- Artificial Path
- Stream River
- SiteBoundaries



Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC, Maxar

TABLES



TABLE 1
Soil Floor Sample Analytical Results
Plains All American Pipeline
Montera 6" Release
Lea County, New Mexico
LHS Project ID: 2125-5742
32.138757, -103.358297

Sample ID	Sample Date	Sample Depth (BGS)	TPH (GRO) (mg/Kg)	TPH (DRO) (mg/Kg)	TPH (ORO) (mg/Kg)	TPH (Total) (mg/Kg)	Benzene (mg/Kg)	Total BTEX (mg/Kg)	Chloride (mg/Kg)
NMOCD Closure Criteria			100				10	50	600
Confirmation Soil Samples									
CS-1	12/29/2022	36"	343	2,330	<49.9 U	2,670	NS	NS	<5.00 U
CS-2	12/29/2022	36"	<49.9 U	<49.9 U	<49.9 U	<49.9 U	NS	NS	<5.04 U
CS-3	12/29/2022	30"	<49.9 U	<49.9 U	<49.9 U	<49.9 U	NS	NS	<5.03 U
CS-4	12/29/2022	30"	2,410	4,040	<49.8 U	6,450	NS	NS	<5.05 U
CS-5	12/29/2022	30"	<49.9 U	<49.9 U	<49.9 U	<49.9 U	NS	NS	<4.95 U
CS-6	12/29/2022	0-6"	64	1,600	<50.0 U	1,660	NS	NS	<5.03 U
CS-7	12/29/2022	0-6"	<50.0 U	91.2	<50.0 U	91	NS	NS	37.00
CS-8	12/29/2022	36"	2,820	5,230	<250 U	8,050	NS	NS	<5.00 U
CS-9	12/29/2022	36"	3,020	6470	<250 U	9490	NS	NS	<4.96 U
CS-10	12/29/2022	12-14"	<50.0 U	295	<50.0 U	295	NS	NS	<4.96 U
CS-11	12/29/2022	0-6"	1,380	3,610	<50.0 U	4,990	NS	NS	<4.95 U
CS-12	12/29/2022	6-12"	629	3,590	<49.9 U	4,220	NS	NS	5.95
CS-13	12/29/2022	24"	150	2,280	<49.9 U	2,430	NS	NS	<5.03 U
CS-14	12/29/2022	5'	<50.0 U	297	<50.0 U	297	NS	NS	<5.01 U
CS-15	12/29/2022	48"	1110	5,210	<250 U	6,320	NS	NS	<5.01 U
CS-16	12/29/2022	18'	65	253	<50.0 U	318	NS	NS	5
CS-17	12/29/2022	18'	417	1,300	<50.0 U	1,720	NS	NS	14
CS-18	12/29/2022	18'	3,800	4600	<250 U	8,400	NS	NS	31
CS-19	12/29/2022	18'	5,270	6,230	<249 U	11500	NS	NS	5
CS-20	12/29/2022	18'	1,930	3,790	<49.9 U	5,720	NS	NS	54
CS-21	12/29/2022	18'	1,140	11,700	1,440	14,300	NS	NS	36
CS-22	12/29/2022	18'	4,700	19,500	2,430	26,600	NS	NS	74
CS-23	12/29/2022	18'	2,340	15,300	1,750	19,400	NS	NS	66
CS-24	12/29/2022	18'	2,590	11,300	1,340	15,200	NS	NS	60
CS-25	12/29/2022	18'	6,120	17,300	2,120	25,500	NS	NS	45.5
CS-26	12/29/2022	18'	<50.0 U F1	<50.0 U F1	<50.0 U	<50.0 U	NS	NS	69
CS-27	12/29/2022	18'	<50.0 U	106	<50.0 U	106	NS	NS	48.4
CS-28	12/29/2022	8'	<50.0 U	<50.0 U	<50.0 U	<50.0 U	NS	NS	<5.01 U
CS-29	12/29/2022	8'	<50.0 U	<50.0 U	<50.0 U	<50.0 U	NS	NS	<4.97 U
CS-30	12/29/2022	0-6"	<50.0 U	299	<50.0 U	299	NS	NS	<4.98 U
CS-31	12/29/2022	0-6"	<50.0 U	<50.0 U	<50.0 U	<50.0 U	NS	NS	36

: Indicates sample concentration exceeds Background Averaged Remediation Limit

NOTES:

BGS: below ground surface

mg/Kg: milligrams per Kilogram

NA: Not Applicable

NS: Not Sampled

F1: MS and/or MSD recovery exceeds control limits

*2: Calibration Blank is outside acceptance limits

U: Indicates the analyte was analyzed for but not detected



TABLE 2
Soil Sidewall Sample Analytical Results
Plains All American Pipeline Montero 6"
Release
Lea County, New Mexico
LHS Project ID: 2125-5742 32.138757,
-103.358297

Sample ID	Sample Date	Sample Depth (BGS) (ft)	TPH (GRO) (mg/Kg)	TPH (DRO) (mg/Kg)	TPH (ORO) (mg/Kg)	TPH (Total) (mg/Kg)	Benzene (mg/Kg)	Total BTEX (mg/Kg)	Chloride (mg/Kg)
NMOCD Closure Criteria			100				10	50	600
Confirmation Soil Samples									
SW-1	1/10/2023	10	<49.9 U F1 F2	<49.9 U	<49.9 U	<49.9 U	<0.00201 U	0.0334	46.2
SW-2	1/10/2023	10	1,540	5,690	<49.8 U	7,230	0.47	24.6000	45.8
SW-3	1/10/2023	12	<49.9 U	<49.9 U	<49.9 U	<49.9 U	<0.00199 U	0.0200	111
SW-4	1/10/2023	12	<49.8 U	2,550	<49.8 U	2,550	<0.00199 U	0.0215	72.5
SW-5	1/10/2023	13	<49.9 U	<49.9 U	<49.9 U	<49.9 U	<0.00201 U	<0.00402 U	114
SW-6	1/10/2023	13	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<0.00200 U	0.0066	71.4
SW-7	1/10/2023	11	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<0.00199 U	0.0084	51.8
SW-8	1/10/2023	11	<50.0 U	<50.0 U	<50.0 U	<50.0 U	<0.00199 U	0.0091	34

: Indicates sample concentration exceeds Background Averaged Remediation Limit

NOTES:

BGS: below ground surface

mg/Kg: milligrams per Kilogram

F1: MS and/or MSD recovery exceeds control limits

F2: Indicates the MS/MSD RPD exceeds control limits

U: Indicates the analyte was analyzed for but not detected

LABORATORY REPORTS



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11
- 12
- 13
- 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Simon Hudgens
Lighthouse Environmental Services, Inc
4218 Pasadena Blvd
Pasadena, Texas 77503

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JOB DESCRIPTION

Montera 6" Release
SDG NUMBER 2125-5742

JOB NUMBER

880-23147-1

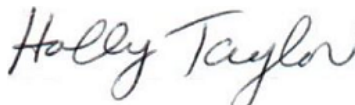
Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Laboratory Job ID: 880-23147-1
SDG: 2125-5742

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Definitions/Glossary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Job ID: 880-23147-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-23147-1

Receipt

The samples were received on 12/29/2022 12:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-23147-A-2-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-4 (880-23147-4), CS-8 (880-23147-8) and CS-11 (880-23147-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-12 (880-23147-12), CS-18 (880-23147-18), CS-19 (880-23147-19) and CS-20 (880-23147-20). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-13 (880-23147-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-43074 and analytical batch 880-43031 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-26 (880-23147-26), CS-27 (880-23147-27), CS-28 (880-23147-28), (880-23147-A-26-C MS) and (880-23147-A-26-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-21 (880-23147-21), CS-22 (880-23147-22), CS-23 (880-23147-23), CS-24 (880-23147-24) and CS-25 (880-23147-25). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43074 and analytical batch 880-43031 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-42887 and analytical batch 880-42998 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-42888 and analytical batch 880-42999 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-1

Date Collected: 12/27/22 11:26

Date Received: 12/29/22 12:05

Sample Depth: 36"

Lab Sample ID: 880-23147-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2670		49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	343		49.9	mg/Kg		01/03/23 11:30	01/04/23 07:18	1
Diesel Range Organics (Over C10-C28)	2330		49.9	mg/Kg		01/03/23 11:30	01/04/23 07:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/04/23 07:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			01/03/23 11:30	01/04/23 07:18	1
o-Terphenyl (Surr)	100		70 - 130			01/03/23 11:30	01/04/23 07:18	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/03/23 14:41	1

Client Sample ID: CS-2

Date Collected: 12/27/22 11:30

Date Received: 12/29/22 12:05

Sample Depth: 24"36"

Lab Sample ID: 880-23147-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 22:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 22:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	117		70 - 130			01/03/23 11:30	01/03/23 22:24	1
o-Terphenyl (Surr)	105		70 - 130			01/03/23 11:30	01/03/23 22:24	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04	mg/Kg			01/03/23 15:05	1

Client Sample ID: CS-3

Date Collected: 12/27/22 11:35

Date Received: 12/29/22 12:05

Sample Depth: 30"

Lab Sample ID: 880-23147-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/04/23 11:53	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-3

Date Collected: 12/27/22 11:35

Date Received: 12/29/22 12:05

Sample Depth: 30"

Lab Sample ID: 880-23147-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	117		70 - 130	01/03/23 11:30	01/03/23 23:31	1
o-Terphenyl (Surr)	105		70 - 130	01/03/23 11:30	01/03/23 23:31	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03	mg/Kg			01/03/23 15:13	1

Client Sample ID: CS-4

Date Collected: 12/27/22 11:40

Date Received: 12/29/22 12:05

Sample Depth: 30"

Lab Sample ID: 880-23147-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6450		49.8	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2410		49.8	mg/Kg		01/03/23 11:30	01/04/23 03:59	1
Diesel Range Organics (Over C10-C28)	4040		49.8	mg/Kg		01/03/23 11:30	01/04/23 03:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/03/23 11:30	01/04/23 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	188	S1+	70 - 130	01/03/23 11:30	01/04/23 03:59	1
o-Terphenyl (Surr)	136	S1+	70 - 130	01/03/23 11:30	01/04/23 03:59	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05	mg/Kg			01/03/23 15:21	1

Client Sample ID: CS-5

Date Collected: 12/27/22 11:45

Date Received: 12/29/22 12:05

Sample Depth: 30"

Lab Sample ID: 880-23147-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:52	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-5

Date Collected: 12/27/22 11:45

Date Received: 12/29/22 12:05

Sample Depth: 30"

Lab Sample ID: 880-23147-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/03/23 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	121		70 - 130			01/03/23 11:30	01/03/23 23:52	1
o-Terphenyl (Surr)	107		70 - 130			01/03/23 11:30	01/03/23 23:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			01/03/23 15:29	1

Client Sample ID: CS-6

Date Collected: 12/27/22 11:50

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1660		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	64.0		50.0	mg/Kg		01/03/23 11:30	01/04/23 03:14	1
Diesel Range Organics (Over C10-C28)	1600		50.0	mg/Kg		01/03/23 11:30	01/04/23 03:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 03:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			01/03/23 11:30	01/04/23 03:14	1
o-Terphenyl (Surr)	102		70 - 130			01/03/23 11:30	01/04/23 03:14	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03	mg/Kg			01/03/23 15:52	1

Client Sample ID: CS-7

Date Collected: 12/27/22 11:55

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	91.2		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 00:15	1
Diesel Range Organics (Over C10-C28)	91.2		50.0	mg/Kg		01/03/23 11:30	01/04/23 00:15	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-7

Date Collected: 12/27/22 11:55

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 00:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			01/03/23 11:30	01/04/23 00:15	1
o-Terphenyl (Surr)	102		70 - 130			01/03/23 11:30	01/04/23 00:15	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.0		5.01	mg/Kg			01/03/23 16:00	1

Client Sample ID: CS-8

Date Collected: 12/27/22 12:00

Date Received: 12/29/22 12:05

Sample Depth: 36"

Lab Sample ID: 880-23147-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8050		250	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2820		250	mg/Kg		01/03/23 11:30	01/04/23 04:43	5
Diesel Range Organics (Over C10-C28)	5230		250	mg/Kg		01/03/23 11:30	01/04/23 04:43	5
Oil Range Organics (Over C28-C36)	<250	U	250	mg/Kg		01/03/23 11:30	01/04/23 04:43	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	176	S1+	70 - 130			01/03/23 11:30	01/04/23 04:43	5
o-Terphenyl (Surr)	139	S1+	70 - 130			01/03/23 11:30	01/04/23 04:43	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/03/23 16:19	1

Client Sample ID: CS-9

Date Collected: 12/27/22 12:05

Date Received: 12/29/22 12:05

Sample Depth: 36"

Lab Sample ID: 880-23147-9

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9490		250	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3020		250	mg/Kg		01/03/23 11:30	01/04/23 05:05	5
Diesel Range Organics (Over C10-C28)	6470		250	mg/Kg		01/03/23 11:30	01/04/23 05:05	5
Oil Range Organics (Over C28-C36)	<250	U	250	mg/Kg		01/03/23 11:30	01/04/23 05:05	5

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-9

Date Collected: 12/27/22 12:05

Date Received: 12/29/22 12:05

Sample Depth: 36"

Lab Sample ID: 880-23147-9

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	123		70 - 130	01/03/23 11:30	01/04/23 05:05	5
o-Terphenyl (Surr)	115		70 - 130	01/03/23 11:30	01/04/23 05:05	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96	mg/Kg			01/03/23 16:28	1

Client Sample ID: CS-10

Date Collected: 12/27/22 12:10

Date Received: 12/29/22 12:05

Sample Depth: 12-14"

Lab Sample ID: 880-23147-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	295		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 00:38	1
Diesel Range Organics (Over C10-C28)	295		50.0	mg/Kg		01/03/23 11:30	01/04/23 00:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	111		70 - 130	01/03/23 11:30	01/04/23 00:38	1
o-Terphenyl (Surr)	97		70 - 130	01/03/23 11:30	01/04/23 00:38	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96	mg/Kg			01/03/23 16:36	1

Client Sample ID: CS-11

Date Collected: 12/27/22 12:15

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4990		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1380		50.0	mg/Kg		01/03/23 11:30	01/04/23 04:21	1
Diesel Range Organics (Over C10-C28)	3610		50.0	mg/Kg		01/03/23 11:30	01/04/23 04:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	158	S1+	70 - 130	01/03/23 11:30	01/04/23 04:21	1
o-Terphenyl (Surr)	117		70 - 130	01/03/23 11:30	01/04/23 04:21	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-11

Date Collected: 12/27/22 12:15

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-11

Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U F1	4.95	mg/Kg			01/03/23 16:44	1

Client Sample ID: CS-12

Date Collected: 12/27/22 12:20

Date Received: 12/29/22 12:05

Sample Depth: 6-12"

Lab Sample ID: 880-23147-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4220		49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	629		49.9	mg/Kg		01/03/23 11:30	01/04/23 06:33	1
Diesel Range Organics (Over C10-C28)	3590		49.9	mg/Kg		01/03/23 11:30	01/04/23 06:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/04/23 06:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	146	S1+	70 - 130			01/03/23 11:30	01/04/23 06:33	1
o-Terphenyl (Surr)	127		70 - 130			01/03/23 11:30	01/04/23 06:33	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.95		5.05	mg/Kg			01/03/23 17:09	1

Client Sample ID: CS-13

Date Collected: 12/27/22 12:25

Date Received: 12/29/22 12:05

Sample Depth: 24"

Lab Sample ID: 880-23147-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2430		49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	150		49.9	mg/Kg		01/03/23 11:30	01/04/23 08:09	1
Diesel Range Organics (Over C10-C28)	2280		49.9	mg/Kg		01/03/23 11:30	01/04/23 08:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/03/23 11:30	01/04/23 08:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	237	S1+	70 - 130			01/03/23 11:30	01/04/23 08:09	1
o-Terphenyl (Surr)	202	S1+	70 - 130			01/03/23 11:30	01/04/23 08:09	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03	mg/Kg			01/03/23 17:18	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-14

Date Collected: 12/27/22 12:30

Date Received: 12/29/22 12:05

Sample Depth: 5'

Lab Sample ID: 880-23147-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	297		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 01:01	1
Diesel Range Organics (Over C10-C28)	297		50.0	mg/Kg		01/03/23 11:30	01/04/23 01:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 01:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130			01/03/23 11:30	01/04/23 01:01	1
o-Terphenyl (Surr)	96		70 - 130			01/03/23 11:30	01/04/23 01:01	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01	mg/Kg			01/03/23 17:43	1

Client Sample ID: CS-15

Date Collected: 12/27/22 12:35

Date Received: 12/29/22 12:05

Sample Depth: 48"

Lab Sample ID: 880-23147-15

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6320		250	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1110		250	mg/Kg		01/03/23 11:30	01/04/23 05:28	5
Diesel Range Organics (Over C10-C28)	5210		250	mg/Kg		01/03/23 11:30	01/04/23 05:28	5
Oil Range Organics (Over C28-C36)	<250	U	250	mg/Kg		01/03/23 11:30	01/04/23 05:28	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	128		70 - 130			01/03/23 11:30	01/04/23 05:28	5
o-Terphenyl (Surr)	119		70 - 130			01/03/23 11:30	01/04/23 05:28	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01	mg/Kg			01/03/23 17:51	1

Client Sample ID: CS-16

Date Collected: 12/27/22 12:40

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	318		50.0	mg/Kg			01/04/23 11:53	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-16

Date Collected: 12/27/22 12:40

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	65.0		50.0	mg/Kg		01/03/23 11:30	01/04/23 01:23	1
Diesel Range Organics (Over C10-C28)	253		50.0	mg/Kg		01/03/23 11:30	01/04/23 01:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 01:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	109		70 - 130			01/03/23 11:30	01/04/23 01:23	1
o-Terphenyl (Surr)	96		70 - 130			01/03/23 11:30	01/04/23 01:23	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.03		5.02	mg/Kg			01/03/23 17:59	1

Client Sample ID: CS-17

Date Collected: 12/27/22 12:45

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1720		50.0	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	417		50.0	mg/Kg		01/03/23 11:30	01/04/23 01:46	1
Diesel Range Organics (Over C10-C28)	1300		50.0	mg/Kg		01/03/23 11:30	01/04/23 01:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/04/23 01:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	123		70 - 130			01/03/23 11:30	01/04/23 01:46	1
o-Terphenyl (Surr)	102		70 - 130			01/03/23 11:30	01/04/23 01:46	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.3		5.00	mg/Kg			01/03/23 18:08	1

Client Sample ID: CS-18

Date Collected: 12/27/22 12:50

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	8400		250	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	3800		250	mg/Kg		01/03/23 11:30	01/04/23 05:50	5

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-18

Date Collected: 12/27/22 12:50

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	4600		250	mg/Kg		01/03/23 11:30	01/04/23 05:50	5
Oil Range Organics (Over C28-C36)	<250	U	250	mg/Kg		01/03/23 11:30	01/04/23 05:50	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	132	S1+	70 - 130			01/03/23 11:30	01/04/23 05:50	5
o-Terphenyl (Surr)	109		70 - 130			01/03/23 11:30	01/04/23 05:50	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.8		4.97	mg/Kg			01/03/23 18:16	1

Client Sample ID: CS-19

Date Collected: 12/27/22 12:55

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	11500		249	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	5270		249	mg/Kg		01/03/23 11:30	01/04/23 06:12	5
Diesel Range Organics (Over C10-C28)	6230		249	mg/Kg		01/03/23 11:30	01/04/23 06:12	5
Oil Range Organics (Over C28-C36)	<249	U	249	mg/Kg		01/03/23 11:30	01/04/23 06:12	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	187	S1+	70 - 130			01/03/23 11:30	01/04/23 06:12	5
o-Terphenyl (Surr)	127		70 - 130			01/03/23 11:30	01/04/23 06:12	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.26		4.99	mg/Kg			01/03/23 18:24	1

Client Sample ID: CS-20

Date Collected: 12/27/22 13:00

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5720		49.9	mg/Kg			01/04/23 11:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1930		49.9	mg/Kg		01/03/23 11:30	01/04/23 06:55	1
Diesel Range Organics (Over C10-C28)	3790		49.9	mg/Kg		01/03/23 11:30	01/04/23 06:55	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-20

Date Collected: 12/27/22 13:00

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	-	01/03/23 11:30	01/04/23 06:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	171	S1+	70 - 130			01/03/23 11:30	01/04/23 06:55	1
o-Terphenyl (Surr)	126		70 - 130			01/03/23 11:30	01/04/23 06:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.9		5.03	mg/Kg	-		01/03/23 18:33	1

Client Sample ID: CS-21

Date Collected: 12/27/22 13:05

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-21

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	14300		249	mg/Kg	-		01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1140		249	mg/Kg	-	01/03/23 11:37	01/04/23 04:21	5
Diesel Range Organics (Over C10-C28)	11700		249	mg/Kg	-	01/03/23 11:37	01/04/23 04:21	5
Oil Range Organics (Over C28-C36)	1440		249	mg/Kg	-	01/03/23 11:37	01/04/23 04:21	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	161	S1+	70 - 130			01/03/23 11:37	01/04/23 04:21	5
o-Terphenyl (Surr)	191	S1+	70 - 130			01/03/23 11:37	01/04/23 04:21	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.6	F1	5.00	mg/Kg	-		01/03/23 14:06	1

Client Sample ID: CS-22

Date Collected: 12/27/22 13:10

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-22

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	26600		250	mg/Kg	-		01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	4700		250	mg/Kg	-	01/03/23 11:37	01/04/23 04:43	5
Diesel Range Organics (Over C10-C28)	19500		250	mg/Kg	-	01/03/23 11:37	01/04/23 04:43	5

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-22

Date Collected: 12/27/22 13:10

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-22

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	2430		250	mg/Kg		01/03/23 11:37	01/04/23 04:43	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	391	S1+	70 - 130			01/03/23 11:37	01/04/23 04:43	5
o-Terphenyl (Surr)	344	S1+	70 - 130			01/03/23 11:37	01/04/23 04:43	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.9		5.02	mg/Kg			01/03/23 14:20	1

Client Sample ID: CS-23

Date Collected: 12/27/22 13:15

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-23

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19400		250	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2340		250	mg/Kg		01/03/23 11:37	01/04/23 05:05	5
Diesel Range Organics (Over C10-C28)	15300		250	mg/Kg		01/03/23 11:37	01/04/23 05:05	5
Oil Range Organics (Over C28-C36)	1750		250	mg/Kg		01/03/23 11:37	01/04/23 05:05	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	297	S1+	70 - 130			01/03/23 11:37	01/04/23 05:05	5
o-Terphenyl (Surr)	250	S1+	70 - 130			01/03/23 11:37	01/04/23 05:05	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.6		5.00	mg/Kg			01/03/23 14:25	1

Client Sample ID: CS-24

Date Collected: 12/27/22 13:20

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-24

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	15200		249	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	2590		249	mg/Kg		01/03/23 11:37	01/04/23 05:28	5
Diesel Range Organics (Over C10-C28)	11300		249	mg/Kg		01/03/23 11:37	01/04/23 05:28	5

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-24

Date Collected: 12/27/22 13:20

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-24

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	1340		249	mg/Kg		01/03/23 11:37	01/04/23 05:28	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	229	S1+	70 - 130			01/03/23 11:37	01/04/23 05:28	5
o-Terphenyl (Surr)	188	S1+	70 - 130			01/03/23 11:37	01/04/23 05:28	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.3		4.98	mg/Kg			01/03/23 14:39	1

Client Sample ID: CS-25

Date Collected: 12/27/22 13:25

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	25500		249	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	6120		249	mg/Kg		01/03/23 11:37	01/04/23 05:50	5
Diesel Range Organics (Over C10-C28)	17300		249	mg/Kg		01/03/23 11:37	01/04/23 05:50	5
Oil Range Organics (Over C28-C36)	2120		249	mg/Kg		01/03/23 11:37	01/04/23 05:50	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	459	S1+	70 - 130			01/03/23 11:37	01/04/23 05:50	5
o-Terphenyl (Surr)	309	S1+	70 - 130			01/03/23 11:37	01/04/23 05:50	5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.5		4.95	mg/Kg			01/03/23 14:44	1

Client Sample ID: CS-26

Date Collected: 12/27/22 13:30

Date Received: 12/29/22 12:05

Sample Depth: 17'

Lab Sample ID: 880-23147-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	50.0	mg/Kg		01/03/23 11:37	01/03/23 22:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0	mg/Kg		01/03/23 11:37	01/03/23 22:24	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-26

Date Collected: 12/27/22 13:30

Date Received: 12/29/22 12:05

Sample Depth: 17'

Lab Sample ID: 880-23147-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			01/03/23 11:37	01/03/23 22:24	1
o-Terphenyl (Surr)	131	S1+	70 - 130			01/03/23 11:37	01/03/23 22:24	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.5		5.00	mg/Kg			01/03/23 14:48	1

Client Sample ID: CS-27

Date Collected: 12/27/22 13:35

Date Received: 12/29/22 12:05

Sample Depth: 18'

Lab Sample ID: 880-23147-27

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	106		50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 23:31	1
Diesel Range Organics (Over C10-C28)	106		50.0	mg/Kg		01/03/23 11:37	01/03/23 23:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	122		70 - 130			01/03/23 11:37	01/03/23 23:31	1
o-Terphenyl (Surr)	132	S1+	70 - 130			01/03/23 11:37	01/03/23 23:31	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.4		4.99	mg/Kg			01/03/23 14:53	1

Client Sample ID: CS-28

Date Collected: 12/27/22 13:40

Date Received: 12/29/22 12:05

Sample Depth: 8'

Lab Sample ID: 880-23147-28

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 23:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 23:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 23:52	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-28

Date Collected: 12/27/22 13:40

Date Received: 12/29/22 12:05

Sample Depth: 8'

Lab Sample ID: 880-23147-28

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	139	S1+	70 - 130	01/03/23 11:37	01/03/23 23:52	1
o-Terphenyl (Surr)	141	S1+	70 - 130	01/03/23 11:37	01/03/23 23:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01	mg/Kg			01/03/23 14:58	1

Client Sample ID: CS-29

Date Collected: 12/27/22 13:45

Date Received: 12/29/22 12:05

Sample Depth: 8'

Lab Sample ID: 880-23147-29

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 00:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 00:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130	01/03/23 11:37	01/04/23 00:15	1
o-Terphenyl (Surr)	119		70 - 130	01/03/23 11:37	01/04/23 00:15	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97	mg/Kg			01/03/23 15:03	1

Client Sample ID: CS-30

Date Collected: 12/27/22 13:50

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-30

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	299		50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 00:38	1
Diesel Range Organics (Over C10-C28)	299		50.0	mg/Kg		01/03/23 11:37	01/04/23 00:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130	01/03/23 11:37	01/04/23 00:38	1
o-Terphenyl (Surr)	118		70 - 130	01/03/23 11:37	01/04/23 00:38	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-30

Date Collected: 12/27/22 13:50

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-30

Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98	mg/Kg			01/03/23 15:16	1

Client Sample ID: CS-31

Date Collected: 12/27/22 13:55

Date Received: 12/29/22 12:05

Sample Depth: 0-6"

Lab Sample ID: 880-23147-31

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/04/23 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 01:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 01:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/04/23 01:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	114		70 - 130			01/03/23 11:37	01/04/23 01:01	1
o-Terphenyl (Surr)	124		70 - 130			01/03/23 11:37	01/04/23 01:01	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.7		4.96	mg/Kg			12/31/22 05:12	1

Surrogate Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-23147-1	CS-1	118	100
880-23147-2	CS-2	117	105
880-23147-2 MS	CS-2	133 S1+	106
880-23147-2 MSD	CS-2	127	102
880-23147-3	CS-3	117	105
880-23147-4	CS-4	188 S1+	136 S1+
880-23147-5	CS-5	121	107
880-23147-6	CS-6	118	102
880-23147-7	CS-7	118	102
880-23147-8	CS-8	176 S1+	139 S1+
880-23147-9	CS-9	123	115
880-23147-10	CS-10	111	97
880-23147-11	CS-11	158 S1+	117
880-23147-12	CS-12	146 S1+	127
880-23147-13	CS-13	237 S1+	202 S1+
880-23147-14	CS-14	110	96
880-23147-15	CS-15	128	119
880-23147-16	CS-16	109	96
880-23147-17	CS-17	123	102
880-23147-18	CS-18	132 S1+	109
880-23147-19	CS-19	187 S1+	127
880-23147-20	CS-20	171 S1+	126
880-23147-21	CS-21	161 S1+	191 S1+
880-23147-22	CS-22	391 S1+	344 S1+
880-23147-23	CS-23	297 S1+	250 S1+
880-23147-24	CS-24	229 S1+	188 S1+
880-23147-25	CS-25	459 S1+	309 S1+
880-23147-26	CS-26	118	131 S1+
880-23147-26 MS	CS-26	128	133 S1+
880-23147-26 MSD	CS-26	128	134 S1+
880-23147-27	CS-27	122	132 S1+
880-23147-28	CS-28	139 S1+	141 S1+
880-23147-29	CS-29	110	119
880-23147-30	CS-30	110	118
880-23147-31	CS-31	114	124
LCS 880-43073/2-A	Lab Control Sample	95	83
LCS 880-43074/2-A	Lab Control Sample	92	96
LCSD 880-43073/3-A	Lab Control Sample Dup	115	98
LCSD 880-43074/3-A	Lab Control Sample Dup	92	99
MB 880-43073/1-A	Method Blank	113	104
MB 880-43074/1-A	Method Blank	114	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Eurofins Midland

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

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

Lab Sample ID: MB 880-43073/1-A

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43073

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/03/23 21:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/03/23 21:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:30	01/03/23 21:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	113		70 - 130			01/03/23 11:30	01/03/23 21:17	1
o-Terphenyl (Surr)	104		70 - 130			01/03/23 11:30	01/03/23 21:17	1

Lab Sample ID: LCS 880-43073/2-A

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 43073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	941.1		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	905.4		mg/Kg		91	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane (Surr)	95		70 - 130				
o-Terphenyl (Surr)	83		70 - 130				

Lab Sample ID: LCSD 880-43073/3-A

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43073

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1049		mg/Kg		105	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg		107	70 - 130	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	115		70 - 130						
o-Terphenyl (Surr)	98		70 - 130						

Lab Sample ID: 880-23147-2 MS

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: CS-2

Prep Type: Total/NA

Prep Batch: 43073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1195		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1176		mg/Kg		118	70 - 130

Eurofins Midland

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

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

Lab Sample ID: 880-23147-2 MS

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: CS-2

Prep Type: Total/NA

Prep Batch: 43073

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	133	S1+	70 - 130
o-Terphenyl (Surr)	106		70 - 130

Lab Sample ID: 880-23147-2 MSD

Matrix: Solid

Analysis Batch: 43029

Client Sample ID: CS-2

Prep Type: Total/NA

Prep Batch: 43073

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1167		mg/Kg		115	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1106		mg/Kg		111	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	127		70 - 130
o-Terphenyl (Surr)	102		70 - 130

Lab Sample ID: MB 880-43074/1-A

Matrix: Solid

Analysis Batch: 43031

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43074

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 21:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 21:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/03/23 11:37	01/03/23 21:17	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane (Surr)	114		70 - 130	01/03/23 11:37	01/03/23 21:17	1
o-Terphenyl (Surr)	133	S1+	70 - 130	01/03/23 11:37	01/03/23 21:17	1

Lab Sample ID: LCS 880-43074/2-A

Matrix: Solid

Analysis Batch: 43031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 43074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	902.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	976.1		mg/Kg		98	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	92		70 - 130
o-Terphenyl (Surr)	96		70 - 130

Eurofins Midland

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

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

Lab Sample ID: LCSD 880-43074/3-A

Matrix: Solid

Analysis Batch: 43031

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43074

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1038		mg/Kg		104	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	977.1		mg/Kg		98	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	92		70 - 130						
o-Terphenyl (Surr)	99		70 - 130						

Lab Sample ID: 880-23147-26 MS

Matrix: Solid

Analysis Batch: 43031

Client Sample ID: CS-26

Prep Type: Total/NA

Prep Batch: 43074

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	1347	F1	mg/Kg		132	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	999	1604	F1	mg/Kg		156	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane (Surr)	128		70 - 130								
o-Terphenyl (Surr)	133	S1+	70 - 130								

Lab Sample ID: 880-23147-26 MSD

Matrix: Solid

Analysis Batch: 43031

Client Sample ID: CS-26

Prep Type: Total/NA

Prep Batch: 43074

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	1359	F1	mg/Kg		133	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	999	1616	F1	mg/Kg		157	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane (Surr)	128		70 - 130								
o-Terphenyl (Surr)	134	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-42868/1-A

Matrix: Solid

Analysis Batch: 42948

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			12/31/22 02:51	1

Eurofins Midland

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montero 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-42868/2-A

Matrix: Solid

Analysis Batch: 42948

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	263.9		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-42868/3-A

Matrix: Solid

Analysis Batch: 42948

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256.2		mg/Kg		102	90 - 110	3	20

Lab Sample ID: MB 880-42887/1-A

Matrix: Solid

Analysis Batch: 42998

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/03/23 12:01	1

Lab Sample ID: LCS 880-42887/2-A

Matrix: Solid

Analysis Batch: 42998

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.9		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-42887/3-A

Matrix: Solid

Analysis Batch: 42998

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	260.2		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-23147-21 MS

Matrix: Solid

Analysis Batch: 42998

Client Sample ID: CS-21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	35.6	F1	250	314.8	F1	mg/Kg		112	90 - 110

Lab Sample ID: 880-23147-21 MSD

Matrix: Solid

Analysis Batch: 42998

Client Sample ID: CS-21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.6	F1	250	315.8	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: MB 880-42888/1-A

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/03/23 14:17	1

Eurofins Midland

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-42888/2-A

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	267.9		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-42888/3-A

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	257.3		mg/Kg		103	90 - 110	4	20

Lab Sample ID: 880-23147-1 MS

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: CS-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<5.00	U	250	259.6		mg/Kg		104	90 - 110

Lab Sample ID: 880-23147-1 MSD

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: CS-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<5.00	U	250	270.0		mg/Kg		108	90 - 110	4	20

Lab Sample ID: 880-23147-11 MS

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: CS-11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<4.95	U F1	248	231.8		mg/Kg		92	90 - 110

Lab Sample ID: 880-23147-11 MSD

Matrix: Solid

Analysis Batch: 42999

Client Sample ID: CS-11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.95	U F1	248	210.8	F1	mg/Kg		84	90 - 110	10	20

Eurofins Midland

QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

GC Semi VOA

Analysis Batch: 43029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-1	CS-1	Total/NA	Solid	8015B NM	43073
880-23147-2	CS-2	Total/NA	Solid	8015B NM	43073
880-23147-3	CS-3	Total/NA	Solid	8015B NM	43073
880-23147-4	CS-4	Total/NA	Solid	8015B NM	43073
880-23147-5	CS-5	Total/NA	Solid	8015B NM	43073
880-23147-6	CS-6	Total/NA	Solid	8015B NM	43073
880-23147-7	CS-7	Total/NA	Solid	8015B NM	43073
880-23147-8	CS-8	Total/NA	Solid	8015B NM	43073
880-23147-9	CS-9	Total/NA	Solid	8015B NM	43073
880-23147-10	CS-10	Total/NA	Solid	8015B NM	43073
880-23147-11	CS-11	Total/NA	Solid	8015B NM	43073
880-23147-12	CS-12	Total/NA	Solid	8015B NM	43073
880-23147-13	CS-13	Total/NA	Solid	8015B NM	43073
880-23147-14	CS-14	Total/NA	Solid	8015B NM	43073
880-23147-15	CS-15	Total/NA	Solid	8015B NM	43073
880-23147-16	CS-16	Total/NA	Solid	8015B NM	43073
880-23147-17	CS-17	Total/NA	Solid	8015B NM	43073
880-23147-18	CS-18	Total/NA	Solid	8015B NM	43073
880-23147-19	CS-19	Total/NA	Solid	8015B NM	43073
880-23147-20	CS-20	Total/NA	Solid	8015B NM	43073
MB 880-43073/1-A	Method Blank	Total/NA	Solid	8015B NM	43073
LCS 880-43073/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43073
LCSD 880-43073/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43073
880-23147-2 MS	CS-2	Total/NA	Solid	8015B NM	43073
880-23147-2 MSD	CS-2	Total/NA	Solid	8015B NM	43073

Analysis Batch: 43031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-21	CS-21	Total/NA	Solid	8015B NM	43074
880-23147-22	CS-22	Total/NA	Solid	8015B NM	43074
880-23147-23	CS-23	Total/NA	Solid	8015B NM	43074
880-23147-24	CS-24	Total/NA	Solid	8015B NM	43074
880-23147-25	CS-25	Total/NA	Solid	8015B NM	43074
880-23147-26	CS-26	Total/NA	Solid	8015B NM	43074
880-23147-27	CS-27	Total/NA	Solid	8015B NM	43074
880-23147-28	CS-28	Total/NA	Solid	8015B NM	43074
880-23147-29	CS-29	Total/NA	Solid	8015B NM	43074
880-23147-30	CS-30	Total/NA	Solid	8015B NM	43074
880-23147-31	CS-31	Total/NA	Solid	8015B NM	43074
MB 880-43074/1-A	Method Blank	Total/NA	Solid	8015B NM	43074
LCS 880-43074/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43074
LCSD 880-43074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43074
880-23147-26 MS	CS-26	Total/NA	Solid	8015B NM	43074
880-23147-26 MSD	CS-26	Total/NA	Solid	8015B NM	43074

Prep Batch: 43073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-1	CS-1	Total/NA	Solid	8015NM Prep	
880-23147-2	CS-2	Total/NA	Solid	8015NM Prep	
880-23147-3	CS-3	Total/NA	Solid	8015NM Prep	
880-23147-4	CS-4	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

GC Semi VOA (Continued)

Prep Batch: 43073 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-5	CS-5	Total/NA	Solid	8015NM Prep	
880-23147-6	CS-6	Total/NA	Solid	8015NM Prep	
880-23147-7	CS-7	Total/NA	Solid	8015NM Prep	
880-23147-8	CS-8	Total/NA	Solid	8015NM Prep	
880-23147-9	CS-9	Total/NA	Solid	8015NM Prep	
880-23147-10	CS-10	Total/NA	Solid	8015NM Prep	
880-23147-11	CS-11	Total/NA	Solid	8015NM Prep	
880-23147-12	CS-12	Total/NA	Solid	8015NM Prep	
880-23147-13	CS-13	Total/NA	Solid	8015NM Prep	
880-23147-14	CS-14	Total/NA	Solid	8015NM Prep	
880-23147-15	CS-15	Total/NA	Solid	8015NM Prep	
880-23147-16	CS-16	Total/NA	Solid	8015NM Prep	
880-23147-17	CS-17	Total/NA	Solid	8015NM Prep	
880-23147-18	CS-18	Total/NA	Solid	8015NM Prep	
880-23147-19	CS-19	Total/NA	Solid	8015NM Prep	
880-23147-20	CS-20	Total/NA	Solid	8015NM Prep	
MB 880-43073/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43073/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43073/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23147-2 MS	CS-2	Total/NA	Solid	8015NM Prep	
880-23147-2 MSD	CS-2	Total/NA	Solid	8015NM Prep	

Prep Batch: 43074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-21	CS-21	Total/NA	Solid	8015NM Prep	
880-23147-22	CS-22	Total/NA	Solid	8015NM Prep	
880-23147-23	CS-23	Total/NA	Solid	8015NM Prep	
880-23147-24	CS-24	Total/NA	Solid	8015NM Prep	
880-23147-25	CS-25	Total/NA	Solid	8015NM Prep	
880-23147-26	CS-26	Total/NA	Solid	8015NM Prep	
880-23147-27	CS-27	Total/NA	Solid	8015NM Prep	
880-23147-28	CS-28	Total/NA	Solid	8015NM Prep	
880-23147-29	CS-29	Total/NA	Solid	8015NM Prep	
880-23147-30	CS-30	Total/NA	Solid	8015NM Prep	
880-23147-31	CS-31	Total/NA	Solid	8015NM Prep	
MB 880-43074/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43074/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23147-26 MS	CS-26	Total/NA	Solid	8015NM Prep	
880-23147-26 MSD	CS-26	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-1	CS-1	Total/NA	Solid	8015 NM	
880-23147-2	CS-2	Total/NA	Solid	8015 NM	
880-23147-3	CS-3	Total/NA	Solid	8015 NM	
880-23147-4	CS-4	Total/NA	Solid	8015 NM	
880-23147-5	CS-5	Total/NA	Solid	8015 NM	
880-23147-6	CS-6	Total/NA	Solid	8015 NM	
880-23147-7	CS-7	Total/NA	Solid	8015 NM	
880-23147-8	CS-8	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

GC Semi VOA (Continued)

Analysis Batch: 43157 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-9	CS-9	Total/NA	Solid	8015 NM	
880-23147-10	CS-10	Total/NA	Solid	8015 NM	
880-23147-11	CS-11	Total/NA	Solid	8015 NM	
880-23147-12	CS-12	Total/NA	Solid	8015 NM	
880-23147-13	CS-13	Total/NA	Solid	8015 NM	
880-23147-14	CS-14	Total/NA	Solid	8015 NM	
880-23147-15	CS-15	Total/NA	Solid	8015 NM	
880-23147-16	CS-16	Total/NA	Solid	8015 NM	
880-23147-17	CS-17	Total/NA	Solid	8015 NM	
880-23147-18	CS-18	Total/NA	Solid	8015 NM	
880-23147-19	CS-19	Total/NA	Solid	8015 NM	
880-23147-20	CS-20	Total/NA	Solid	8015 NM	
880-23147-21	CS-21	Total/NA	Solid	8015 NM	
880-23147-22	CS-22	Total/NA	Solid	8015 NM	
880-23147-23	CS-23	Total/NA	Solid	8015 NM	
880-23147-24	CS-24	Total/NA	Solid	8015 NM	
880-23147-25	CS-25	Total/NA	Solid	8015 NM	
880-23147-26	CS-26	Total/NA	Solid	8015 NM	
880-23147-27	CS-27	Total/NA	Solid	8015 NM	
880-23147-28	CS-28	Total/NA	Solid	8015 NM	
880-23147-29	CS-29	Total/NA	Solid	8015 NM	
880-23147-30	CS-30	Total/NA	Solid	8015 NM	
880-23147-31	CS-31	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 42868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-31	CS-31	Soluble	Solid	DI Leach	
MB 880-42868/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-42868/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-42868/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 42887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-21	CS-21	Soluble	Solid	DI Leach	
880-23147-22	CS-22	Soluble	Solid	DI Leach	
880-23147-23	CS-23	Soluble	Solid	DI Leach	
880-23147-24	CS-24	Soluble	Solid	DI Leach	
880-23147-25	CS-25	Soluble	Solid	DI Leach	
880-23147-26	CS-26	Soluble	Solid	DI Leach	
880-23147-27	CS-27	Soluble	Solid	DI Leach	
880-23147-28	CS-28	Soluble	Solid	DI Leach	
880-23147-29	CS-29	Soluble	Solid	DI Leach	
880-23147-30	CS-30	Soluble	Solid	DI Leach	
MB 880-42887/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-42887/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-42887/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-23147-21 MS	CS-21	Soluble	Solid	DI Leach	
880-23147-21 MSD	CS-21	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

HPLC/IC

Leach Batch: 42888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-1	CS-1	Soluble	Solid	DI Leach	
880-23147-2	CS-2	Soluble	Solid	DI Leach	
880-23147-3	CS-3	Soluble	Solid	DI Leach	
880-23147-4	CS-4	Soluble	Solid	DI Leach	
880-23147-5	CS-5	Soluble	Solid	DI Leach	
880-23147-6	CS-6	Soluble	Solid	DI Leach	
880-23147-7	CS-7	Soluble	Solid	DI Leach	
880-23147-8	CS-8	Soluble	Solid	DI Leach	
880-23147-9	CS-9	Soluble	Solid	DI Leach	
880-23147-10	CS-10	Soluble	Solid	DI Leach	
880-23147-11	CS-11	Soluble	Solid	DI Leach	
880-23147-12	CS-12	Soluble	Solid	DI Leach	
880-23147-13	CS-13	Soluble	Solid	DI Leach	
880-23147-14	CS-14	Soluble	Solid	DI Leach	
880-23147-15	CS-15	Soluble	Solid	DI Leach	
880-23147-16	CS-16	Soluble	Solid	DI Leach	
880-23147-17	CS-17	Soluble	Solid	DI Leach	
880-23147-18	CS-18	Soluble	Solid	DI Leach	
880-23147-19	CS-19	Soluble	Solid	DI Leach	
880-23147-20	CS-20	Soluble	Solid	DI Leach	
MB 880-42888/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-42888/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-42888/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-23147-1 MS	CS-1	Soluble	Solid	DI Leach	
880-23147-1 MSD	CS-1	Soluble	Solid	DI Leach	
880-23147-11 MS	CS-11	Soluble	Solid	DI Leach	
880-23147-11 MSD	CS-11	Soluble	Solid	DI Leach	

Analysis Batch: 42948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-31	CS-31	Soluble	Solid	300.0	42868
MB 880-42868/1-A	Method Blank	Soluble	Solid	300.0	42868
LCS 880-42868/2-A	Lab Control Sample	Soluble	Solid	300.0	42868
LCSD 880-42868/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	42868

Analysis Batch: 42998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-21	CS-21	Soluble	Solid	300.0	42887
880-23147-22	CS-22	Soluble	Solid	300.0	42887
880-23147-23	CS-23	Soluble	Solid	300.0	42887
880-23147-24	CS-24	Soluble	Solid	300.0	42887
880-23147-25	CS-25	Soluble	Solid	300.0	42887
880-23147-26	CS-26	Soluble	Solid	300.0	42887
880-23147-27	CS-27	Soluble	Solid	300.0	42887
880-23147-28	CS-28	Soluble	Solid	300.0	42887
880-23147-29	CS-29	Soluble	Solid	300.0	42887
880-23147-30	CS-30	Soluble	Solid	300.0	42887
MB 880-42887/1-A	Method Blank	Soluble	Solid	300.0	42887
LCS 880-42887/2-A	Lab Control Sample	Soluble	Solid	300.0	42887
LCSD 880-42887/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	42887
880-23147-21 MS	CS-21	Soluble	Solid	300.0	42887

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QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

HPLC/IC (Continued)

Analysis Batch: 42998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-21 MSD	CS-21	Soluble	Solid	300.0	42887

Analysis Batch: 42999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23147-1	CS-1	Soluble	Solid	300.0	42888
880-23147-2	CS-2	Soluble	Solid	300.0	42888
880-23147-3	CS-3	Soluble	Solid	300.0	42888
880-23147-4	CS-4	Soluble	Solid	300.0	42888
880-23147-5	CS-5	Soluble	Solid	300.0	42888
880-23147-6	CS-6	Soluble	Solid	300.0	42888
880-23147-7	CS-7	Soluble	Solid	300.0	42888
880-23147-8	CS-8	Soluble	Solid	300.0	42888
880-23147-9	CS-9	Soluble	Solid	300.0	42888
880-23147-10	CS-10	Soluble	Solid	300.0	42888
880-23147-11	CS-11	Soluble	Solid	300.0	42888
880-23147-12	CS-12	Soluble	Solid	300.0	42888
880-23147-13	CS-13	Soluble	Solid	300.0	42888
880-23147-14	CS-14	Soluble	Solid	300.0	42888
880-23147-15	CS-15	Soluble	Solid	300.0	42888
880-23147-16	CS-16	Soluble	Solid	300.0	42888
880-23147-17	CS-17	Soluble	Solid	300.0	42888
880-23147-18	CS-18	Soluble	Solid	300.0	42888
880-23147-19	CS-19	Soluble	Solid	300.0	42888
880-23147-20	CS-20	Soluble	Solid	300.0	42888
MB 880-42888/1-A	Method Blank	Soluble	Solid	300.0	42888
LCS 880-42888/2-A	Lab Control Sample	Soluble	Solid	300.0	42888
LCSD 880-42888/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	42888
880-23147-1 MS	CS-1	Soluble	Solid	300.0	42888
880-23147-1 MSD	CS-1	Soluble	Solid	300.0	42888
880-23147-11 MS	CS-11	Soluble	Solid	300.0	42888
880-23147-11 MSD	CS-11	Soluble	Solid	300.0	42888

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-1

Date Collected: 12/27/22 11:26

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 07:18	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 14:41	CH	EET MID

Client Sample ID: CS-2

Date Collected: 12/27/22 11:30

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/03/23 22:24	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 15:05	CH	EET MID

Client Sample ID: CS-3

Date Collected: 12/27/22 11:35

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/03/23 23:31	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 15:13	CH	EET MID

Client Sample ID: CS-4

Date Collected: 12/27/22 11:40

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 03:59	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 15:21	CH	EET MID

Client Sample ID: CS-5

Date Collected: 12/27/22 11:45

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-5

Date Collected: 12/27/22 11:45

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/03/23 23:52	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 15:29	CH	EET MID

Client Sample ID: CS-6

Date Collected: 12/27/22 11:50

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 03:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 15:52	CH	EET MID

Client Sample ID: CS-7

Date Collected: 12/27/22 11:55

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 00:15	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 16:00	CH	EET MID

Client Sample ID: CS-8

Date Collected: 12/27/22 12:00

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43029	01/04/23 04:43	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 16:19	CH	EET MID

Client Sample ID: CS-9

Date Collected: 12/27/22 12:05

Date Received: 12/29/22 12:05

Lab Sample ID: 880-23147-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-9

Lab Sample ID: 880-23147-9

Date Collected: 12/27/22 12:05

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43029	01/04/23 05:05	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 16:28	CH	EET MID

Client Sample ID: CS-10

Lab Sample ID: 880-23147-10

Date Collected: 12/27/22 12:10

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 00:38	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 16:36	CH	EET MID

Client Sample ID: CS-11

Lab Sample ID: 880-23147-11

Date Collected: 12/27/22 12:15

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 04:21	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 16:44	CH	EET MID

Client Sample ID: CS-12

Lab Sample ID: 880-23147-12

Date Collected: 12/27/22 12:20

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 06:33	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 17:09	CH	EET MID

Client Sample ID: CS-13

Lab Sample ID: 880-23147-13

Date Collected: 12/27/22 12:25

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-13

Lab Sample ID: 880-23147-13

Date Collected: 12/27/22 12:25

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 08:09	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 17:18	CH	EET MID

Client Sample ID: CS-14

Lab Sample ID: 880-23147-14

Date Collected: 12/27/22 12:30

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 01:01	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 17:43	CH	EET MID

Client Sample ID: CS-15

Lab Sample ID: 880-23147-15

Date Collected: 12/27/22 12:35

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43029	01/04/23 05:28	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 17:51	CH	EET MID

Client Sample ID: CS-16

Lab Sample ID: 880-23147-16

Date Collected: 12/27/22 12:40

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 01:23	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 17:59	CH	EET MID

Client Sample ID: CS-17

Lab Sample ID: 880-23147-17

Date Collected: 12/27/22 12:45

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-17

Lab Sample ID: 880-23147-17

Date Collected: 12/27/22 12:45

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 01:46	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 18:08	CH	EET MID

Client Sample ID: CS-18

Lab Sample ID: 880-23147-18

Date Collected: 12/27/22 12:50

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43029	01/04/23 05:50	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 18:16	CH	EET MID

Client Sample ID: CS-19

Lab Sample ID: 880-23147-19

Date Collected: 12/27/22 12:55

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43029	01/04/23 06:12	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 18:24	CH	EET MID

Client Sample ID: CS-20

Lab Sample ID: 880-23147-20

Date Collected: 12/27/22 13:00

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 11:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43073	01/03/23 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43029	01/04/23 06:55	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	42888	12/29/22 12:43	KS	EET MID
Soluble	Analysis	300.0		1			42999	01/03/23 18:33	CH	EET MID

Client Sample ID: CS-21

Lab Sample ID: 880-23147-21

Date Collected: 12/27/22 13:05

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-21

Lab Sample ID: 880-23147-21

Date Collected: 12/27/22 13:05

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43031	01/04/23 04:21	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:06	CH	EET MID

Client Sample ID: CS-22

Lab Sample ID: 880-23147-22

Date Collected: 12/27/22 13:10

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43031	01/04/23 04:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:20	CH	EET MID

Client Sample ID: CS-23

Lab Sample ID: 880-23147-23

Date Collected: 12/27/22 13:15

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43031	01/04/23 05:05	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:25	CH	EET MID

Client Sample ID: CS-24

Lab Sample ID: 880-23147-24

Date Collected: 12/27/22 13:20

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43031	01/04/23 05:28	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:39	CH	EET MID

Client Sample ID: CS-25

Lab Sample ID: 880-23147-25

Date Collected: 12/27/22 13:25

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-25

Lab Sample ID: 880-23147-25

Date Collected: 12/27/22 13:25

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	43031	01/04/23 05:50	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:44	CH	EET MID

Client Sample ID: CS-26

Lab Sample ID: 880-23147-26

Date Collected: 12/27/22 13:30

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/03/23 22:24	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:48	CH	EET MID

Client Sample ID: CS-27

Lab Sample ID: 880-23147-27

Date Collected: 12/27/22 13:35

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/03/23 23:31	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:53	CH	EET MID

Client Sample ID: CS-28

Lab Sample ID: 880-23147-28

Date Collected: 12/27/22 13:40

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/03/23 23:52	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 14:58	CH	EET MID

Client Sample ID: CS-29

Lab Sample ID: 880-23147-29

Date Collected: 12/27/22 13:45

Matrix: Solid

Date Received: 12/29/22 12:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Client Sample ID: CS-29**Lab Sample ID: 880-23147-29****Date Collected: 12/27/22 13:45****Matrix: Solid****Date Received: 12/29/22 12:05**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/04/23 00:15	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 15:03	CH	EET MID

Client Sample ID: CS-30**Lab Sample ID: 880-23147-30****Date Collected: 12/27/22 13:50****Matrix: Solid****Date Received: 12/29/22 12:05**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/04/23 00:38	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	42887	12/29/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1			42998	01/03/23 15:16	CH	EET MID

Client Sample ID: CS-31**Lab Sample ID: 880-23147-31****Date Collected: 12/27/22 13:55****Matrix: Solid****Date Received: 12/29/22 12:05**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43157	01/04/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43074	01/03/23 11:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43031	01/04/23 01:01	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	42868	12/29/22 16:30	KS	EET MID
Soluble	Analysis	300.0		1			42948	12/31/22 05:12	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montero 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Midland

Sample Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: Montera 6" Release

Job ID: 880-23147-1
SDG: 2125-5742

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-23147-1	CS-1	Solid	12/27/22 11:26	12/29/22 12:05	36'
880-23147-2	CS-2	Solid	12/27/22 11:30	12/29/22 12:05	24"36"
880-23147-3	CS-3	Solid	12/27/22 11:35	12/29/22 12:05	30"
880-23147-4	CS-4	Solid	12/27/22 11:40	12/29/22 12:05	30"
880-23147-5	CS-5	Solid	12/27/22 11:45	12/29/22 12:05	30"
880-23147-6	CS-6	Solid	12/27/22 11:50	12/29/22 12:05	0-6"
880-23147-7	CS-7	Solid	12/27/22 11:55	12/29/22 12:05	0-6"
880-23147-8	CS-8	Solid	12/27/22 12:00	12/29/22 12:05	36"
880-23147-9	CS-9	Solid	12/27/22 12:05	12/29/22 12:05	36"
880-23147-10	CS-10	Solid	12/27/22 12:10	12/29/22 12:05	12-14"
880-23147-11	CS-11	Solid	12/27/22 12:15	12/29/22 12:05	0-6"
880-23147-12	CS-12	Solid	12/27/22 12:20	12/29/22 12:05	6-12"
880-23147-13	CS-13	Solid	12/27/22 12:25	12/29/22 12:05	24"
880-23147-14	CS-14	Solid	12/27/22 12:30	12/29/22 12:05	5'
880-23147-15	CS-15	Solid	12/27/22 12:35	12/29/22 12:05	48"
880-23147-16	CS-16	Solid	12/27/22 12:40	12/29/22 12:05	18'
880-23147-17	CS-17	Solid	12/27/22 12:45	12/29/22 12:05	18'
880-23147-18	CS-18	Solid	12/27/22 12:50	12/29/22 12:05	18'
880-23147-19	CS-19	Solid	12/27/22 12:55	12/29/22 12:05	18'
880-23147-20	CS-20	Solid	12/27/22 13:00	12/29/22 12:05	18'
880-23147-21	CS-21	Solid	12/27/22 13:05	12/29/22 12:05	18'
880-23147-22	CS-22	Solid	12/27/22 13:10	12/29/22 12:05	18'
880-23147-23	CS-23	Solid	12/27/22 13:15	12/29/22 12:05	18'
880-23147-24	CS-24	Solid	12/27/22 13:20	12/29/22 12:05	18'
880-23147-25	CS-25	Solid	12/27/22 13:25	12/29/22 12:05	18'
880-23147-26	CS-26	Solid	12/27/22 13:30	12/29/22 12:05	17'
880-23147-27	CS-27	Solid	12/27/22 13:35	12/29/22 12:05	18'
880-23147-28	CS-28	Solid	12/27/22 13:40	12/29/22 12:05	8'
880-23147-29	CS-29	Solid	12/27/22 13:45	12/29/22 12:05	8'
880-23147-30	CS-30	Solid	12/27/22 13:50	12/29/22 12:05	0-6"
880-23147-31	CS-31	Solid	12/27/22 13:55	12/29/22 12:05	0-6"



Environment Testing
Xenco

Chain of Custody

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El Paso TX (915) 585-3443 Lubbock TX (806) 794-1286
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No:

23147

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Page 1 of 3

Project Manager:	Simon Huddgens	Bill to: (if different)	Attn: Camille Bryant
Company Name:	Lighthouse Environmental Services Inc	Company Name:	Plains All American
Address:	4904 Fuqua Street	Address:	
City, State ZIP:	Houston, TX 77048	City, State ZIP:	
Phone:	713-987-0400	Email:	shuddgens@lighthouseenv.com, ap@lighthouseenv.com, lsawyer@lighthouseenv.com, lsawyer@lighthouseenv.com, jmartinez@lighthouseenv.com, jmartinez@lighthouseenv.com

Program. UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project: NM	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name:	Montera 6" release	Turn Around		Pres. Code	ANALYSIS REQUEST		Preservative Codes		
Project Number:	2125-5742	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush					None NO	DI Water H ₂ O
Project Location:	32 139295, -103 358124	Due Date						Cool Cool	MeOH Me
Sampler's Name:	Trey Sawyer	TAT starts the day received by the lab if received by 4:30pm						HCL HC	HNO ₃ HN
PO #:	2125-5742							H ₂ SO ₄ H ₂	NaOH Na
SAMPLE RECEIPT		Temp Blank	Yes No	Wet Ice	Yes No			H ₃ PO ₄ HP	
Samples Received Intact:	Yes No	Thermometer ID:						NaHSO ₄ NABIS	
Cooler Custody Seals:	Yes No	Correction Factor:						Na ₂ S ₂ O ₃ NaSO ₃	
Sample Custody Seals:	Yes No	Temperature Reading:						Zn Acetate+NaOH Zn	
Total Containers:	31	Corrected Temperature:						NaOH+Ascorbic Acid SAPC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH TX-1005, Extended Ranges	TCLP BTEX	TCLP RCRA 8 Metals	Total Sulfur	BTEX 8021B	RCI	pH	TPH 8015 GRO, DRO, MRO	Chloride EPA 300 0	Sample Comments
CS-1	Soil	12 27 22	1126	36"	Grab	1								X		
CS-2	Soil	12 27 22	1130	24"	Grab	1								X		
CS-3	Soil	12 27 22	1135	36"	Grab	1								X		
CS-4	Soil	12 27 22	1140	30"	Grab	1								X		
CS-5	Soil	12 27 22	1145	30"	Grab	1								X		
CS-6	Soil	12 27 22	1150	0-6"	Grab	1								X		
CS-7	Soil	12 27 22	1155	0-6"	Grab	1								X		
CS-8	Soil	12 27 22	1200	36"	Grab	1								X		
CS-9	Soil	12 27 22	1205	36"	Grab	1								X		
CS-10	Soil	12 27 22	1210	12-14"	Grab	1								X		
CS-11	Soil	12 27 22	1215	0-6"	Grab	1								X		



880-231 47 Chain of Custody

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn			
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010		8RCRA	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												

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		12/29			
		1205			



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Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199

Work Order No: _____

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Page 2 of 3

Project Manager	Simon Hudgens	Bill to: (if different)	Attn: Camille Bryant
Company Name	Lighthouse Environmental Services Inc	Company Name:	Plains All American
Address:	4904 Fuqua Street	Address:	
City, State ZIP	Houston, TX 77048	City, State ZIP	
Phone:	713-987-0400	Email:	shudgens@lighthouseenv.com, ap@lighthouseenv.com, lsawyer@lighthouseenv.com, lsawyer@lighthouseenv.com, jmuino@lighthouseenv.com

Program UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project NM
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other

Project Name	Montera 6" release	Turn Around	Pres. Code	ANALYSIS REQUEST	Preservative Codes
Project Number	2125-5742	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			None NO DI Water H ₂ O
Project Location	32 139295, -103 358124	Due Date			Cool Cool MeOH Me
Sampler's Name	Trey Sawyer	TAT starts the day received by the lab if received by 4 30pm			HCL HC HNO ₃ HN
PO #	2125-5742				H ₂ SO ₄ H ₂ NaOH Na
SAMPLE RECEIPT	Temp Blank: Yes (No) Wet Ice: Yes (No)				H ₃ PO ₄ HP
Samples Received Intact:	Yes (No) N/A	Thermometer ID:			NaHSO ₄ NABIS
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:			Na ₂ S ₂ O ₃ NaSO ₃
Sample Custody Seals:	Yes (No) N/A	Temperature Reading:			Zn Acetate+NaOH Zn
Total Containers:	31	Corrected Temperature:			NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Cont	# of Cont	TPH TX-1005, Extended Ranges	TCLP BTEX	TCLP RCRA 8 Metals	Total Sulfur	BTEX 8021B	RCI	pH	TPH 8015 GRO, DRO, MRO	Chloride EPA 300 0	Sample Comments
CS-12	Soil	12 27 22	1220	6-12"	Grab	1								X		
CS-13	Soil	12 27 22	1225	24"	Grab	1								X		
CS-14	Soil	12 27 22	1230	5'	Grab	1								X		
CS-15	Soil	12 27 22	1235	48"	Grab	1								X		
CS-16	Soil	12 27 22	1240	18'	Grab	1								X		
CS-17	Soil	12 27 22	1245	18'	Grab	1								X		
CS-18	Soil	12 27 22	1250	18'	Grab	1								X		
CS-19	Soil	12 27 22	1255	18'	Grab	1								X		
CS-20	Soil	12 27 22	1300	18'	Grab	1								X		
CS-21	Soil	12 27 22	1305	18'	Grab	1								X		
CS-22	Soil	12 27 22	1310	18'	Grab	1								X		

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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		12/05			



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Chain of Custody

Work Order No: _____

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Page 3 of 3

Project Manager:	Simon Huddgens	Bill to: (if different)	Attn: Camille Bryant
Company Name:	Lighthouse Environmental Services, Inc	Company Name:	Plains All American
Address:	4904 Fuqua Street	Address:	
City, State ZIP	Houston, TX 77048	City, State ZIP	
Phone:	713-987-0400	Email:	shuddgens@lighthouseenv.com, ap@lighthouseenv.com, lsawyer@lighthouseenv.com, lsawyer@lighthouseenv.com, jminic@lighthouseenv.com

Program UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project: NM	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name:	Montera 6' release	Turn Around	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	2125-5742	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush				None NO DI Water H ₂ O
Project Location:	32 139295 -103 358124	Due Date				Cool Cool MeOH Me
Sampler's Name:	Trey Sawyer	TAT starts the day received by the lab if received by 4:30pm				HCL HC HNO ₃ HN
PO #:	2125-5742					H ₂ SO ₄ H ₂ NaOH Na
SAMPLE RECEIPT		Temp Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Parameters		H ₃ PO ₄ HP
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID	1253			NaHSO ₄ NABIS
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor	-1.3			Na ₂ S ₂ O ₃ NaSO ₃
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:	2.46			Zn Acetate+NaOH Zn
Total Containers:	31	Corrected Temperature:	2.3			NaOH+Ascorbic Acid SAPC
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
CS-23	Soil	12 27 22	1315	18'	Grab	1
CS-24	Soil	12 27 22	1320	18'	Grab	1
CS-25	Soil	12 27 22	1325	18'	Grab	1
CS-26	Soil	12 27 22	1330	17'	Grab	1
CS-27	Soil	12 27 22	1335	18'	Grab	1
CS-28	Soil	12 27 22	1340	8'	Grab	1
CS-29	Soil	12 27 22	1345	8'	Grab	1
CS-30	Soil	12 27 22	1350	0-6"	Grab	1
CS-31	Soil	12 27 22	1355	0-6"	Grab	1
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn						
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471						
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.						
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1		12/29/2025	2			
3			4			
5			6			

Login Sample Receipt Checklist

Client: Lighthouse Environmental Services, Inc

Job Number: 880-23147-1

SDG Number: 2125-5742

Login Number: 23147**List Number: 1****Creator: Kramer, Jessica****List Source: Eurofins Midland**

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Simon Hudgens
Lighthouse Environmental Services, Inc
4218 Pasadena Blvd
Pasadena, Texas 77503

Generated 1/17/2023 10:55:34 AM

JOB DESCRIPTION

2125-5742 Montera 6' Release
SDG NUMBER 32.139295, -103.358124

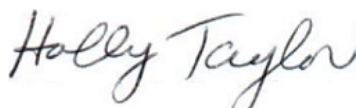
JOB NUMBER

880-23613-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
1/17/2023 10:55:34 AM

Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Laboratory Job ID: 880-23613-1
SDG: 32.139295, -103.358124

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Definitions/Glossary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Job ID: 880-23613-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-23613-1****Receipt**

The samples were received on 1/11/2023 3:35 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SW-1 (880-23613-1), SW-2 (880-23613-2), SW-3 (880-23613-3), SW-4 (880-23613-4), SW-5 (880-23613-5), SW-6 (880-23613-6), SW-7 (880-23613-7) and SW-8 (880-23613-8).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-2 (880-23613-2) and SW-4 (880-23613-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43837 and analytical batch 880-43854 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-43837/2-A), (LCSD 880-43837/3-A) and (MB 880-43837/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-1

Lab Sample ID: 880-23613-1

Date Collected: 01/10/23 11:20

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 10'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
Toluene	0.0135		0.00201	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
o-Xylene	0.0199		0.00201	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
Xylenes, Total	0.0199		0.00402	mg/Kg		01/12/23 14:52	01/14/23 01:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			01/12/23 14:52	01/14/23 01:11	1
1,4-Difluorobenzene (Surr)	94		70 - 130			01/12/23 14:52	01/14/23 01:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0334		0.00402	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	49.9	mg/Kg		01/12/23 15:11	01/13/23 20:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 20:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 20:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	127		70 - 130			01/12/23 15:11	01/13/23 20:57	1
o-Terphenyl (Surr)	112		70 - 130			01/12/23 15:11	01/13/23 20:57	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.2		5.04	mg/Kg			01/16/23 22:03	1

Client Sample ID: SW-2

Lab Sample ID: 880-23613-2

Date Collected: 01/10/23 11:15

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 10'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.469		0.0998	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
Toluene	6.62		0.0998	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
Ethylbenzene	4.00		0.0998	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
m,p-Xylenes	9.11		0.200	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
o-Xylene	4.37		0.0998	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
Xylenes, Total	13.5		0.200	mg/Kg		01/12/23 14:52	01/14/23 01:32	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	172	S1+	70 - 130			01/12/23 14:52	01/14/23 01:32	50

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-2

Lab Sample ID: 880-23613-2

Date Collected: 01/10/23 11:15

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 10'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	01/12/23 14:52	01/14/23 01:32	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	24.6		0.200	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7230		49.8	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1540		49.8	mg/Kg		01/12/23 15:11	01/13/23 22:04	1
Diesel Range Organics (Over C10-C28)	5690		49.8	mg/Kg		01/12/23 15:11	01/13/23 22:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/12/23 15:11	01/13/23 22:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	143	S1+	70 - 130			01/12/23 15:11	01/13/23 22:04	1
o-Terphenyl (Surr)	161	S1+	70 - 130			01/12/23 15:11	01/13/23 22:04	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.8		4.97	mg/Kg			01/16/23 22:09	1

Client Sample ID: SW-3

Lab Sample ID: 880-23613-3

Date Collected: 01/10/23 11:10

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 12'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 02:55	1
Toluene	0.00521		0.00199	mg/Kg		01/12/23 14:52	01/14/23 02:55	1
Ethylbenzene	0.00354		0.00199	mg/Kg		01/12/23 14:52	01/14/23 02:55	1
m,p-Xylenes	0.00850		0.00398	mg/Kg		01/12/23 14:52	01/14/23 02:55	1
o-Xylene	0.00277		0.00199	mg/Kg		01/12/23 14:52	01/14/23 02:55	1
Xylenes, Total	0.0113		0.00398	mg/Kg		01/12/23 14:52	01/14/23 02:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	01/12/23 14:52	01/14/23 02:55	1
1,4-Difluorobenzene (Surr)	70		70 - 130	01/12/23 14:52	01/14/23 02:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0200		0.00398	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/16/23 16:35	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-3

Lab Sample ID: 880-23613-3

Date Collected: 01/10/23 11:10

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 12'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 22:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 22:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 22:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			01/12/23 15:11	01/13/23 22:48	1
o-Terphenyl (Surr)	104		70 - 130			01/12/23 15:11	01/13/23 22:48	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		5.03	mg/Kg			01/16/23 22:28	1

Client Sample ID: SW-4

Lab Sample ID: 880-23613-4

Date Collected: 01/10/23 11:05

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 12'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
Toluene	0.0108		0.00199	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
Ethylbenzene	0.00244		0.00199	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
m,p-Xylenes	0.00609		0.00398	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
o-Xylene	0.00216		0.00199	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
Xylenes, Total	0.00825		0.00398	mg/Kg		01/12/23 14:52	01/14/23 03:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			01/12/23 14:52	01/14/23 03:16	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130			01/12/23 14:52	01/14/23 03:16	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0215		0.00398	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2550		49.8	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		01/12/23 15:11	01/13/23 22:26	1
Diesel Range Organics (Over C10-C28)	2550		49.8	mg/Kg		01/12/23 15:11	01/13/23 22:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/12/23 15:11	01/13/23 22:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	111		70 - 130			01/12/23 15:11	01/13/23 22:26	1
o-Terphenyl (Surr)	104		70 - 130			01/12/23 15:11	01/13/23 22:26	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-4

Lab Sample ID: 880-23613-4

Date Collected: 01/10/23 11:05

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 12'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.5		5.00	mg/Kg			01/16/23 22:34	1

Client Sample ID: SW-5

Lab Sample ID: 880-23613-5

Date Collected: 01/10/23 11:00

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 13'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/12/23 14:52	01/14/23 03:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			01/12/23 14:52	01/14/23 03:36	1
1,4-Difluorobenzene (Surr)	78		70 - 130			01/12/23 14:52	01/14/23 03:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 23:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 23:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/12/23 15:11	01/13/23 23:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	116		70 - 130			01/12/23 15:11	01/13/23 23:09	1
o-Terphenyl (Surr)	104		70 - 130			01/12/23 15:11	01/13/23 23:09	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		4.98	mg/Kg			01/16/23 22:40	1

Eurofins Midland

Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-6

Lab Sample ID: 880-23613-6

Date Collected: 01/10/23 10:55

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 13'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
Toluene	0.00253		0.00200	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
m,p-Xylenes	0.00408		0.00401	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
Xylenes, Total	0.00408		0.00401	mg/Kg		01/12/23 14:52	01/14/23 03:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			01/12/23 14:52	01/14/23 03:57	1
1,4-Difluorobenzene (Surr)	72		70 - 130			01/12/23 14:52	01/14/23 03:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00661		0.00401	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	102		70 - 130			01/12/23 15:11	01/13/23 23:31	1
o-Terphenyl (Surr)	98		70 - 130			01/12/23 15:11	01/13/23 23:31	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.4		4.97	mg/Kg			01/16/23 22:46	1

Client Sample ID: SW-7

Lab Sample ID: 880-23613-7

Date Collected: 01/10/23 11:25

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 11'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
Toluene	0.00422		0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
m,p-Xylenes	0.00417		0.00398	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
Xylenes, Total	0.00417		0.00398	mg/Kg		01/12/23 14:52	01/14/23 04:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130			01/12/23 14:52	01/14/23 04:17	1

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Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Monterera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-7

Lab Sample ID: 880-23613-7

Date Collected: 01/10/23 11:25

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 11'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	77		70 - 130	01/12/23 14:52	01/14/23 04:17	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00839		0.00398	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	115		70 - 130			01/12/23 15:11	01/13/23 23:52	1
o-Terphenyl (Surr)	102		70 - 130			01/12/23 15:11	01/13/23 23:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.8		5.02	mg/Kg			01/16/23 22:52	1

Client Sample ID: SW-8

Lab Sample ID: 880-23613-8

Date Collected: 01/10/23 11:30

Matrix: Solid

Date Received: 01/11/23 15:35

Sample Depth: 11'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:38	1
Toluene	0.00446		0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:38	1
m,p-Xylenes	0.00467		0.00398	mg/Kg		01/12/23 14:52	01/14/23 04:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/12/23 14:52	01/14/23 04:38	1
Xylenes, Total	0.00467		0.00398	mg/Kg		01/12/23 14:52	01/14/23 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	01/12/23 14:52	01/14/23 04:38	1
1,4-Difluorobenzene (Surr)	98		70 - 130	01/12/23 14:52	01/14/23 04:38	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00913		0.00398	mg/Kg			01/16/23 16:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	1

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Client Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Monterera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-8
Date Collected: 01/10/23 11:30
Date Received: 01/11/23 15:35
Sample Depth: 11'

Lab Sample ID: 880-23613-8
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/14/23 00:14	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/14/23 00:14	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/14/23 00:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane (Surr)	108		70 - 130			01/12/23 15:11	01/14/23 00:14	1	
o-Terphenyl (Surr)	104		70 - 130			01/12/23 15:11	01/14/23 00:14	1	

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	34.0		5.01	mg/Kg			01/16/23 22:59	1	

Surrogate Summary

Client: Lighthouse Environmental Services, Inc
 Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
 SDG: 32.139295, -103.358124

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-23613-1	SW-1	109	94
880-23613-2	SW-2	172 S1+	109
880-23613-3	SW-3	86	70
880-23613-4	SW-4	90	66 S1-
880-23613-5	SW-5	77	78
880-23613-6	SW-6	90	72
880-23613-7	SW-7	83	77
880-23613-8	SW-8	75	98
LCS 880-43833/1-A	Lab Control Sample	110	95
LCSD 880-43833/2-A	Lab Control Sample Dup	115	91
MB 880-43539/5-A	Method Blank	83	91
MB 880-43833/5-A	Method Blank	85	93
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-23613-1	SW-1	127	112
880-23613-1 MS	SW-1	99	80
880-23613-1 MSD	SW-1	83	75
880-23613-2	SW-2	143 S1+	161 S1+
880-23613-3	SW-3	107	104
880-23613-4	SW-4	111	104
880-23613-5	SW-5	116	104
880-23613-6	SW-6	102	98
880-23613-7	SW-7	115	102
880-23613-8	SW-8	108	104
LCS 880-43837/2-A	Lab Control Sample	138 S1+	124
LCSD 880-43837/3-A	Lab Control Sample Dup	140 S1+	130
MB 880-43837/1-A	Method Blank	186 S1+	164 S1+
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43539/5-A

Matrix: Solid

Analysis Batch: 43862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43539

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/09/23 12:46	01/13/23 10:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/09/23 12:46	01/13/23 10:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/09/23 12:46	01/13/23 10:53	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		01/09/23 12:46	01/13/23 10:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/09/23 12:46	01/13/23 10:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/09/23 12:46	01/13/23 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	01/09/23 12:46	01/13/23 10:53	1
1,4-Difluorobenzene (Surr)	91		70 - 130	01/09/23 12:46	01/13/23 10:53	1

Lab Sample ID: MB 880-43833/5-A

Matrix: Solid

Analysis Batch: 43862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43833

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/13/23 22:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/13/23 22:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/13/23 22:06	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		01/12/23 14:52	01/13/23 22:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/12/23 14:52	01/13/23 22:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/12/23 14:52	01/13/23 22:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	01/12/23 14:52	01/13/23 22:06	1
1,4-Difluorobenzene (Surr)	93		70 - 130	01/12/23 14:52	01/13/23 22:06	1

Lab Sample ID: LCS 880-43833/1-A

Matrix: Solid

Analysis Batch: 43862

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 43833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07628		mg/Kg		76	70 - 130
Toluene	0.100	0.08971		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.08555		mg/Kg		86	70 - 130
m,p-Xylenes	0.200	0.1903		mg/Kg		95	70 - 130
o-Xylene	0.100	0.1058		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-43833/2-A

Matrix: Solid

Analysis Batch: 43862

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43833

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.07750		mg/Kg		78	70 - 130	2	35

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QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-43833/2-A

Matrix: Solid

Analysis Batch: 43862

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43833

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09708		mg/Kg		97	70 - 130	8	35
Ethylbenzene	0.100	0.09265		mg/Kg		93	70 - 130	8	35
m,p-Xylenes	0.200	0.2078		mg/Kg		104	70 - 130	9	35
o-Xylene	0.100	0.1164		mg/Kg		116	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

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

Lab Sample ID: MB 880-43837/1-A

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 43837

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 19:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 19:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:11	01/13/23 19:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	186	S1+	70 - 130	01/12/23 15:11	01/13/23 19:51	1
o-Terphenyl (Surr)	164	S1+	70 - 130	01/12/23 15:11	01/13/23 19:51	1

Lab Sample ID: LCS 880-43837/2-A

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 43837

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1056		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1099		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	138	S1+	70 - 130
o-Terphenyl (Surr)	124		70 - 130

Lab Sample ID: LCSD 880-43837/3-A

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43837

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1032		mg/Kg		103	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1039		mg/Kg		104	70 - 130	6	20

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QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

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

Lab Sample ID: LCSD 880-43837/3-A

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 43837

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	140	S1+	70 - 130
o-Terphenyl (Surr)	130		70 - 130

Lab Sample ID: 880-23613-1 MS

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 43837

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	2514	F1	mg/Kg		248	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	994.6		mg/Kg		100	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	99		70 - 130
o-Terphenyl (Surr)	80		70 - 130

Lab Sample ID: 880-23613-1 MSD

Matrix: Solid

Analysis Batch: 43854

Client Sample ID: SW-1

Prep Type: Total/NA

Prep Batch: 43837

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	997	883.6	F2	mg/Kg		85	70 - 130	96	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	997	906.2		mg/Kg		91	70 - 130	9	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	83		70 - 130
o-Terphenyl (Surr)	75		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43797/1-A

Matrix: Solid

Analysis Batch: 44142

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00	mg/Kg			01/16/23 19:59	1		

Lab Sample ID: LCS 880-43797/2-A

Matrix: Solid

Analysis Batch: 44142

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	259.0		mg/Kg		104	90 - 110			

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QC Sample Results

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-43797/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 44142											
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	250	259.4		mg/Kg		104	90 - 110	0	20		

QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

GC VOA

Prep Batch: 43539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-43539/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 43833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	5035	
880-23613-2	SW-2	Total/NA	Solid	5035	
880-23613-3	SW-3	Total/NA	Solid	5035	
880-23613-4	SW-4	Total/NA	Solid	5035	
880-23613-5	SW-5	Total/NA	Solid	5035	
880-23613-6	SW-6	Total/NA	Solid	5035	
880-23613-7	SW-7	Total/NA	Solid	5035	
880-23613-8	SW-8	Total/NA	Solid	5035	
MB 880-43833/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43833/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43833/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 43862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	8021B	43833
880-23613-2	SW-2	Total/NA	Solid	8021B	43833
880-23613-3	SW-3	Total/NA	Solid	8021B	43833
880-23613-4	SW-4	Total/NA	Solid	8021B	43833
880-23613-5	SW-5	Total/NA	Solid	8021B	43833
880-23613-6	SW-6	Total/NA	Solid	8021B	43833
880-23613-7	SW-7	Total/NA	Solid	8021B	43833
880-23613-8	SW-8	Total/NA	Solid	8021B	43833
MB 880-43539/5-A	Method Blank	Total/NA	Solid	8021B	43539
MB 880-43833/5-A	Method Blank	Total/NA	Solid	8021B	43833
LCS 880-43833/1-A	Lab Control Sample	Total/NA	Solid	8021B	43833
LCSD 880-43833/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43833

Analysis Batch: 44070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	Total BTEX	
880-23613-2	SW-2	Total/NA	Solid	Total BTEX	
880-23613-3	SW-3	Total/NA	Solid	Total BTEX	
880-23613-4	SW-4	Total/NA	Solid	Total BTEX	
880-23613-5	SW-5	Total/NA	Solid	Total BTEX	
880-23613-6	SW-6	Total/NA	Solid	Total BTEX	
880-23613-7	SW-7	Total/NA	Solid	Total BTEX	
880-23613-8	SW-8	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	8015NM Prep	
880-23613-2	SW-2	Total/NA	Solid	8015NM Prep	
880-23613-3	SW-3	Total/NA	Solid	8015NM Prep	
880-23613-4	SW-4	Total/NA	Solid	8015NM Prep	
880-23613-5	SW-5	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

GC Semi VOA (Continued)

Prep Batch: 43837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-6	SW-6	Total/NA	Solid	8015NM Prep	
880-23613-7	SW-7	Total/NA	Solid	8015NM Prep	
880-23613-8	SW-8	Total/NA	Solid	8015NM Prep	
MB 880-43837/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43837/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43837/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23613-1 MS	SW-1	Total/NA	Solid	8015NM Prep	
880-23613-1 MSD	SW-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	8015B NM	43837
880-23613-2	SW-2	Total/NA	Solid	8015B NM	43837
880-23613-3	SW-3	Total/NA	Solid	8015B NM	43837
880-23613-4	SW-4	Total/NA	Solid	8015B NM	43837
880-23613-5	SW-5	Total/NA	Solid	8015B NM	43837
880-23613-6	SW-6	Total/NA	Solid	8015B NM	43837
880-23613-7	SW-7	Total/NA	Solid	8015B NM	43837
880-23613-8	SW-8	Total/NA	Solid	8015B NM	43837
MB 880-43837/1-A	Method Blank	Total/NA	Solid	8015B NM	43837
LCS 880-43837/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43837
LCSD 880-43837/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43837
880-23613-1 MS	SW-1	Total/NA	Solid	8015B NM	43837
880-23613-1 MSD	SW-1	Total/NA	Solid	8015B NM	43837

Analysis Batch: 44029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Total/NA	Solid	8015 NM	
880-23613-2	SW-2	Total/NA	Solid	8015 NM	
880-23613-3	SW-3	Total/NA	Solid	8015 NM	
880-23613-4	SW-4	Total/NA	Solid	8015 NM	
880-23613-5	SW-5	Total/NA	Solid	8015 NM	
880-23613-6	SW-6	Total/NA	Solid	8015 NM	
880-23613-7	SW-7	Total/NA	Solid	8015 NM	
880-23613-8	SW-8	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Soluble	Solid	DI Leach	
880-23613-2	SW-2	Soluble	Solid	DI Leach	
880-23613-3	SW-3	Soluble	Solid	DI Leach	
880-23613-4	SW-4	Soluble	Solid	DI Leach	
880-23613-5	SW-5	Soluble	Solid	DI Leach	
880-23613-6	SW-6	Soluble	Solid	DI Leach	
880-23613-7	SW-7	Soluble	Solid	DI Leach	
880-23613-8	SW-8	Soluble	Solid	DI Leach	
MB 880-43797/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43797/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43797/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Monterera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

HPLC/IC

Analysis Batch: 44142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-23613-1	SW-1	Soluble	Solid	300.0	43797
880-23613-2	SW-2	Soluble	Solid	300.0	43797
880-23613-3	SW-3	Soluble	Solid	300.0	43797
880-23613-4	SW-4	Soluble	Solid	300.0	43797
880-23613-5	SW-5	Soluble	Solid	300.0	43797
880-23613-6	SW-6	Soluble	Solid	300.0	43797
880-23613-7	SW-7	Soluble	Solid	300.0	43797
880-23613-8	SW-8	Soluble	Solid	300.0	43797
MB 880-43797/1-A	Method Blank	Soluble	Solid	300.0	43797
LCS 880-43797/2-A	Lab Control Sample	Soluble	Solid	300.0	43797
LCSD 880-43797/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43797

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-1

Lab Sample ID: 880-23613-1

Date Collected: 01/10/23 11:20

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 01:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 20:57	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:03	CH	EET MID

Client Sample ID: SW-2

Lab Sample ID: 880-23613-2

Date Collected: 01/10/23 11:15

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	43862	01/14/23 01:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 22:04	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:09	CH	EET MID

Client Sample ID: SW-3

Lab Sample ID: 880-23613-3

Date Collected: 01/10/23 11:10

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 02:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 22:48	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:28	CH	EET MID

Client Sample ID: SW-4

Lab Sample ID: 880-23613-4

Date Collected: 01/10/23 11:05

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 03:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID

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Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-4

Lab Sample ID: 880-23613-4

Date Collected: 01/10/23 11:05

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 22:26	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:34	CH	EET MID

Client Sample ID: SW-5

Lab Sample ID: 880-23613-5

Date Collected: 01/10/23 11:00

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 03:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 23:09	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:40	CH	EET MID

Client Sample ID: SW-6

Lab Sample ID: 880-23613-6

Date Collected: 01/10/23 10:55

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 03:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 23:31	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:46	CH	EET MID

Client Sample ID: SW-7

Lab Sample ID: 880-23613-7

Date Collected: 01/10/23 11:25

Matrix: Solid

Date Received: 01/11/23 15:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 04:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 23:52	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Client Sample ID: SW-7
Date Collected: 01/10/23 11:25
Date Received: 01/11/23 15:35

Lab Sample ID: 880-23613-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:52	CH	EET MID

Client Sample ID: SW-8
Date Collected: 01/10/23 11:30
Date Received: 01/11/23 15:35

Lab Sample ID: 880-23613-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	43833	01/12/23 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43862	01/14/23 04:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44070	01/16/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44029	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43837	01/12/23 15:11	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/14/23 00:14	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	43797	01/12/23 09:32	KS	EET MID
Soluble	Analysis	300.0		1			44142	01/16/23 22:59	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montera 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Lighthouse Environmental Services, Inc
Project/Site: 2125-5742 Montero 6' Release

Job ID: 880-23613-1
SDG: 32.139295, -103.358124

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-23613-1	SW-1	Solid	01/10/23 11:20	01/11/23 15:35	10'
880-23613-2	SW-2	Solid	01/10/23 11:15	01/11/23 15:35	10'
880-23613-3	SW-3	Solid	01/10/23 11:10	01/11/23 15:35	12'
880-23613-4	SW-4	Solid	01/10/23 11:05	01/11/23 15:35	12'
880-23613-5	SW-5	Solid	01/10/23 11:00	01/11/23 15:35	13'
880-23613-6	SW-6	Solid	01/10/23 10:55	01/11/23 15:35	13'
880-23613-7	SW-7	Solid	01/10/23 11:25	01/11/23 15:35	11'
880-23613-8	SW-8	Solid	01/10/23 11:30	01/11/23 15:35	11'



Environment Testing
Xenco

Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300
Midland TX (432) 704-5440 San Antonio TX (210) 509-3334
El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199

Work Order No: 23613

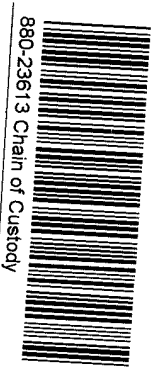
www.xenco.com Page 1 of 1

Project Manager	Simon Hudgens	Bill to: (if different)	Attn: Camille Bryant
Company Name	Lighthouse Environmental Services, Inc	Company Name	Plans All American
Address	4904 Fuqua Street	Address	
City, State ZIP	Houston, TX 77048	City, State ZIP	
Phone	713-987-0400	Email	shudgens@lighthouseenv.com, ap@lighthouseenv.com, tsawyer@lighthouseenv.com, lramirez@lighthouseenv.com, jmartin@lighthouseenv.com

Program		UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project		NM	
Reporting Level		Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables		EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name	Montera 6" Release	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST		Preservative Codes
Project Number	2125-5742	Due Date						None NO DI Water H ₂ O
Project Location	32 139295, -103 358124							Cool Cool MeOH Me
Sampler's Name	Trey Sawyer	TAT starts the day received by the lab if received by 4:30pm						HCL HC HNO ₃ HN
PO #	2125-5742							H ₂ SO ₄ H ₂ NaOH Na
SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No		H ₃ PO ₄ HP
Samples Received Intact	Yes	No		Thermometer ID				NaHSO ₄ NABIS
Cooler Custody Seals	Yes	No		Correction Factor				Na ₂ S ₂ O ₃ NaSO ₃
Sample Custody Seals	Yes	No		Temperature Reading				Zn Acetate+NaOH Zn
Total Containers	8	Corrected Temperature						NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH TX-1005, Extended Ranges	TCLP BTEX	TCLP RCRA 8 Metals	Total Sulfur	BTEX 8021B	RCI	pH	TPH 8015 GRO, DRO, MRO	Chloride EPA 300 0	Sample Comments
SW-1	Soil	1 10 23	1120	10'	Grab	1					X			X		
SW-2	Soil	1 10 23	1115	10'	Grab	1					X			X		
SW-3	Soil	1 10 23	1110	12'	Grab	1					X			X		
SW-4	Soil	1 10 23	1105	12'	Grab	1					X			X		
SW-5	Soil	1 10 23	1100	13'	Grab	1					X			X		
SW-6	Soil	1 10 23	1055	13'	Grab	1					X			X		
SW-7	Soil	1 10 23	1125	11'	Grab	1					X			X		
SW-8	Soil	1 10 23	1130	11'	Grab	1					X			X		



880-23613 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		11/23			
		1535			

Login Sample Receipt Checklist

Client: Lighthouse Environmental Services, Inc

Job Number: 880-23613-1

SDG Number: 32.139295, -103.358124

Login Number: 23613

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

REFERENCES

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2229253656
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Plains Pipeline, L.P.	OGRID	34053
Contact Name	Karolanne Hudgens	Contact Telephone	575-200-5517
Contact email	khudgens@paalp.com	Incident # <i>(assigned by OCD)</i>	nAPP2229253656
Contact mailing address	1106 Griffith Drive, Midland, TX 79706		

Location of Release Source

Latitude 32.1388868 Longitude -103.3580480
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Plains Montera 6" Release	Site Type	Pipeline
Date Release Discovered	10/18/2022	API#	(if applicable)

Unit Letter	Section	Township	Range	County
N	10	25S	35E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name: Tap Rock NM 10 Minerals, LLC*)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 21.1 bbls	Volume Recovered (bbls) 21.1 bbls
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

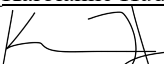
Cause of Release	Internal corrosion of crude oil pipeline.
------------------	---

Incident ID	NAPP2229253656
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Karolanne Hudgens</u>	Title: <u>HSE Remediation Specialist II</u>
Signature: 	Date: <u>10/20/2022</u>
email: <u>khudgens@paalp.com</u>	Telephone: <u>575-200-5517</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>10/20/2022</u>

NAPP2229253656

Soil Type	Est. Pore Space
Clay	15%
Sandy Clay	12%
Silt	16%
Loess	25%
Fine Sand	16%
Med. Sand	25%
Coarse Sand	26%
Gravelly Sand	26%
Fine Gravel	26%
Med. Gravel	25%
Coarse Gravel	18%
Compacted Caliche Pad	16%
Loosely Compacted Caliche Pad	20%

Location:

Rule of Thumb

To Calculate The Oil Content of Saturated Soil

Average Pore Space Between Soil Grains Ranges From A **Low of 15%** To A **High of 26%**. Pure Sand Being 26%.

16% = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

7 = Width in **Feet**5 = Length in **Feet**60 = Depth in **Inches**

5 = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

209.44 = Gallons of Oil In Soil

5.0 = Barrels of Oil In Soil

5.0 = Total Estimated Barrels of Oil in Soil

If different soil types are impacted (I.E. Caliche Pad and Sandy Clay Pasture Area), additional calculation boxes are provided below. If not, please make sure the dimensions are zeroed out before finalizing.

20% = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

= Width in **Feet**= Length in **Feet**= Depth in **Inches**

0 = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

0.00 = Gallons of Oil In Soil

0.0 = Barrels of Oil In Soil

20% = Estimated Pore Space

Width Times Length Times Depth = Cubic Feet

= Width in **Feet**= Length in **Feet**= Depth in **Inches**

0 = Depth in Feet

There Are 7.48 Gallons Of Oil Per Cubic Foot

0.00 = Gallons of Oil In Soil

0.0 = Barrels of Oil In Soil

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 152283

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 152283
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	10/20/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 198316

CONDITIONS

Operator: PLAINS MARKETING L.P. 333 Clay Street Suite 1900 Houston, TX 77002	OGRID: 34053
	Action Number: 198316
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Please have this work completed within 90 days as opposed to the proposed 180 days.	4/24/2023