

Incident ID	nAPP2036347592 &
District RP	nAPP2211732512
Facility ID	
Application ID	

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?	<u>>101.5</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ 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)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ 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?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ 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 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

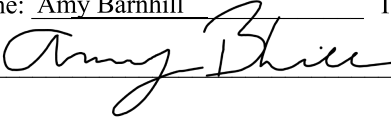
State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nAPP2036347592 &
District RP	nAPP2211732512
Facility ID	
Application ID	

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: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 9-12-22

email: ABarnhill@chevron.com Telephone: 432-687-7723

OCD Only

Received by: Jocelyn Harimon Date: 09/12/2022

Incident ID	nAPP2036347592 &
District RP	nAPP2211732512
Facility ID	
Application ID	

Remediation Plan

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

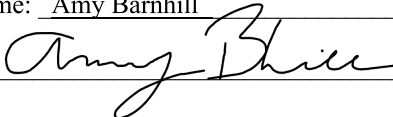
- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note 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.

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: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 9-12-22

email: ABarnhill@chevron.com Telephone: 432-687-7723

OCD Only

Received by: Jocelyn Harimon Date: 09/12/2022

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

Signature:  Date: 09/14/2022

Incident ID	nAPP2036347592 &
District RP	nAPP2211732512
Facility ID	
Application ID	

Closure

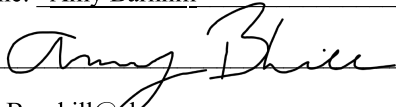
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 9-12-22

email: ABarnhill@chevron.com Telephone: 432-687-7723

OCD Only

Received by: Jocelyn Harimon Date: 09/12/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Tracking Number: nAPP2036347592 & nAPP2211732512

**Closure Report
SD 13 SWD Corridor Line
Produced Water Release
Lea County, New Mexico**

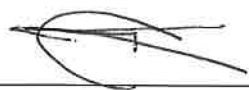
Latitude: N 32.035531°
Longitude: W -103.638179°

LAI Project No. 21-0100-03 & 22-0105-08

September 2, 2022

Prepared for:
Chevron USA Inc.
6301 Deauville Blvd.
Midland, Texas 79706

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 202
Midland, Texas 79701



Mark J. Larson, P.G.
Certified Professional Geologist #10490



Robert Nelson
Sr. Geoscientist

Table of Contents

1.0	INTRODUCTION	4
1.1	<i>Background</i>	4
1.2	<i>Physical Setting</i>	4
1.3	<i>Remediation Standards</i>	4
2.0	DELINEATION	5
3.0	REMEDICATION	6
4.0	DEFERRAL REQUEST	7

Tables

Table 1a	Delineation Soil Sample Analytical Data Summary (nAPP2036347592)
Table 1b	Delineation Soil Sample Analytical Data Summary (nAPP2211732512)
Table 2	Confirmation Soil Sample Analytical Data Summary

Figures

Figure 1	Topographic Map
Figure 2a	Aerial Map Showing Sample Locations (nAPP2036347592)
Figure 2b	Aerial Map Showing Sample Locations (nAPP2211732512)
Figure 3	Aerial Map Showing Soil Boring Location
Figure 4	Aerial Map Showing Excavation and Confirmation Soil Sample Locations
Figure 5	Aerial Map Showing Deferral Location

Appendices

Appendix A	Initial C-141's and Chevron Spill Calculation
Appendix B	Karst Risk Potential
Appendix C	Soil Boring Log
Appendix D	Laboratory Reports
Appendix E	Photographs
Appendix F	NMOCD Communications

This Page Intentionally Left Blank

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Release

September 2, 2022

1.0 INTRODUCTION

Larson & Associates, Inc. (LAI), has prepared this delineation report and remediation plan on behalf of Chevron USA Inc. (Chevron) for submittal to the New Mexico Oil Conservation Division (NMOCD) District I for two (2) produced water releases at the Salado Draw 13 SWD Corridor Line (Site) located in Unit P (SE/4, SE/4), Section 14, Township 26 South, Range 32 East in Lea County, New Mexico. The geodetic position is North 32.035531° and West -103.638179°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The first release (nAPP2036347592) was discovered on December 25, 2020 was due to an underground water line failure on the main corridor line. Chevron reported that 62.7 barrels (bbls) of produced water was released and 40 bbls were recovered. The affected area measures approximately 1,972 square feet. The initial C-141 was submitted to NMOCD District 1 on December 25, 2020 and assigned incident number nAPP2036347592.

The second release (nAPP2211732512) was discovered on April 14, 2022 and was due to a pinhole leak in the poly to steel transition piece. Chevron reported that approximately 7.528 bbls of produced water was released with no recovery. The affected area overlaps the original spill area measuring approximately 1,972 square feet. The initial C-141 was submitted to NMOCD District I on April 27, 2022. Appendix A presents the initial Chevron spill calculation.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,160 feet above mean sea level (msl).
- The surface elevation gradually decreases to the southwest.
- There are no surface water features within 1,000 feet of the Site.
- Karst data provided by the USGS describes the Site as “medium risk” potential.
- The soils are designated as Pyote and Maljamar fine sands, 0 to 3 percent slopes, consisting of 0 to 30 inches of fine sand, underlain by 30 to 60 inches of a fine sandy loam.
- The geology is Quaternary age sand and silt, and locally includes cover sand.
- Groundwater occurs greater than 101.5 feet below ground surface (bgs) based on depth to groundwater measurements 72 hours after installing a temporary monitor well (SB-1) on April 14, 2020.

Appendix B presents USGS data depicting karst risk potential. Appendix C presents the soil boring log. Figure 3 presents an aerial map showing the soil boring location.

1.3 Remediation Standards

The following remediation standards are based on closure criteria for soils impacted by a release as presented in Table 1 of 19.15.29 NMAC:

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Release

September 2, 2022

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 2,500 mg/Kg
- Chloride 20,000 mg/Kg

Further, 19.15.29.13 NMAC (Restoration, Reclamation and Re-Vegetation) requires the operator to restore the impacted surface area that existed prior to the release or their final land use.

2.0 DELINEATION

The first release (nAPP2036347592) was delineated between February 3, 2021, and March 9, 2021. The delineation was reported to the NMOCD in the document titled "Tracking Number: nAPP2036347592, Delineation Report and Remediation Plan, SD 13 SWD Corridor Line, Produced Water Release, Lea County, New Mexico, April 26, 2021" and recommended the following remediation:

- Excavate soil from an area measuring approximately 1,972 square feet encompassing S-2, S-3, S-7, and S-8 to a depth of 1.5 feet bgs.
- Collect five (5) point composite bottom and sidewall confirmation soil samples every 200 square feet and analyze for BTEX, TPH and chloride.
- Backfill excavation with clean top within the ROW assuming achievement of NMOCD remediation levels.
- Seed the backfilled area with BLM mix #2.
- Prepare report with photographs for submittal to NMOCD District 1.

NMOCD conditionally approved the remediation plan on July 20, 2021 and stated the following "...Please make sure all groundwater data is included in closure report summary. Soil Samples will need to meet Table 1 Closure Criteria for proven depth to water determination. Closure samples should be representative of no more than 200ft². The samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Please make sure the edges/sidewalls are delineated to 600 mg/Kg for chloride and 100 mg/Kg for TPH, defining the edge of the release."

On April 18, 2022, LAI personnel used a stainless-steel hand auger to collect soil samples from five (5) locations inside of the spill area (S-1 through S-5) and in each cardinal direction of the spill (S-6 through S-9) from the second release (nAPP2211732512). The samples were collected to a maximum depth of approximately four (4) feet bgs, depending on subsurface conditions. The soil samples were delivered under chain of custody and preservation to Eurofins-Xenco Laboratories (Xenco) in Midland, Texas, which analyzed the samples for benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35), and chloride by EPA SW-846 Methods 8021B and 8015M, and M300, respectively.

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Release

September 2, 2022

Benzene, BTEX, and TPH were below the OCD remediation standards in Table 1 (19.15.29 NMAC) of 10 milligrams per kilogram (mg/Kg), 50 mg/Kg, and 100 mg/Kg, respectively. Chloride exceeded the OCD delineation limit of 600 mg/Kg in the following samples:

Sample ID	Depth (Feet)	Chloride Concentration (mg/Kg)
S-1	0.5	6,330
S-1	1	7,490
S-1	2	6,260
S-1	3	2,600
S-1	4	1,350
S-2	0.5	7,880
S-2	2	735
S-2	3	877
S-3	0.5	10,300
S-3	1	1,920
S-3	2	1,610
S-3	3	3,340
S-4	0.5	10,600
S-4	1	730
S-4	3	619
S-5	0.5	11,700
S-5	2	717

On May 9 and March 14, 2022, LAI personnel used a Geoprobe® 7822DT direct push rig to further delineate chloride at sample locations S—1 through S-4. Soil samples were collected at approximately one (1), three (3), five (5), and ten (10) feet bgs. The laboratory results demonstrate the release was delineated according to the NMOC remediation and closure requirements (19.15.29.12 NMAC Table 1) for groundwater greater than 100 feet bgs. Table 1a presents the delineation soil sample analytical data summary (nAPP2036347592). Table 1b presents the delineation soil sample analytical data summary (nAPP2211732512). Figure 2 presents an aerial map showing the sample locations. Appendix D presents the laboratory reports.

3.0 REMEDIATION

On July 28, 2022, Warrior Technologies, LLC (Warrior), under supervision from LAI personnel began hydro excavation of soil encompassing sample locations S-1, S-2, S-5, and S-7 from the first release (nAPP2036347592) and S-1 through S-5 from the second release (nAPP2211732512) to a depth of approximately 4.1 feet bgs and soil encompassing S-3 and S-8 from the first release (nAPP2036347592) to a depth of approximately 1.5 feet bgs. Hydrovac media (i.e., soil water rock) was contained in vacuum boxes prior to being disposed of at the R360 Halfway facility between Carlsbad and Hobbs, New Mexico. Approximately 360 cubic yards of impacted soil was hauled to disposal.

Between July 29, 2022 and August 15, 2022, LAI personnel collected twenty four (24) bottom and sidewall sample locations from within the excavated area. The soil samples were delivered under chain of custody

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Release

September 2, 2022

and preservation to Xenco and Permian Basin Environmental Laboratories (Permian) in Midland, Texas, which analyzed the samples for BTEX, TPH, including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35), EPA SW-846 Methods 8021B and 8015M, respectively, and chloride by EPA Method 300. Laboratory analysis reported benzene, BTEX, TPH, and chloride concentrations below the NMOCD remediation standards in Table 1 of 19.15.29 NMAC for all confirmation soil samples. Figure 4 presents an aerial map showing the excavation and confirmation soil sample locations.

On August 24, 2022, Bullseye Testing LLC backfilled the excavation with clean topsoil. LAI personnel collected two (2) composite samples (BF-1 and BF-2) of clean topsoil from a nearby burrow pit. Permian analyzed the samples for BTEX, TPH, and chloride. Benzene, BTEX, and TPH were below the analytical method reporting limits (RLs) and chloride was less than 600 mg/Kg. At the time of backfilling, Chevron personnel were repairing the riser therefore an excavation area measuring approximately 153 square feet will be backfilled once the repairs are complete.

On August 29, 2022, the excavation was seeded with BLM Mix #2. Appendix E presents photographs.

4.0 DEFERRAL REQUEST

Chevron requests deferral for chloride at sidewall sample location D-1 (2,730 mg/Kg) where an aboveground pipeline riser is located that connects the Salado Draw 24 tank battery to the Salado Draw 13 SWD. Further excavation of this area risks jeopardizing the integrity of the flowline resulting in additional environmental impacts. Figure 5 presents an aerial map showing the deferral locations.

Tables

Table 1a
Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line Produced Water Spill (nAPP2036347592)
Lea County, New Mexico
32° 02' 07.97" North, 103° 38' 17.89" West

Page 1 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:										
10										
50										
100/2,500										
600/20,000										
S-1	0.5	2/3/2021	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	17.5
	1	2/3/2021	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	36.6
S-2	0.5	2/3/2021	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	9,780
	1	2/3/2021	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	429
S-3	0.5	2/3/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	8,280
	1	2/3/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	2,130
	1	3/9/2021	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	1,450
	3	3/9/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	179
	5	3/9/2021	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	147
	10	3/9/2021	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	201
S-4	0.5	2/3/2021	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	47.3
	1	2/3/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	20.5
S-5	0.5	2/3/2021	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	84.1
	1	2/3/2021	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	15.1
S-6	0.5	2/3/2021	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	30.3
	1	2/3/2021	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	22.5
S-7	0.5	2/3/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	20.0
	1	2/3/2021	In-Situ	0.00346	0.0271	<50.0	<50.0	<50.0	<50.0	610
	1	3/9/2021	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	154

Table 1a

Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line Produced Water Spill (nAPP2036347592)

Lea County, New Mexico

32° 02' 07.97" North, 103° 38' 17.89" West

Page 2 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:										
				10		50			100/2,500	
	3	3/9/2021	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	132
	5	3/9/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	174
	10	3/9/2021	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	126
S-8	0.5	2/3/2021	In-Situ	<0.00202	0.0392	<50.0	<50.0	<50.0	<50.0	8,250
	1	2/3/2021	In-Situ	<0.00200	0.00357	<49.9	<49.9	<49.9	<49.9	2,250
	1	3/9/2021	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	124
	3	3/9/2021	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	182
	5	3/9/2021	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	133
	10	3/9/2021	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	56.1
S-9	0.5	2/3/2021	In-Situ	<0.00201	0.0188	<49.9	<49.9	<49.9	<49.9	172
	1	2/3/2021	In-Situ	0.00202	0.00545	<50.0	<50.0	<50.0	<50.0	10.9
S-10	0.5	2/3/2021	In-Situ	<0.00202	0.00232	<49.8	<49.8	<49.8	<49.8	99.7
	1	3/9/2021	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	20.1
S-11	0.5	2/3/2021	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	38.4
	1	2/3/2021	In-Situ	<0.00198	0.00965	<49.8	<49.8	<49.8	<49.8	35.8
S-12	0.5	2/3/2021	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	57.3
	1	2/3/2021	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	37.3

Notes: Analysis performed by Xenco Laboratories (Xenco) in Midland, Texas by EPA SW-846 8021B (BTEX), 8015M (TPH), and 300E (Chloride)
 Depth in feet below ground surface (bgs)

Table 1a

Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line Produced Water Spill (nAPP2036347592)

Lea County, New Mexico

32° 02' 07.97" North, 103° 38' 17.89" West

Page 3 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50				100/2,500	600/20,000

mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

<: denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation action limits

Table 1b
Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line 2nd Produced Water Spill (nAPP2211732512)
Lea County, New Mexico
32° 02' 07.93" North, 103° 38' 18.03" West

Page 1 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	Remediation Level:				TPH (mg/Kg)	Chloride (mg/Kg)	
						10	50				100/2,500	600/20,000
S-1	0.5	4/18/2022	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	6,330	
	1	4/18/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	7,490	
	2	4/18/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	6,260	
	3	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,600	
	4	4/18/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,350	
	1	5/9/2022	In-Situ	<0.00199	<0.00398	<50.0	81.9	<49.9	<49.9	81.9	9,500	
	3	5/9/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	3,020	
	5	5/9/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	6,650	
S-2	10	5/9/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,050	
	0.5	4/18/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,880	
	1	4/18/2022	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	331	
	2	4/18/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	735	
	3	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	877	
	1	6/14/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	121	
	3	6/14/2022	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	234	
	5	6/14/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	174	
S-3	10	6/14/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	65.8	
	0.5	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	10,300	
	1	4/18/2022	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	1,920	
	2	4/18/2022	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,610	
	3	4/18/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	3,340	
	1	6/14/2022	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	2,430	
	3	6/14/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	7,170	

Table 1b
Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line 2nd Produced Water Spill (nAPP2211732512)
Lea County, New Mexico
32° 02' 07.93" North, 103° 38' 18.03" West

Page 2 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)	
Remediation Level:											
10						50		100/2,500			600/20,000
S-4	5	6/14/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	5,800	
	10	6/14/2022	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	2,850	
	0.5	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10,600	
	1	4/18/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	730	
	2	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	422	
S-5	3	4/18/2022	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	619	
	1	6/14/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	129	
	3	6/14/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	955	
	5	6/14/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	273	
	10	6/14/2022	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	85.7	
S-6	0.5	4/18/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	11,700	
	1	4/18/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	461	
	2	4/18/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	717	
	3	4/18/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	476	
S-7	0.5	4/18/2022	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	41.0	
	1	4/18/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	22.2	
S-8	0.5	4/18/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	25.1	
	1	4/18/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	11.4	
S-9	0.5	4/18/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	12.9	
	1	4/18/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	9.32	

Table 1b

Soil Sample Analytical Data Summary
SD 13 SWD Corridor Line 2nd Produced Water Spill (nAPP2211732512)

Lea County, New Mexico

32° 02' 07.93" North, 103° 38' 18.03" West

Page 3 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50	100/2,500				600/20,000
S-9	0.5	4/18/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	12.1
	1	4/18/2022	In-Situ	<0.00200	0.00404	<49.9	<49.9	<49.9	<49.9	15.1

Notes: Analysis performed by Xenco Laboratories (Xenco) in Midland, Texas by EPA SW-846 8021B (BTEX), 8015M (TPH), and 300E (Chloride)

Depth in feet below ground surface (bgs)

mg/kg: milligrams per kilogram equivalent to parts per million (ppm)

<: denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation action limits

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 Corridor Line
Lea County, New Mexico
North 32°02'07.97"N West 103°38'17.89"W

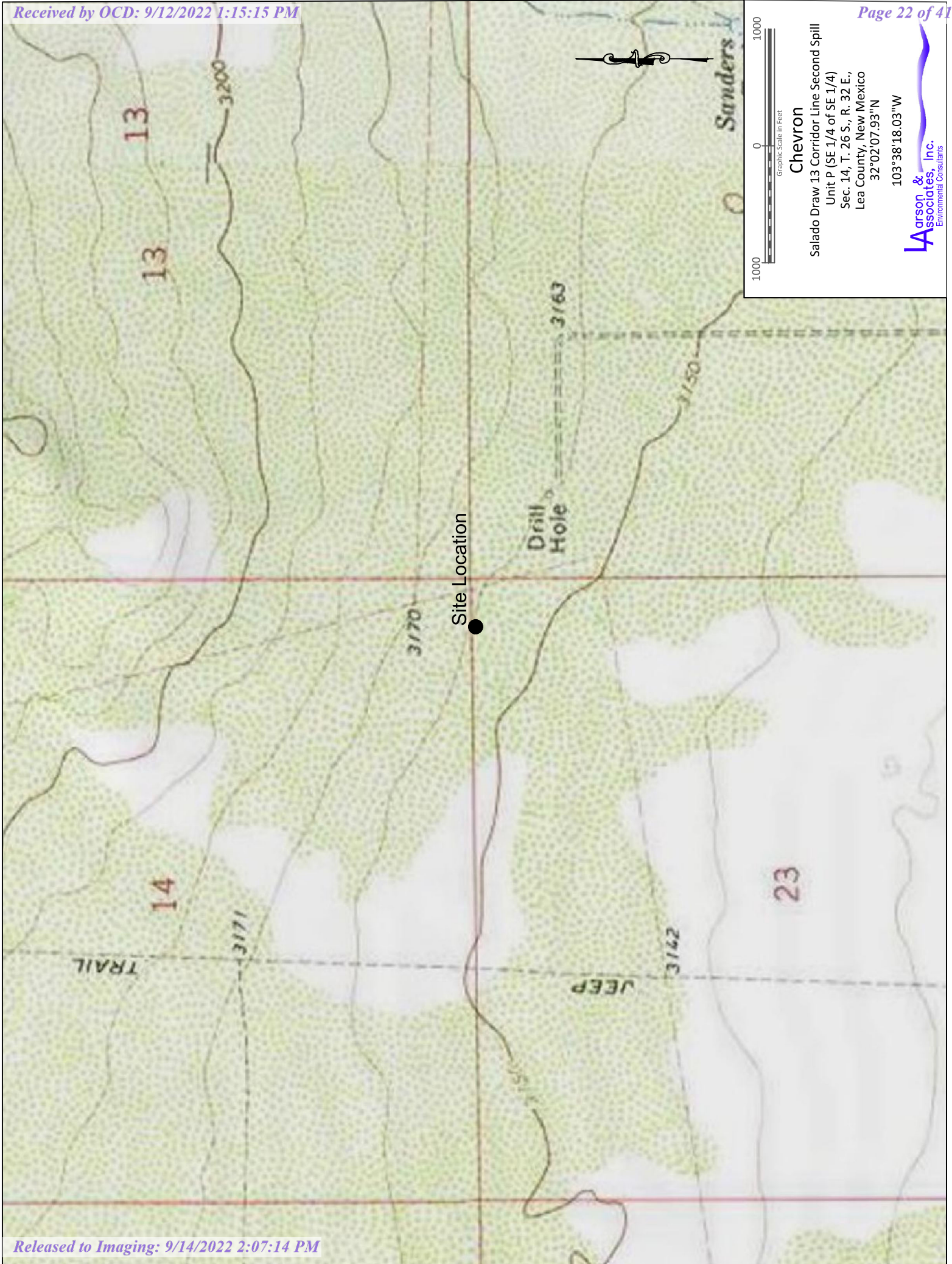
Sample ID	Location	Depth (feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RAL:					10	50				100/2,500	600/20,000
C-1	Bottom	4.1	7/29/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	425
C-2	Sidewall	0 - 4.1	7/29/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	222
C-3	Bottom	4.1	8/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	1,600
C-4	Sidewall	0 - 4.1	8/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	249
C-5	Bottom	4.1	8/4/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	569
C-6	Bottom	4.1	8/4/2022	In-Situ	<0.00199	0.0137	<49.9	<49.9	<49.9	<49.9	393
C-7	Bottom	4.1	8/4/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	624
C-8	Bottom	4.1	8/8/2022	In-Situ	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	2,210
C-9	Bottom	4.1	8/8/2022	In-Situ	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	3,260
C-10	Sidewall	0 - 3	8/9/2022	In-Situ	<0.00118	<0.00235	<29.4	<29.4	<29.4	<29.4	591
C-11	Sidewall	0 - 4.1	8/8/2022	In-Situ	<0.00102	<0.00204	<25.5	<25.5	<25.5	<25.5	494
C-12	Sidewall	0 - 4.1	8/8/2022	In-Situ	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	279
C-13	Bottom	4.1	8/12/2022	In-Situ	<0.00119	<0.00238	<29.8	<29.8	<29.8	<29.8	606
C-14	Bottom	1.5	8/12/2022	In-Situ	<0.00111	<0.00222	<27.8	<27.8	<27.8	<27.8	513
C-15	Bottom	4.1	8/12/2022	In-Situ	<0.00119	<0.00238	<29.8	<29.8	<29.8	<29.8	213
C-16	Bottom	1.5	8/12/2022	In-Situ	<0.00110	<0.00220	<27.5	<27.5	<27.5	<27.5	38.0
C-17	Sidewall	0 - 1.5	8/12/2022	In-Situ	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	99.5
C-18	Bottom	1.5	8/15/2022	In-Situ	<0.00112	<0.00225	<28.1	<28.1	<28.1	<28.1	33.5
C-19	Bottom	1.5	8/15/2022	In-Situ	<0.00110	<0.00220	<27.5	<27.5	<27.5	<27.5	180
C-20	Bottom	1.5	8/15/2022	In-Situ	<0.00114	<0.00227	<28.4	<28.4	<28.4	<28.4	268
C-21	Sidewall	0 - 1.5	8/15/2022	In-Situ	<0.00109	<0.00217	<27.2	<27.2	<27.2	<27.2	190
C-22	Sidewall	0 - 1.5	8/15/2022	In-Situ	<0.00104	<0.00208	<26.0	<26.0	<26.0	<26.0	129
C-23	Bottom	4.1	8/15/2022	In-Situ	<0.00122	<0.00244	<30.5	<30.5	<30.5	<30.5	2,200
C-24	Sidewall	0 - 4.1	8/15/2022	In-Situ	<0.00105	<0.00211	<26.3	<26.3	<26.3	<26.3	470
D-1	Sidewall	0 - 4.1	8/15/2022	In-Situ	<0.00106	<0.00213	<26.6	<26.6	<26.6	<26.6	2,730
BF-1	--	--	8/12/2022	In-Situ	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	15.9
BF-2	--	--	8/12/2022	In-Situ	<0.00103	<0.00206	<25.8	<25.8	<25.8	<25.8	5.45

Notes: analysis performed by Xenco Laboratories (Xenco), Midland, Texas and Carlsbad, New Mexico by EPA SW-846 Methods 8021B (BTEX) and 8015M (TPH), and

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 Corridor Line
Lea County, New Mexico
North 32°02'07.97"N West 103°38'17.89"W

Method 300 (chloride)
Depth in feet below ground surface (bgs)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)
Bold and Highlighted Denotes Conetrations Above OCD Closure Criteria

Figures



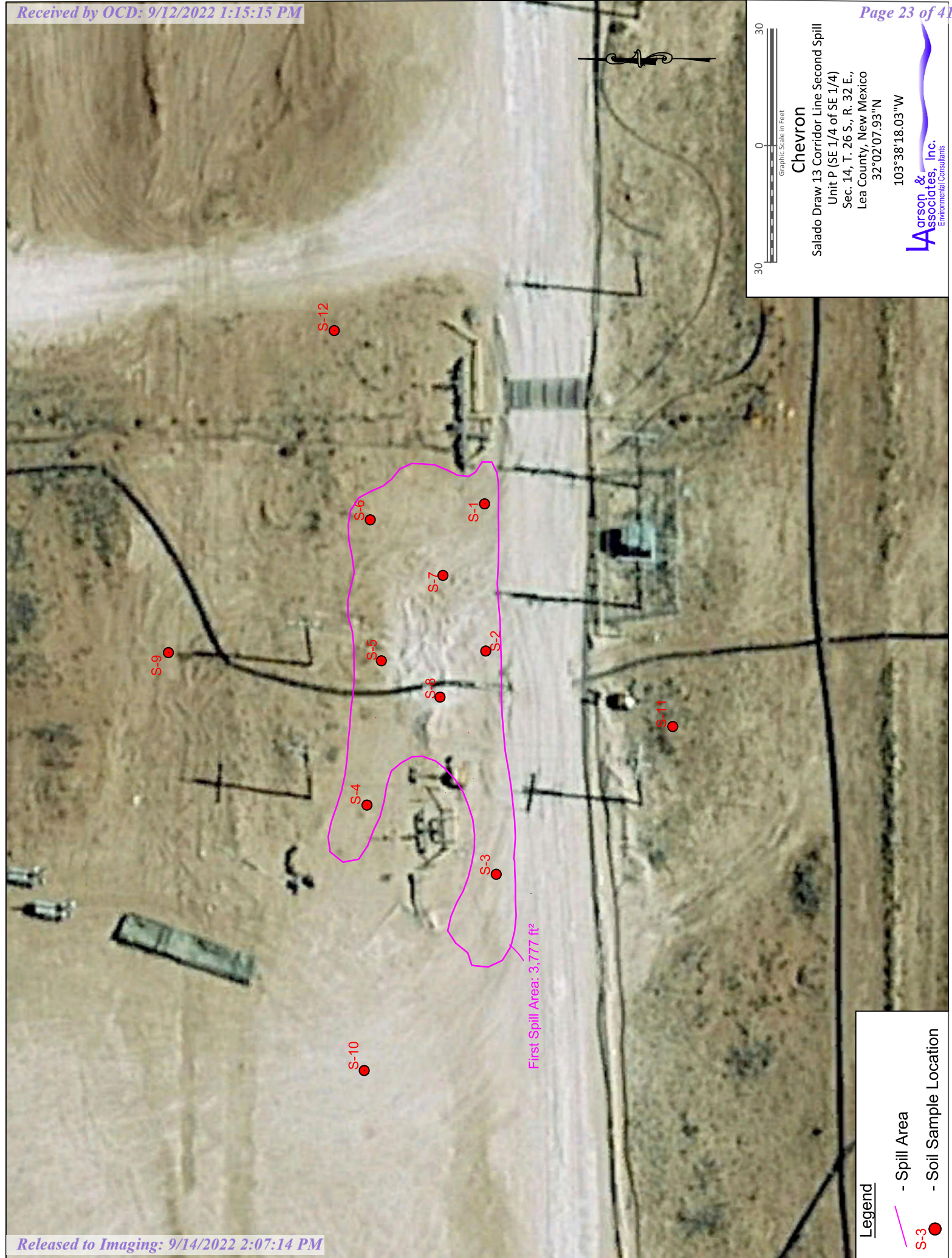


Figure 2a - Aerial Map (NAPP2036347592)

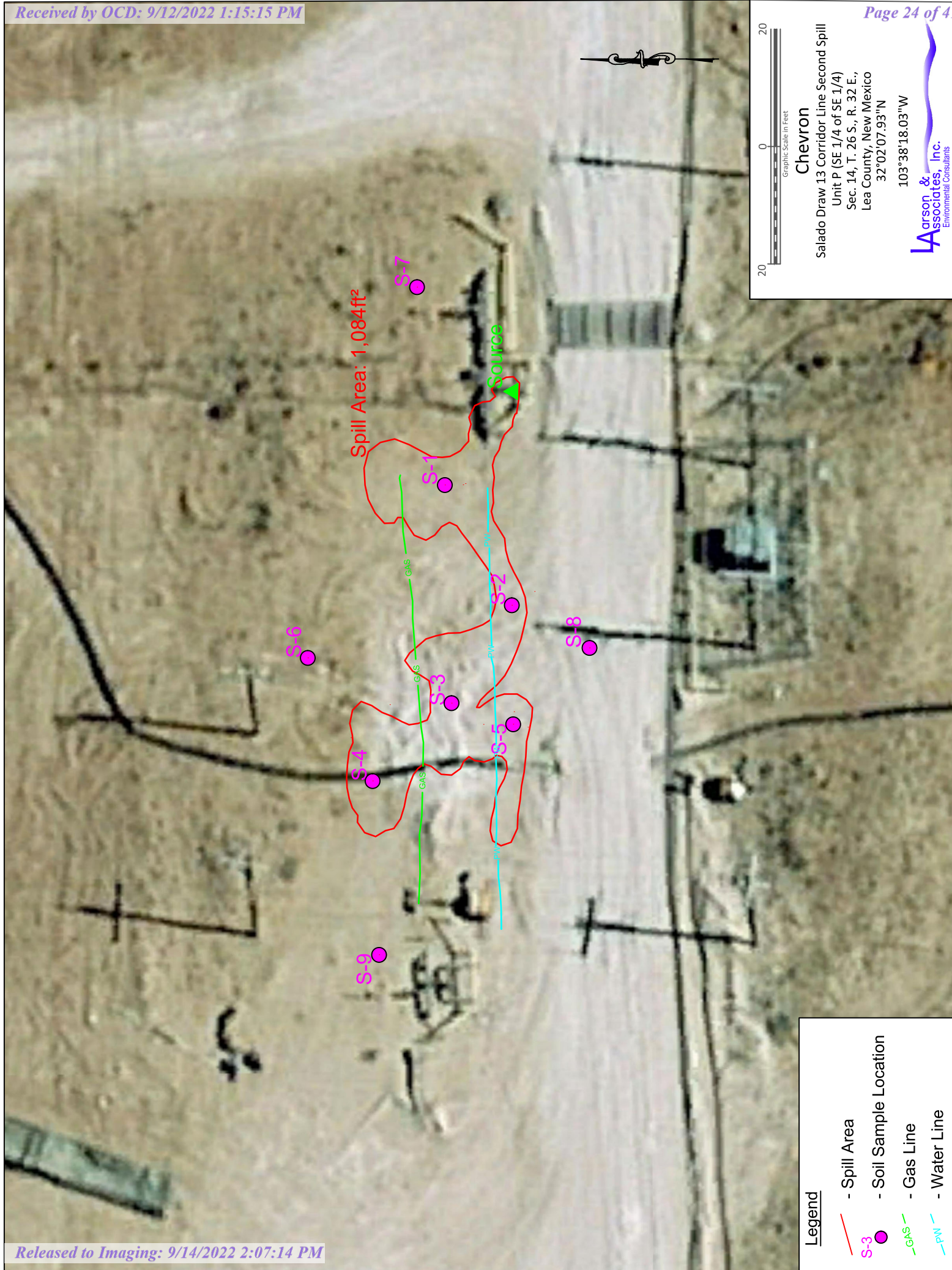




Figure 3 - Aerial Map Showing Soil Boring Location

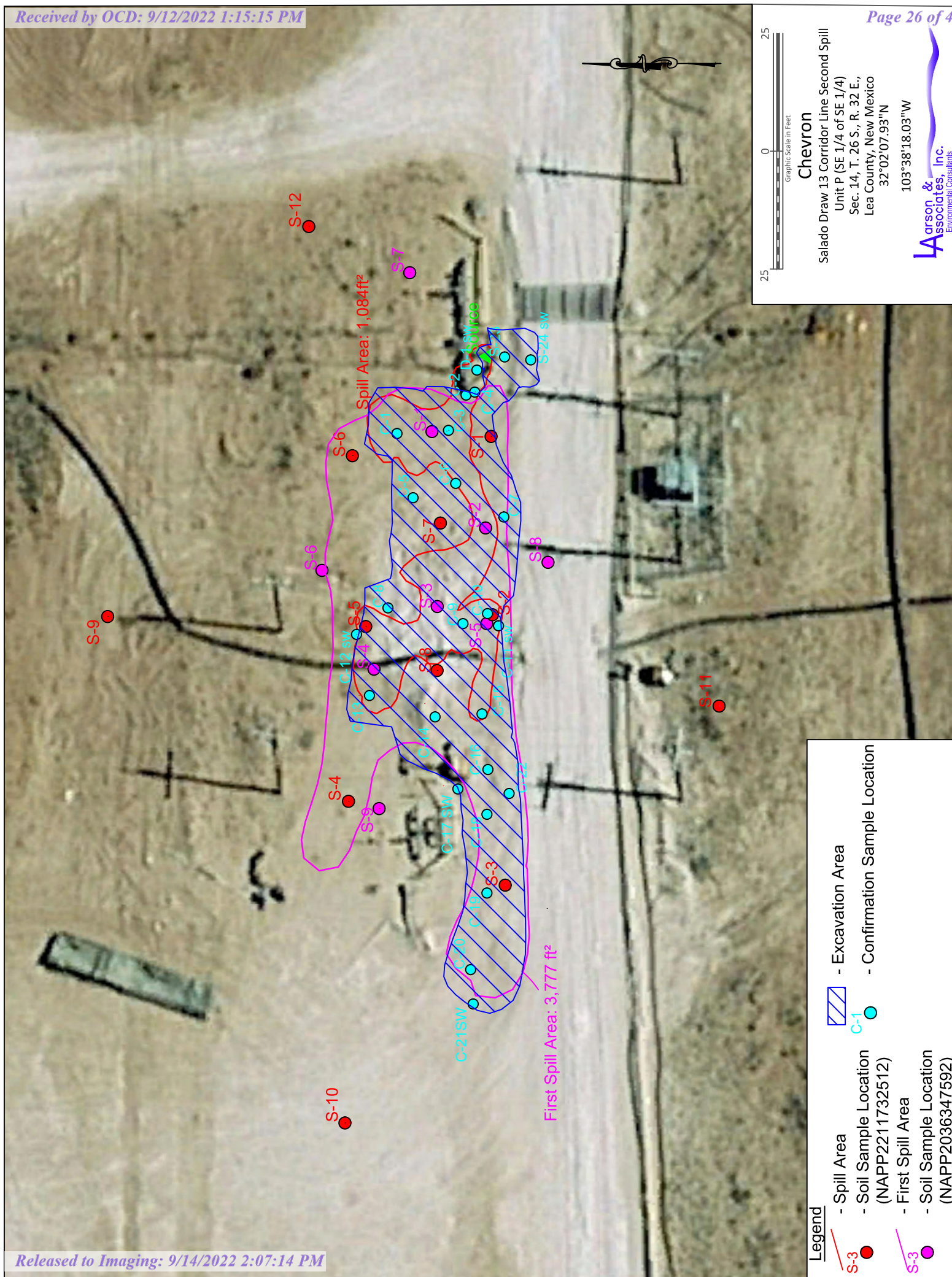


Figure 4 - Aerial Map Showing Spill Areas and Excavation Area

Appendix A
Chevron Initial C-141's

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Chevron U.S.A., Inc.	OGRID 4323
Contact Name Jessica Zemen	Contact Telephone 432-530-9187
Contact email jessicazemen@chevron.com	Incident # (assigned by OCD)
Contact mailing address 6301 Deauville Blvd. Midland, TX 79706	

Location of Release Source

Latitude 32.02192 Longitude -103.38262
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Salado Draw 13 SWD	Site Type: SWD
Date Release Discovered: 12/25/2020	API# (if applicable):

Unit Letter	Section	Township	Range	County
P	20	26S	35E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls): 62.7 bbl	Volume Recovered (bbls): 40.0 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls):	Volume Recovered (bbls):
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

An underground water line failure on the main corridor line resulted in a release of 62.7 bbls of produced water to ground.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The spill release was over 25 bbl.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Jessica Zemen sent an email to EMNRD-OCD-District1spills@state.nm.us on December 26, 2020 at 7:39 AM detailing the spill release information.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ 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>Jessica Zemen</u> Title: <u>Lead Environmental Specialist, Field Support</u>	
Signature: <u></u>	Date: <u>12/28/2020</u>
email: <u>jessicazemen@chevron.com</u>	Telephone: <u>432-530-9187</u>
<u>OCD Only</u>	
Received by: _____ Date: _____	

Incident ID	
District RP	
Facility ID	
Application ID	

Area	Standing Liquid	In Soil	dimensions / shape	Oil Volume	Water Volume
1-Hole 1	0	2'	3' diam Circular	0	0.67
2- Hole 2	0	2'	Circular 2' diam	0	0.17
3- Main Runoff	0.0833	0.208	Rectangular 125x30	0	57.72
4-Runoff in road	0.0208	0	Rectangular 45x25	0	4.17
5					
6					
7					
8					
Total Fluid				0	62.7

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	nAPP2211732512
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Chevron USA	OGRID: 4323
Contact Name: Amy Barnhill	Contact Telephone: 432-687-7108
Contact email: ABarnhill@chevron.com	Incident # (assigned by OCD)
Contact mailing address: 6301 Deauville Blvd Midland, Tx 79706	

Location of Release Source

Latitude 32.03578552 _____ Longitude -103.63861265 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: 4-14-22	Site Type: Produced Water
Date Release Discovered: 4-13-22	API# (if applicable)

Unit Letter	Section	Township	Range	County
P	14	26S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 7.528	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

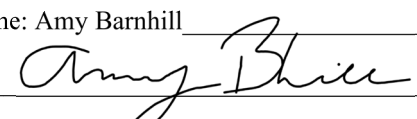
Cause of Release: **pin hole in poly to steel transition piece**

Incident ID	nAPP2211732512
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ 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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ 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: Amy Barnhill	Title: Water Specialist
Signature: 	Date: 4-27-22
email: ABarnhill@chevron.com	Telephone: 432-687-7108
<u>OCD Only</u>	
Received by: Jocelyn Harimon	Date: 04/27/2022

Incident ID	nAPP2211732512
District RP	
Facility ID	
Application ID	

Spill Calculations:

Calculation Details

Area 1

Shape: Rectangle

Secondary Containment?: No

Standing Liquid Dimensions: 18 ft x 12 ft x 1 in

Total Volume: 4.168 bbl

Water Cut: 100 %

Oil Volume:.000 bbl

Penetration Depth: 2 in

Fluid to Soil Volume: .962 bbl

Water Volume: 4.168 bbl

Area 2

Shape: Rectangle

Secondary Containment?: No

Standing Liquid Dimensions: 13 ft x 6 ft x 1 in

Total Volume: 1.331 bbl

Water Cut: 100%

Oil Volume: .000 bbl

Penetration Depth: 1 in

Volume to Soil Volume: .174 bbl

Water Volume: 1.331 bbl

Area 3

Shape: Rectangle

Secondary Containment?: No

Standing Liquid Dimensions: 20 ft x 2 ft x .5 in

Total Volume: .319 bbl

Water Cut: 100%

Oil Volume: .000 bbl

Penetration Depth: .25 in

Fluid to Soil Volume: .022 bbl

Water Volume: 0.319 bbl

Area 4

Shape: Rectangle

Secondary Containment?: No

Standing Liquid Dimensions: 10 ft x 6 ft x .5 in

Total Volume: .479 bbl

Water Cut: 100%

Oil Volume: .000 bbl

Penetration Depth: .25 in

Fluid to Soil Volume: .033 bbl

Water Volume: 0.479 bbl

State of New Mexico
Oil Conservation Division

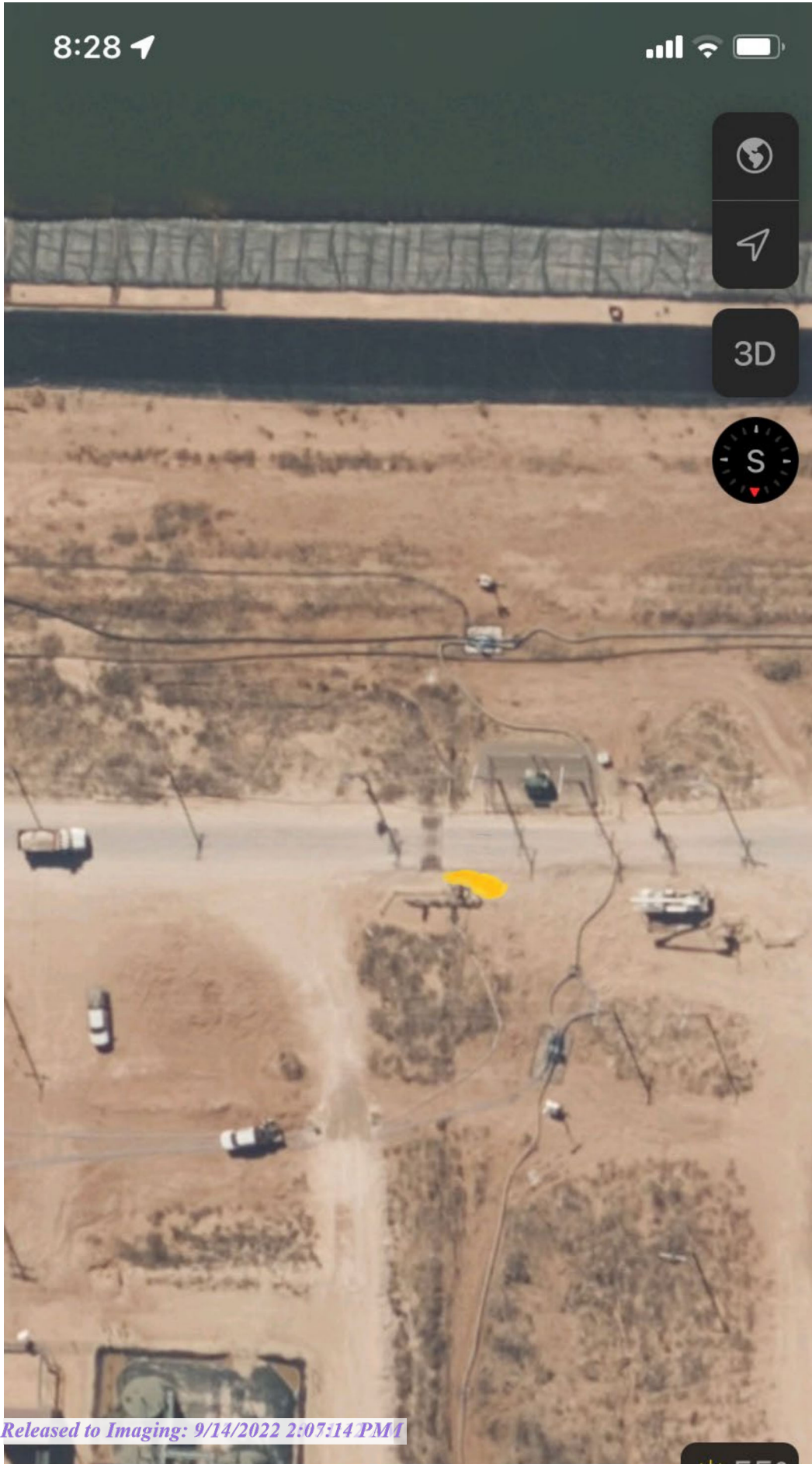
Page 4

Incident ID	nAPP2211732512
District RP	
Facility ID	
Application ID	

Area 5
Shape: Rectangle
Secondary Containment?: No
Standing Liquid Dimensions: 10 ft x 10 ft x .25 in
Total Volume: .427 bbl
Water Cut: 100%
Oil Volume: .000 bbl
Penetration Depth: .25 in
Fluid to Soil Volume: .056 bbl
Water Volume: 0.427 bbl

Area 6
Shape: Circle
Secondary Containment? No
Standing Liquid Dimensions: 1 ft x 60
Total Volume: .804 bbl
Water Cut: 100%
Oil Volume: .000 bbl
Penetration Depth: 60 in
Fluid to Soil Volume: .056 bbl
Water Volume: 0.427 bbl

Incident ID	nAPP2211732512
District RP	
Facility ID	
Application ID	



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 101830

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 101830
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	4/27/2022

Appendix B
Karst Risk Potential



Appendix C
Soil Boring Log

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: 10:35 MDT Finish: 15:15 DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING										SAMPLE			REMARKS		
					PPM X _____										NUMBER	PID READING	RECOVERY	DEPTH	BACKGROUND PID READING	
					2	4	6	8	10	12	14	16	18							
	0	Silty Sand, 5YR 5/4, Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Dry	ML																	
	5															1				
	10	Caliche, 2.5YR 8/3, Pink, Very Fine Grained, Poorly Sorted, Dry																		
	15		Caliche																	
	20																			
	25															2				
	30	Silty Sand, 5YR 5/4, Reddish Brown, Fine Grained Quartz Sand with Caliche Clasts (~10mm), Poorly Sorted	ML													3				
	35	Caliche, 2.5YR 8/3, Pink, Very Fine Grained, Poorly Sorted with Subangular Clasts (~10mm)	Caliche																	
	40															4				
	45	Silty Sand, 5YR 6/4, Light Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted with Subangular Caliche Clasts (~10mm)																		
	50		ML																	
	55																			
	60																			



ONE CONTINUOUS AUGER SAMPLER



WATER TABLE (TIME OF BORING)



STANDARD PENETRATION TEST



LABORATORY TEST LOCATION



UNDISTURBED SAMPLE



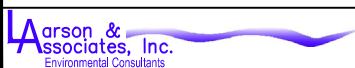
PENETROMETER (TONS/ SQ. FT)



WATER TABLE (24 HRS)



NR NO RECOVERY

JOB NUMBER : Chevron/ 19-0180-01HOLE DIAMETER : 2"LOCATION : Salado Draw 24 CTB
32.0250583°, -103.6342389°LAI GEOLOGIST : E. ChavezDRILLING CONTRACTOR : ScarboroughDRILLING METHOD : Air RotaryDRILL DATE :
04-14-2020BORING NUMBER :
SB-01

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: 10:35 MDT Finish: 15:15 DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING										SAMPLE			REMARKS			
					PPM X _____										NUMBER	PID READING	RECOVERY	DEPTH	BACKGROUND PID READING SOIL : _____ PPM SOIL : _____ PPM		
					2	4	6	8	10	12	14	16	18								
	65	Silty Sand, 5YR 5/6, Yellowish Red, Very Fine Grained, Poorly Sorted with Subangular Caliche and Black Chert Clasts (~0.5mm)	ML												5			66			
	70																				
	75																				
	80																				
	85																				
	90	Silty Sand, 5YR 4/6, Yellowish Red, Fine Grained, Poorly Sorted with Subangular Caliche (~2mm)	ML															90			
	95																				
	100																				
	101.5																				
	105	TD:101.5' Dry After 72 Hours													6			101.5			



ONE CONTINUOUS AUGER SAMPLER



WATER TABLE (TIME OF BORING)



STANDARD PENETRATION TEST



LABORATORY TEST LOCATION



UNDISTURBED SAMPLE



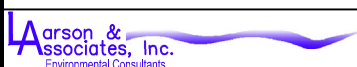
PENETROMETER (TONS/ SQ. FT)



WATER TABLE (24 HRS)



NR NO RECOVERY



DRILL DATE :

04-14-2020

BORING NUMBER :

SB-01

JOB NUMBER : Chevron/ 19-0180-01

HOLE DIAMETER : 2"

LOCATION : Salado Draw 24 CTB
32.0250583°, -103.6342389°

LAI GEOLOGIST : E. Chavez

DRILLING CONTRACTOR : Scarborough

DRILLING METHOD : Air Rotary

Appendix D
Laboratory Reports

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 02.04.2021 09:34
Report Date: 02.11.2021 08:25
Project Manager: Holly Taylor

Certificate of Analysis Summary 687297
Larson and Associates, Inc., Midland, TX
Project Name: SD 13 SWD Corridor Line

<i>Analysis Requested</i>	<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>687297-001</i>	<i>687297-002</i>	<i>687297-003</i>	<i>687297-004</i>	<i>687297-005</i>	<i>687297-006</i>
	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>								
BTEX by EPA 8021B	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Benzene	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Toluene	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Ethylbenzene	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
m,p-Xylenes	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
o-Xylene	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Total Xylenes	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Total BTEX	02.05.2021 17:00	02.06.2021 17:09	mg/kg	RL	02.03.2021 12:28	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Chloride by EPA 300	02.04.2021 15:00	02.04.2021 20:31	mg/kg	RL	02.04.2021 20:31	RL	RL	RL	RL	RL	RL
Chloride	02.04.2021 15:00	02.04.2021 20:31	mg/kg	RL	02.04.2021 20:31	RL	RL	RL	RL	RL	RL
TPH by SW8015 Mod	02.06.2021 09:00	02.06.2021 13:10	mg/kg	RL	02.06.2021 13:10	RL	RL	RL	RL	RL	RL
Gasoline Range Hydrocarbons (GRO)	02.06.2021 09:00	02.06.2021 13:10	mg/kg	RL	02.06.2021 13:10	RL	RL	RL	RL	RL	RL
Diesel Range Organics (DRO)	02.06.2021 09:00	02.06.2021 13:10	mg/kg	RL	02.06.2021 13:10	RL	RL	RL	RL	RL	RL
Motor Oil Range Hydrocarbons (MRO)	02.06.2021 09:00	02.06.2021 13:10	mg/kg	RL	02.06.2021 13:10	RL	RL	RL	RL	RL	RL
Total TPH	02.06.2021 09:00	02.06.2021 13:10	mg/kg	RL	02.06.2021 13:10	RL	RL	RL	RL	RL	RL

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 02.04.2021 09:34
Report Date: 02.11.2021 08:25
Project Manager: Holly Taylor

Certificate of Analysis Summary 687297
Larson and Associates, Inc., Midland, TX
Project Name: SD 13 SWD Corridor Line

<i>Analysis Requested</i>	<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	687297-007	687297-008	687297-009	687297-010	687297-011	687297-012
	<i>Sampled:</i>	<i>Sampled:</i>	<i>Sampled:</i>	<i>Sampled:</i>	<i>Sampled:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Units/RL:</i>	<i>Units/RL:</i>	<i>Units/RL:</i>	<i>Units/RL:</i>	<i>Units/RL:</i>	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BTEX by EPA 8021B	Extracted:	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00	02.05.2021 17:00
	Analyzed:	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12	02.06.2021 19:12
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Benzene	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
	Toluene	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
	Ethylbenzene	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
Chloride by EPA 300	m,p-Xylenes	<0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399	0.00399
	o-Xylene	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
	Total Xylenes	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
	Total BTEX	<0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200
	Chloride	47.3	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TPH by SW8015 Mod	Extracted:	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00
	Analyzed:	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59	02.06.2021 15:59
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Gasoline Range Hydrocarbons (GRO)	<49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
	Diesel Range Organics (DRO)	<49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
	Motor Oil Range Hydrocarbons (MRO)	<49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
Total TPH		<49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 02.04.2021 09:34
Report Date: 02.11.2021 08:25
Project Manager: Holly Taylor

Certificate of Analysis Summary 687297
Larson and Associates, Inc., Midland, TX
Project Name: SD 13 SWD Corridor Line

<i>Analysis Requested</i>	<i>Lab Id:</i>	687297-013	<i>Field Id:</i>	687297-014	<i>Depth:</i>	687297-015	<i>Matrix:</i>	687297-016	<i>Sampled:</i>	687297-017	<i>Units/RL:</i>	687297-018
	<i>Field Id:</i>	S-7 0.5'	<i>Depth:</i>	S-7 1'	<i>Matrix:</i>	S-8 0.5'	<i>Sampled:</i>	S-8 1'	<i>Matrix:</i>	S-9 0.5'	<i>Units/RL:</i>	S-9 1'
	<i>Matrix:</i>	SOIL	<i>Sampled:</i>	SOIL	<i>Matrix:</i>	SOIL	<i>Sampled:</i>	SOIL	<i>Matrix:</i>	SOIL	<i>Units/RL:</i>	SOIL
	<i>Sampled:</i>	02.03.2021 12:52	<i>Sampled:</i>	02.03.2021 12:54	<i>Sampled:</i>	02.03.2021 12:56	<i>Sampled:</i>	02.03.2021 12:58	<i>Sampled:</i>	02.03.2021 12:00	<i>Sampled:</i>	02.03.2021 13:02
BTEX by EPA 8021B	<i>Extracted:</i>	02.05.2021 15:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00	02.04.2021 17:00
	<i>Analyzed:</i>	02.05.2021 19:38	02.05.2021 06:20	02.05.2021 06:40	02.05.2021 06:40	02.05.2021 06:40	02.05.2021 07:01	02.05.2021 07:01	02.05.2021 07:21	02.05.2021 07:42	02.05.2021 07:42	02.05.2021 07:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Benzene	<0.00200 0.00200	0.00346 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00200
	Toluene	<0.00200 0.00200	0.00885 0.00199	0.0156 0.00202	0.0156 0.00202	0.0156 0.00202	0.00357 0.00200	0.00357 0.00200	0.00785 0.00201	0.00343 0.00200	0.00343 0.00200	0.00343 0.00200
	Ethylbenzene	<0.00200 0.00200	0.00451 0.00199	0.00722 0.00202	0.00722 0.00202	0.00722 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.00277 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
Chloride by EPA 300	m,p-Xylenes	<0.00399 0.00399	0.00676 0.00398	0.0110 0.00403	0.0110 0.00403	0.0110 0.00403	<0.00401 0.00401	<0.00401 0.00401	0.00553 0.00402	<0.00399 0.00399	<0.00399 0.00399	<0.00399 0.00399
	o-Xylene	<0.00200 0.00200	0.00349 0.00199	0.00542 0.00202	0.00542 0.00202	0.00542 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.00265 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
	Total Xylenes	<0.00200 0.00200	0.0103 0.00199	0.0164 0.00202	0.0164 0.00202	0.0164 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.00818 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200
	Total BTEX	<0.00200 0.00200	0.0271 0.00199	0.0392 0.00202	0.0392 0.00202	0.0392 0.00202	0.00357 0.00200	0.00357 0.00200	0.0188 0.00201	0.00545 0.00200	0.00545 0.00200	0.00545 0.00200
TPH by SW8015 Mod	<i>Extracted:</i>	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45	02.04.2021 17:45
	<i>Analyzed:</i>	02.04.2021 22:39	02.04.2021 22:55	02.04.2021 23:00	02.04.2021 23:00	02.04.2021 23:00	02.04.2021 23:06	02.04.2021 23:06	02.04.2021 23:11	02.04.2021 23:16	02.04.2021 23:16	02.04.2021 23:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Chloride	20.0 4.99	610 4.97	8250 50.2	8250 50.2	8250 50.2	2250 25.3	2250 25.3	172 5.05	10.9 5.05	10.9 5.05	10.9 5.05
	Gasoline Range Hydrocarbons (GRO)	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00
	Diesel Range Organics (DRO)	02.06.2021 18:26	02.06.2021 18:47	02.06.2021 19:09	02.06.2021 19:09	02.06.2021 19:09	02.06.2021 19:30	02.06.2021 19:30	02.06.2021 19:52	02.06.2021 20:13	02.06.2021 20:13	02.06.2021 20:13
Motor Oil Range Hydrocarbons (MRO)	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
	Diesel Range Organics (DRO)	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0
Total TPH	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
	Total TPH	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 02.04.2021 09:34
Report Date: 02.11.2021 08:25
Project Manager: Holly Taylor

Certificate of Analysis Summary 687297
Larson and Associates, Inc., Midland, TX
Project Name: SD 13 SWD Corridor Line

<i>Analysis Requested</i>	<i>Lab Id:</i>	687297-019	<i>Field Id:</i>	687297-020	<i>Depth:</i>	687297-021	<i>Matrix:</i>	687297-022	<i>Sampled:</i>	687297-023
	<i>Field Id:</i>	S-10 0.5'	<i>Field Id:</i>	S-11 0.5'	<i>Depth:</i>	S-11 1'	<i>Matrix:</i>	S-12 0.5	<i>Sampled:</i>	S-12 1'
	<i>Matrix:</i>	SOIL	<i>Matrix:</i>	SOIL	<i>Matrix:</i>	SOIL	<i>Matrix:</i>	SOIL	<i>Matrix:</i>	SOIL
	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL
BTEX by EPA 8021B	<i>Extracted:</i>	02.04.2021 17:00	<i>Extracted:</i>	02.08.2021 11:15	<i>Extracted:</i>	02.08.2021 11:15	<i>Extracted:</i>	02.08.2021 11:15	<i>Extracted:</i>	02.08.2021 11:15
	<i>Analyzed:</i>	02.05.2021 08:02	<i>Analyzed:</i>	02.08.2021 15:19	<i>Analyzed:</i>	02.08.2021 15:39	<i>Analyzed:</i>	02.08.2021 15:59	<i>Analyzed:</i>	02.08.2021 16:20
	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL
	Benzene	<0.00202 0.00202	Benzene	<0.00199 0.00199	Benzene	<0.00198 0.00198	Benzene	<0.00198 0.00198	Benzene	<0.00198 0.00198
	Toluene	0.00232 0.00202	Toluene	<0.00199 0.00199	Toluene	0.00513 0.00198	Toluene	<0.00198 0.00198	Toluene	<0.00198 0.00198
	Ethylbenzene	<0.00202 0.00202	Ethylbenzene	<0.00199 0.00199	Ethylbenzene	0.00226 0.00198	Ethylbenzene	<0.00198 0.00198	Ethylbenzene	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	02.04.2021 17:45	<i>Extracted:</i>	02.04.2021 17:45	<i>Extracted:</i>	02.05.2021 15:30	<i>Extracted:</i>	02.05.2021 15:30	<i>Extracted:</i>	02.05.2021 15:30
	<i>Analyzed:</i>	02.04.2021 23:22	<i>Analyzed:</i>	02.04.2021 23:27	<i>Analyzed:</i>	02.05.2021 15:56	<i>Analyzed:</i>	02.05.2021 16:11	<i>Analyzed:</i>	02.05.2021 16:16
	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL
	Chloride	99.7 5.00	Chloride	38.4 4.98	Chloride	35.8 X 4.96	Chloride	57.3 5.03	Chloride	37.3 4.99
	TPH by SW8015 Mod		TPH by SW8015 Mod		TPH by SW8015 Mod		TPH by SW8015 Mod		TPH by SW8015 Mod	
	<i>Extracted:</i>	02.06.2021 09:00	<i>Extracted:</i>	02.06.2021 09:00	<i>Extracted:</i>	02.06.2021 10:00	<i>Extracted:</i>	02.06.2021 10:00	<i>Extracted:</i>	02.06.2021 10:00
Gasoline Range Hydrocarbons (GRO)	<i>Analyzed:</i>	02.06.2021 20:35	<i>Analyzed:</i>	02.06.2021 20:57	<i>Analyzed:</i>	02.07.2021 03:18	<i>Analyzed:</i>	02.07.2021 03:39	<i>Analyzed:</i>	02.07.2021 04:00
	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL	<i>Units/RL:</i>	mg/kg RL
	Gasoline Range Hydrocarbons (GRO)	<49.8 49.8	Gasoline Range Hydrocarbons (GRO)	<49.9 49.9	Gasoline Range Hydrocarbons (GRO)	<49.8 49.8	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0
	Diesel Range Organics (DRO)	<49.8 49.8	Diesel Range Organics (DRO)	<49.9 49.9	Diesel Range Organics (DRO)	<49.8 49.8	Diesel Range Organics (DRO)	<50.0 50.0	Diesel Range Organics (DRO)	<50.0 50.0
	Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9	Motor Oil Range Hydrocarbons (MRO)	<49.8 49.8	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0
	Total TPH	<49.8 49.8	Total TPH	<49.9 49.9	Total TPH	<49.8 49.8	Total TPH	<50.0 50.0	Total TPH	<50.0 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Analytical Report 687297

for

Larson and Associates, Inc.

Project Manager: Mark Larson

SD 13 SWD Corridor Line

21-0100-03

02.11.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.11.2021

Project Manager: **Mark Larson**

Larson and Associates, Inc.

P. O. Box 50685

Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **687297**

SD 13 SWD Corridor Line

Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687297. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687297 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Holly Taylor".

Holly Taylor
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 687297****Larson and Associates, Inc., Midland, TX**

SD 13 SWD Corridor Line

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 0.5'	S	02.03.2021 12:28		687297-001
S-1 1'	S	02.03.2021 12:30		687297-002
S-2 0.5'	S	02.03.2021 12:32		687297-003
S-2 1'	S	02.03.2021 12:34		687297-004
S-3 0.5'	S	02.03.2021 12:36		687297-005
S-3 1'	S	02.03.2021 12:38		687297-006
S-4 0.5'	S	02.03.2021 12:40		687297-007
S-4 1'	S	02.03.2021 12:42		687297-008
S-5 0.5'	S	02.03.2021 12:44		687297-009
S-5 1'	S	02.03.2021 12:46		687297-010
S-6 0.5'	S	02.03.2021 12:48		687297-011
S-6 1'	S	02.03.2021 12:50		687297-012
S-7 0.5'	S	02.03.2021 12:52		687297-013
S-7 1'	S	02.03.2021 12:54		687297-014
S-8 0.5'	S	02.03.2021 12:56		687297-015
S-8 1'	S	02.03.2021 12:58		687297-016
S-9 0.5'	S	02.03.2021 12:00		687297-017
S-9 1'	S	02.03.2021 13:02		687297-018
S-10 0.5'	S	02.03.2021 13:04		687297-019
S-11 0.5'	S	02.03.2021 13:06		687297-020
S-11 1'	S	02.03.2021 13:08		687297-021
S- 12 0.5	S	02.03.2021 13:10		687297-022
S-12 1'	S	02.03.2021 13:12		687297-023

**CASE NARRATIVE****Client Name: Larson and Associates, Inc.****Project Name: SD 13 SWD Corridor Line**Project ID: 21-0100-03
Work Order Number(s): 687297Report Date: 02.11.2021
Date Received: 02.04.2021**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3150090 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.

Samples affected are: 687301-001 SD.

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 687301-001 S, 687301-001 SD.

Batch: LBA-3150223 BTEX by EPA 8021B

Outlier/s are due to possible matrix interference.

Lab Sample ID 687297-012 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Ethylbenzene, Toluene, m,p-Xylenes Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 687297-012, -013

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 687297-012 S, 687297-012.

Batch: LBA-3150264 Chloride by EPA 300

Lab Sample ID 687297-021 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687297-021, -022, -023.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3150311 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7720997-1-BKS, 7720997-1-BSD.

Batch: LBA-3150324 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7721011-1-BLK.



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: SD 13 SWD Corridor Line

Project ID: 21-0100-03
Work Order Number(s): 687297

Report Date: 02.11.2021
Date Received: 02.04.2021

Batch: LBA-3150520 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7721162-1-BLK.



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-1 0.5'**
Lab Sample Id: 687297-001

Matrix: Soil
Date Collected: 02.03.2021 12:28

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.04.2021 15:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150091

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.5	4.98	mg/kg	02.04.2021 20:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 13:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 13:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 13:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 13:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.06.2021 13:10	
o-Terphenyl	84-15-1	103	%	70-130	02.06.2021 13:10	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-1 0.5'**
Lab Sample Id: 687297-001

Matrix: Soil
Date Collected: 02.03.2021 12:28

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	02.06.2021 17:09	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.06.2021 17:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	83	%	70-130	02.06.2021 17:09		
4-Bromofluorobenzene	460-00-4	99	%	70-130	02.06.2021 17:09		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-1 1'**
Lab Sample Id: 687297-002

Matrix: Soil
Date Collected: 02.03.2021 12:30

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.6	4.97	mg/kg	02.04.2021 21:03		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 14:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 14:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.06.2021 14:14	
o-Terphenyl	84-15-1	104	%	70-130	02.06.2021 14:14	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-1 1'**
Lab Sample Id: 687297-002

Matrix: Soil
Date Collected: 02.03.2021 12:30

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.06.2021 17:30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.06.2021 17:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	72	%	70-130	02.06.2021 17:30	
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.06.2021 17:30	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-2 0.5'**
Lab Sample Id: 687297-003

Matrix: Soil
Date Collected: 02.03.2021 12:32

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9780	100	mg/kg	02.04.2021 21:25		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 14:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 14:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 14:34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 14:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	02.06.2021 14:34	
o-Terphenyl	84-15-1	115	%	70-130	02.06.2021 14:34	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-2 0.5'**
 Lab Sample Id: 687297-003

Matrix: Soil
 Date Collected: 02.03.2021 12:32

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.06.2021 17:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.06.2021 17:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.06.2021 17:50		
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.06.2021 17:50		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-2 1'**
Lab Sample Id: 687297-004

Matrix: Soil
Date Collected: 02.03.2021 12:34

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	429	4.98	mg/kg	02.04.2021 21:30		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 14:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 14:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 14:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 14:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	02.06.2021 14:55	
o-Terphenyl	84-15-1	113	%	70-130	02.06.2021 14:55	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-2 1'**
Lab Sample Id: 687297-004

Matrix: Soil
Date Collected: 02.03.2021 12:34

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.06.2021 18:11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.06.2021 18:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	02.06.2021 18:11	
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.06.2021 18:11	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-3 0.5'**
Lab Sample Id: 687297-005

Matrix: Soil
Date Collected: 02.03.2021 12:36

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8280	50.3	mg/kg	02.04.2021 21:35		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 15:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 15:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 15:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 15:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	02.06.2021 15:17	
o-Terphenyl	84-15-1	112	%	70-130	02.06.2021 15:17	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-3 0.5'**
Lab Sample Id: 687297-005

Matrix: Soil
Date Collected: 02.03.2021 12:36

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.06.2021 18:31	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.2021 18:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.06.2021 18:31		
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.06.2021 18:31		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-3 1'**
Lab Sample Id: 687297-006

Matrix: Soil
Date Collected: 02.03.2021 12:38

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2130	24.8	mg/kg	02.04.2021 21:51		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 15:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 15:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 15:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 15:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	02.06.2021 15:38	
o-Terphenyl	84-15-1	112	%	70-130	02.06.2021 15:38	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-3 1'**
Lab Sample Id: 687297-006

Matrix: Soil
Date Collected: 02.03.2021 12:38

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.2021 18:52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.2021 18:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.06.2021 18:52		
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.06.2021 18:52		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-4 0.5'**
Lab Sample Id: 687297-007

Matrix: Soil
Date Collected: 02.03.2021 12:40

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	47.3	4.99	mg/kg	02.04.2021 21:57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.06.2021 15:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.06.2021 15:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.06.2021 15:59	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.06.2021 15:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	02.06.2021 15:59	
o-Terphenyl	84-15-1	112	%	70-130	02.06.2021 15:59	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-4 0.5'**
 Lab Sample Id: 687297-007

Matrix: Soil
 Date Collected: 02.03.2021 12:40

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.06.2021 19:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.2021 19:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.06.2021 19:12		
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.06.2021 19:12		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-4 1'**
Lab Sample Id: 687297-008

Matrix: Soil
Date Collected: 02.03.2021 12:42

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.5	4.95	mg/kg	02.04.2021 22:02		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 16:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 16:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 16:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.06.2021 16:20	
o-Terphenyl	84-15-1	106	%	70-130	02.06.2021 16:20	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-4 1'**
Lab Sample Id: 687297-008

Matrix: Soil
Date Collected: 02.03.2021 12:42

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.06.2021 19:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.06.2021 19:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	78	%	70-130	02.06.2021 19:33	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.06.2021 19:33	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-5 0.5'**
Lab Sample Id: 687297-009

Matrix: Soil
Date Collected: 02.03.2021 12:44

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	84.1	5.05	mg/kg	02.04.2021 22:07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 16:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 16:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 16:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 16:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.06.2021 16:41	
o-Terphenyl	84-15-1	110	%	70-130	02.06.2021 16:41	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-5 0.5'**
 Lab Sample Id: 687297-009

Matrix: Soil
 Date Collected: 02.03.2021 12:44

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.09.2021 08:30

% Moisture:
 Basis: Wet Weight

Seq Number: 3150520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.09.2021 13:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.09.2021 13:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	122	%	70-130	02.09.2021 13:05	
4-Bromofluorobenzene	460-00-4	74	%	70-130	02.09.2021 13:05	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: S-5 1'
Lab Sample Id: 687297-010

Matrix: Soil
Date Collected: 02.03.2021 12:46

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.1	5.03	mg/kg	02.04.2021 22:13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 17:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 17:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 17:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 17:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	02.06.2021 17:02	
o-Terphenyl	84-15-1	102	%	70-130	02.06.2021 17:02	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-5 1'**
Lab Sample Id: 687297-010

Matrix: Soil
Date Collected: 02.03.2021 12:46

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.07.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150311

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.07.2021 16:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.07.2021 16:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	02.07.2021 16:53	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.07.2021 16:53	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-6 0.5'**
Lab Sample Id: 687297-011

Matrix: Soil
Date Collected: 02.03.2021 12:48

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	30.3	4.95	mg/kg	02.04.2021 22:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 17:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 17:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 17:44	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 17:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	02.06.2021 17:44	
o-Terphenyl	84-15-1	113	%	70-130	02.06.2021 17:44	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-6 0.5'**
Lab Sample Id: 687297-011

Matrix: Soil
Date Collected: 02.03.2021 12:48

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.07.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150311

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.07.2021 17:19	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.07.2021 17:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	02.07.2021 17:19	
1,4-Difluorobenzene	540-36-3	115	%	70-130	02.07.2021 17:19	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-6 1'**
Lab Sample Id: 687297-012

Matrix: Soil
Date Collected: 02.03.2021 12:50

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.5	5.00	mg/kg	02.04.2021 22:34		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 18:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 18:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 18:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 18:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.06.2021 18:05	
o-Terphenyl	84-15-1	108	%	70-130	02.06.2021 18:05	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-6 1'**
Lab Sample Id: 687297-012

Matrix: Soil
Date Collected: 02.03.2021 12:50

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 15:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150223

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.05.2021 19:13	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.05.2021 19:13	UF	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.05.2021 19:13	UF	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.05.2021 19:13	UF	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.05.2021 19:13	UF	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.05.2021 19:13	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.05.2021 19:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.05.2021 19:13	
4-Bromofluorobenzene	460-00-4	137	%	70-130	02.05.2021 19:13	**



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-7 0.5'**
Lab Sample Id: 687297-013

Matrix: Soil
Date Collected: 02.03.2021 12:52

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.0	4.99	mg/kg	02.04.2021 22:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 18:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 18:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 18:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 18:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	02.06.2021 18:26	
o-Terphenyl	84-15-1	104	%	70-130	02.06.2021 18:26	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-7 0.5'**
Lab Sample Id: 687297-013

Matrix: Soil
Date Collected: 02.03.2021 12:52

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 15:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150223

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.05.2021 19:38	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.05.2021 19:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.05.2021 19:38		
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.05.2021 19:38		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: S-7 1'
Lab Sample Id: 687297-014

Matrix: Soil
Date Collected: 02.03.2021 12:54

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	610	4.97	mg/kg	02.04.2021 22:55		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 18:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 18:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 18:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 18:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.06.2021 18:47	
o-Terphenyl	84-15-1	108	%	70-130	02.06.2021 18:47	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-7 1'**
Lab Sample Id: 687297-014

Matrix: Soil
Date Collected: 02.03.2021 12:54

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00346	0.00199	mg/kg	02.05.2021 06:20		1
Toluene	108-88-3	0.00885	0.00199	mg/kg	02.05.2021 06:20		1
Ethylbenzene	100-41-4	0.00451	0.00199	mg/kg	02.05.2021 06:20		1
m,p-Xylenes	179601-23-1	0.00676	0.00398	mg/kg	02.05.2021 06:20		1
o-Xylene	95-47-6	0.00349	0.00199	mg/kg	02.05.2021 06:20		1
Total Xylenes	1330-20-7	0.0103	0.00199	mg/kg	02.05.2021 06:20		1
Total BTEX		0.0271	0.00199	mg/kg	02.05.2021 06:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	02.05.2021 06:20	
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.05.2021 06:20	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-8 0.5'**
Lab Sample Id: 687297-015

Matrix: Soil
Date Collected: 02.03.2021 12:56

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8250	50.2	mg/kg	02.04.2021 23:00		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 19:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 19:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 19:09	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 19:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	02.06.2021 19:09	
o-Terphenyl	84-15-1	114	%	70-130	02.06.2021 19:09	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-8 0.5'**
Lab Sample Id: 687297-015

Matrix: Soil
Date Collected: 02.03.2021 12:56

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.05.2021 06:40	U	1
Toluene	108-88-3	0.0156	0.00202	mg/kg	02.05.2021 06:40		1
Ethylbenzene	100-41-4	0.00722	0.00202	mg/kg	02.05.2021 06:40		1
m,p-Xylenes	179601-23-1	0.0110	0.00403	mg/kg	02.05.2021 06:40		1
o-Xylene	95-47-6	0.00542	0.00202	mg/kg	02.05.2021 06:40		1
Total Xylenes	1330-20-7	0.0164	0.00202	mg/kg	02.05.2021 06:40		1
Total BTEX		0.0392	0.00202	mg/kg	02.05.2021 06:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	02.05.2021 06:40	
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.05.2021 06:40	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-8 1'**
Lab Sample Id: 687297-016

Matrix: Soil
Date Collected: 02.03.2021 12:58

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2250	25.3	mg/kg	02.04.2021 23:06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 19:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 19:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 19:30	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 19:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	02.06.2021 19:30	
o-Terphenyl	84-15-1	122	%	70-130	02.06.2021 19:30	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-8 1'**
Lab Sample Id: 687297-016

Matrix: Soil
Date Collected: 02.03.2021 12:58

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.05.2021 07:01	U	1
Toluene	108-88-3	0.00357	0.00200	mg/kg	02.05.2021 07:01		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.05.2021 07:01	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.05.2021 07:01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.05.2021 07:01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.05.2021 07:01	U	1
Total BTEX		0.00357	0.00200	mg/kg	02.05.2021 07:01		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	02.05.2021 07:01		
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.05.2021 07:01		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-9 0.5'**
Lab Sample Id: 687297-017

Matrix: Soil
Date Collected: 02.03.2021 12:00

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	172	5.05	mg/kg	02.04.2021 23:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 19:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 19:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 19:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 19:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.06.2021 19:52	
o-Terphenyl	84-15-1	104	%	70-130	02.06.2021 19:52	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-9 0.5'**
Lab Sample Id: 687297-017

Matrix: Soil
Date Collected: 02.03.2021 12:00

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.05.2021 07:21	U	1
Toluene	108-88-3	0.00785	0.00201	mg/kg	02.05.2021 07:21		1
Ethylbenzene	100-41-4	0.00277	0.00201	mg/kg	02.05.2021 07:21		1
m,p-Xylenes	179601-23-1	0.00553	0.00402	mg/kg	02.05.2021 07:21		1
o-Xylene	95-47-6	0.00265	0.00201	mg/kg	02.05.2021 07:21		1
Total Xylenes	1330-20-7	0.00818	0.00201	mg/kg	02.05.2021 07:21		1
Total BTEX		0.0188	0.00201	mg/kg	02.05.2021 07:21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	02.05.2021 07:21	
1,4-Difluorobenzene	540-36-3	88	%	70-130	02.05.2021 07:21	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-9 1'**
Lab Sample Id: 687297-018

Matrix: Soil
Date Collected: 02.03.2021 13:02

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:
Basis: Wet Weight

Seq Number: 3150092

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.9	5.05	mg/kg	02.04.2021 23:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150324

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.06.2021 20:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.06.2021 20:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.06.2021 20:13	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.06.2021 20:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.06.2021 20:13	
o-Terphenyl	84-15-1	106	%	70-130	02.06.2021 20:13	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-9 1'**
Lab Sample Id: 687297-018

Matrix: Soil
Date Collected: 02.03.2021 13:02

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00202	0.00200	mg/kg	02.05.2021 07:42		1
Toluene	108-88-3	0.00343	0.00200	mg/kg	02.05.2021 07:42		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.05.2021 07:42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.05.2021 07:42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.05.2021 07:42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.05.2021 07:42	U	1
Total BTEX		0.00545	0.00200	mg/kg	02.05.2021 07:42		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.05.2021 07:42		
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.05.2021 07:42		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-10 0.5'**

Matrix: Soil

Date Received: 02.04.2021 09:34

Lab Sample Id: 687297-019

Date Collected: 02.03.2021 13:04

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:

Seq Number: 3150092

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	99.7	5.00	mg/kg	02.04.2021 23:22		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:

Seq Number: 3150324

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.06.2021 20:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.06.2021 20:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.06.2021 20:35	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.06.2021 20:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	02.06.2021 20:35	
o-Terphenyl	84-15-1	101	%	70-130	02.06.2021 20:35	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-10 0.5'**
 Lab Sample Id: 687297-019

Matrix: Soil
 Date Collected: 02.03.2021 13:04

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.04.2021 17:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3150090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.05.2021 08:02	U	1
Toluene	108-88-3	0.00232	0.00202	mg/kg	02.05.2021 08:02		1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.05.2021 08:02	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.05.2021 08:02	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.05.2021 08:02	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.05.2021 08:02	U	1
Total BTEX		0.00232	0.00202	mg/kg	02.05.2021 08:02		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.05.2021 08:02		
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.05.2021 08:02		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-11 0.5'**

Matrix: Soil

Date Received: 02.04.2021 09:34

Lab Sample Id: 687297-020

Date Collected: 02.03.2021 13:06

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.04.2021 17:45

% Moisture:

Seq Number: 3150092

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.4	4.98	mg/kg	02.04.2021 23:27		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:

Seq Number: 3150324

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.06.2021 20:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.06.2021 20:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.06.2021 20:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.06.2021 20:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	02.06.2021 20:57	
o-Terphenyl	84-15-1	101	%	70-130	02.06.2021 20:57	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-11 0.5'**
 Lab Sample Id: 687297-020

Matrix: Soil
 Date Collected: 02.03.2021 13:06

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.08.2021 11:15

% Moisture:
 Basis: Wet Weight

Seq Number: 3150409

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.08.2021 15:19	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.08.2021 15:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.08.2021 15:19		
4-Bromofluorobenzene	460-00-4	110	%	70-130	02.08.2021 15:19		



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-11 1'**
Lab Sample Id: 687297-021

Matrix: Soil
Date Collected: 02.03.2021 13:08

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.05.2021 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3150264

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.8	4.96	mg/kg	02.05.2021 15:56	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.07.2021 03:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.07.2021 03:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.07.2021 03:18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.07.2021 03:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	02.07.2021 03:18	
o-Terphenyl	84-15-1	81	%	70-130	02.07.2021 03:18	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-11 1'**
Lab Sample Id: 687297-021

Matrix: Soil
Date Collected: 02.03.2021 13:08

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.08.2021 11:15

% Moisture:
Basis: Wet Weight

Seq Number: 3150409

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.08.2021 15:39	U	1
Toluene	108-88-3	0.00513	0.00198	mg/kg	02.08.2021 15:39		1
Ethylbenzene	100-41-4	0.00226	0.00198	mg/kg	02.08.2021 15:39		1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.08.2021 15:39	U	1
o-Xylene	95-47-6	0.00226	0.00198	mg/kg	02.08.2021 15:39		1
Total Xylenes	1330-20-7	0.00226	0.00198	mg/kg	02.08.2021 15:39		1
Total BTEX		0.00965	0.00198	mg/kg	02.08.2021 15:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.08.2021 15:39	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.08.2021 15:39	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S- 12 0.5**
Lab Sample Id: 687297-022

Matrix: Soil
Date Collected: 02.03.2021 13:10

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.05.2021 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3150264

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	57.3	5.03	mg/kg	02.05.2021 16:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.07.2021 03:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.07.2021 03:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 03:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.07.2021 03:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	02.07.2021 03:39	
o-Terphenyl	84-15-1	91	%	70-130	02.07.2021 03:39	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S- 12 0.5**
 Lab Sample Id: 687297-022

Matrix: Soil
 Date Collected: 02.03.2021 13:10

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.08.2021 11:15

% Moisture:
 Basis: Wet Weight

Seq Number: 3150409

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.08.2021 15:59	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.08.2021 15:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.08.2021 15:59	
4-Bromofluorobenzene	460-00-4	103	%	70-130	02.08.2021 15:59	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-12 1'**
Lab Sample Id: 687297-023

Matrix: Soil
Date Collected: 02.03.2021 13:12

Date Received: 02.04.2021 09:34

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.05.2021 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3150264

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	37.3	4.99	mg/kg	02.05.2021 16:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	02.07.2021 04:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	02.07.2021 04:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	02.07.2021 04:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.07.2021 04:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	02.07.2021 04:00	
o-Terphenyl	84-15-1	92	%	70-130	02.07.2021 04:00	



Certificate of Analytical Results 687297

Larson and Associates, Inc., Midland, TX

SD 13 SWD Corridor Line

Sample Id: **S-12 1'**
Lab Sample Id: 687297-023

Matrix: Soil
Date Collected: 02.03.2021 13:12

Date Received: 02.04.2021 09:34

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 02.08.2021 11:15

% Moisture:
Basis: Wet Weight

Seq Number: 3150409

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	02.08.2021 16:20	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.08.2021 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	98	%	70-130	02.08.2021 16:20	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.08.2021 16:20	

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: Chloride by EPA 300

Seq Number: 3150091

MB Sample Id: 7720812-1-BLK

Matrix: Solid

LCS Sample Id: 7720812-1-BKS

Prep Method: E300P

Date Prep: 02.04.2021

LCSD Sample Id: 7720812-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	258	103	90-110	1	20	mg/kg	02.04.2021 17:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3150092

MB Sample Id: 7720832-1-BLK

Matrix: Solid

LCS Sample Id: 7720832-1-BKS

Prep Method: E300P

Date Prep: 02.04.2021

LCSD Sample Id: 7720832-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	255	102	254	102	90-110	0	20	mg/kg	02.04.2021 20:53	

Analytical Method: Chloride by EPA 300

Seq Number: 3150264

MB Sample Id: 7720891-1-BLK

Matrix: Solid

LCS Sample Id: 7720891-1-BKS

Prep Method: E300P

Date Prep: 02.05.2021

LCSD Sample Id: 7720891-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	272	109	271	108	90-110	0	20	mg/kg	02.05.2021 15:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3150091

Parent Sample Id: 687202-003

Matrix: Soil

MS Sample Id: 687202-003 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687202-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3860	2530	6450	102	7140	130	90-110	10	20	mg/kg	02.04.2021 19:27	X

Analytical Method: Chloride by EPA 300

Seq Number: 3150091

Parent Sample Id: 687293-005

Matrix: Soil

MS Sample Id: 687293-005 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687293-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	32.2	248	285	102	286	102	90-110	0	20	mg/kg	02.04.2021 18:13	

Analytical Method: Chloride by EPA 300

Seq Number: 3150092

Parent Sample Id: 687297-002

Matrix: Soil

MS Sample Id: 687297-002 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687297-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.6	249	289	101	287	101	90-110	1	20	mg/kg	02.04.2021 21:09	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: Chloride by EPA 300

Seq Number: 3150092

Parent Sample Id: 687297-011

Matrix: Soil

MS Sample Id: 687297-011 S

Prep Method: E300P

Date Prep: 02.04.2021

MSD Sample Id: 687297-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.3	248	281	101	280	101	90-110	0	20	mg/kg	02.04.2021 22:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3150264

Parent Sample Id: 687223-008

Matrix: Soil

MS Sample Id: 687223-008 S

Prep Method: E300P

Date Prep: 02.05.2021

MSD Sample Id: 687223-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5140	2490	7920	112	7800	107	90-110	2	20	mg/kg	02.05.2021 17:13	X

Analytical Method: Chloride by EPA 300

Seq Number: 3150264

Parent Sample Id: 687297-021

Matrix: Soil

MS Sample Id: 687297-021 S

Prep Method: E300P

Date Prep: 02.05.2021

MSD Sample Id: 687297-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.8	248	332	119	316	113	90-110	5	20	mg/kg	02.05.2021 16:01	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150324

MB Sample Id: 7721011-1-BLK

Matrix: Solid

LCS Sample Id: 7721011-1-BKS

Prep Method: SW8015P

Date Prep: 02.06.2021

LCSD Sample Id: 7721011-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1080	108	1000	100	70-130	8	20	mg/kg	02.06.2021 12:28	
Diesel Range Organics (DRO)	<50.0	1000	1020	102	951	95	70-130	7	20	mg/kg	02.06.2021 12:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		106		106		70-130	%	02.06.2021 12:28
o-Terphenyl	137	**	127		119		70-130	%	02.06.2021 12:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

MB Sample Id: 7721016-1-BLK

Matrix: Solid

LCS Sample Id: 7721016-1-BKS

Prep Method: SW8015P

Date Prep: 02.06.2021

LCSD Sample Id: 7721016-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1040	104	1110	111	70-130	7	20	mg/kg	02.06.2021 22:01	
Diesel Range Organics (DRO)	<50.0	1000	959	96	1030	103	70-130	7	20	mg/kg	02.06.2021 22:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		93		99		70-130	%	02.06.2021 22:01
o-Terphenyl	106		94		101		70-130	%	02.06.2021 22:01

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Larson and Associates, Inc.
SD 13 SWD Corridor Line
Analytical Method: TPH by SW8015 Mod

Seq Number: 3150324

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.06.2021

MB Sample Id: 7721011-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.06.2021 12:07	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.06.2021

MB Sample Id: 7721016-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.06.2021 21:39	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150324

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.06.2021

Parent Sample Id: 687297-001

MS Sample Id: 687297-001 S

MSD Sample Id: 687297-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	971	97	983	98	70-130	1	20	mg/kg	02.06.2021 13:31	
Diesel Range Organics (DRO)	<49.8	996	886	89	894	89	70-130	1	20	mg/kg	02.06.2021 13:31	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		91		70-130	%	02.06.2021 13:31
o-Terphenyl	108		107		70-130	%	02.06.2021 13:31

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150327

Matrix: Soil

Prep Method: SW8015P

Date Prep: 02.06.2021

Parent Sample Id: 687301-002

MS Sample Id: 687301-002 S

MSD Sample Id: 687301-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	994	100	1010	101	70-130	2	20	mg/kg	02.06.2021 23:06	
Diesel Range Organics (DRO)	<49.9	997	904	91	905	91	70-130	0	20	mg/kg	02.06.2021 23:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	84		85		70-130	%	02.06.2021 23:06
o-Terphenyl	88		87		70-130	%	02.06.2021 23:06

 MS/MSD Percent Recovery
 Relative Percent Difference
 LCS/LCSD Recovery
 Log Difference

 $[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

 LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

 MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150090

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.04.2021

MB Sample Id: 7720848-1-BLK

LCS Sample Id: 7720848-1-BKS

LCSD Sample Id: 7720848-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0852	85	0.0959	96	70-130	12	35	mg/kg	02.04.2021 23:33	
Toluene	<0.00200	0.100	0.0807	81	0.0923	92	70-130	13	35	mg/kg	02.04.2021 23:33	
Ethylbenzene	<0.00200	0.100	0.0863	86	0.101	101	70-130	16	35	mg/kg	02.04.2021 23:33	
m,p-Xylenes	<0.00400	0.200	0.171	86	0.203	102	70-130	17	35	mg/kg	02.04.2021 23:33	
o-Xylene	<0.00200	0.100	0.0860	86	0.103	103	70-130	18	35	mg/kg	02.04.2021 23:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		101		103		70-130	%	02.04.2021 23:33
4-Bromofluorobenzene	106		94		110		70-130	%	02.04.2021 23:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150223

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.05.2021

MB Sample Id: 7720901-1-BLK

LCS Sample Id: 7720901-1-BKS

LCSD Sample Id: 7720901-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.125	125	0.123	123	70-130	2	35	mg/kg	02.05.2021 16:13	
Toluene	<0.00200	0.100	0.120	120	0.117	117	70-130	3	35	mg/kg	02.05.2021 16:13	
Ethylbenzene	<0.00200	0.100	0.118	118	0.117	117	70-130	1	35	mg/kg	02.05.2021 16:13	
m,p-Xylenes	<0.00400	0.200	0.245	123	0.243	122	70-130	1	35	mg/kg	02.05.2021 16:13	
o-Xylene	<0.00200	0.100	0.117	117	0.118	118	70-130	1	35	mg/kg	02.05.2021 16:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		106		105		70-130	%	02.05.2021 16:13
4-Bromofluorobenzene	87		124		129		70-130	%	02.05.2021 16:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150285

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.05.2021

MB Sample Id: 7720952-1-BLK

LCS Sample Id: 7720952-1-BKS

LCSD Sample Id: 7720952-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.101	101	0.101	101	70-130	0	35	mg/kg	02.06.2021 09:41	
Toluene	<0.00200	0.100	0.0947	95	0.0946	95	70-130	0	35	mg/kg	02.06.2021 09:41	
Ethylbenzene	<0.00200	0.100	0.0972	97	0.0964	96	70-130	1	35	mg/kg	02.06.2021 09:41	
m,p-Xylenes	<0.00400	0.200	0.192	96	0.191	96	70-130	1	35	mg/kg	02.06.2021 09:41	
o-Xylene	<0.00200	0.100	0.0954	95	0.0947	95	70-130	1	35	mg/kg	02.06.2021 09:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		101		101		70-130	%	02.06.2021 09:41
4-Bromofluorobenzene	101		98		98		70-130	%	02.06.2021 09:41

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150311

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.07.2021

MB Sample Id: 7720997-1-BLK

LCS Sample Id: 7720997-1-BKS

LCSD Sample Id: 7720997-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.130	130	0.125	125	70-130	4	35	mg/kg	02.07.2021 12:12	
Toluene	<0.00200	0.100	0.125	125	0.122	122	70-130	2	35	mg/kg	02.07.2021 12:12	
Ethylbenzene	<0.00200	0.100	0.123	123	0.119	119	70-130	3	35	mg/kg	02.07.2021 12:12	
m,p-Xylenes	<0.00400	0.200	0.252	126	0.247	124	70-130	2	35	mg/kg	02.07.2021 12:12	
o-Xylene	<0.00200	0.100	0.122	122	0.122	122	70-130	0	35	mg/kg	02.07.2021 12:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		102		109		70-130	%	02.07.2021 12:12
4-Bromofluorobenzene	92		131	**	141	**	70-130	%	02.07.2021 12:12

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150409

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.08.2021

MB Sample Id: 7721090-1-BLK

LCS Sample Id: 7721090-1-BKS

LCSD Sample Id: 7721090-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.105	105	0.0984	98	70-130	6	35	mg/kg	02.08.2021 12:15	
Toluene	<0.00200	0.100	0.100	100	0.0939	94	70-130	6	35	mg/kg	02.08.2021 12:15	
Ethylbenzene	<0.00200	0.100	0.106	106	0.0994	99	70-130	6	35	mg/kg	02.08.2021 12:15	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.198	99	70-130	7	35	mg/kg	02.08.2021 12:15	
o-Xylene	<0.00200	0.100	0.104	104	0.0973	97	70-130	7	35	mg/kg	02.08.2021 12:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		102		100		70-130	%	02.08.2021 12:15
4-Bromofluorobenzene	104		100		99		70-130	%	02.08.2021 12:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150520

Matrix: Solid

Prep Method: SW5035A

Date Prep: 02.09.2021

MB Sample Id: 7721162-1-BLK

LCS Sample Id: 7721162-1-BKS

LCSD Sample Id: 7721162-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0753	75	0.0822	82	70-130	9	35	mg/kg	02.09.2021 10:22	
Toluene	<0.00200	0.100	0.0813	81	0.0855	86	70-130	5	35	mg/kg	02.09.2021 10:22	
Ethylbenzene	<0.00200	0.100	0.0838	84	0.0890	89	70-130	6	35	mg/kg	02.09.2021 10:22	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.179	90	70-130	5	35	mg/kg	02.09.2021 10:22	
o-Xylene	<0.00200	0.100	0.0828	83	0.0842	84	70-130	2	35	mg/kg	02.09.2021 10:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		99		99		70-130	%	02.09.2021 10:22
4-Bromofluorobenzene	132	**	97		93		70-130	%	02.09.2021 10:22

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150090

Parent Sample Id: 687301-001

Matrix: Soil

MS Sample Id: 687301-001 S

Prep Method: SW5035A

Date Prep: 02.04.2021

MSD Sample Id: 687301-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	2.35	0.0994	3.74	1398	2.86	513	70-130	27	35	mg/kg	02.05.2021 00:14	X
Toluene	5.96	0.0994	9.51	3571	0.372	0	70-130	185	35	mg/kg	02.05.2021 00:14	XF
Ethylbenzene	2.54	0.0994	4.66	2133	3.57	1036	70-130	26	35	mg/kg	02.05.2021 00:14	X
m,p-Xylenes	2.66	0.199	4.67	1010	1.96	0	70-130	82	35	mg/kg	02.05.2021 00:14	XF
o-Xylene	0.368	0.0994	0.640	274	0.511	144	70-130	22	35	mg/kg	02.05.2021 00:14	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	7300	**	299	**	70-130	%	02.05.2021 00:14
4-Bromofluorobenzene	90		17	**	70-130	%	02.05.2021 00:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150223

Parent Sample Id: 687297-012

Matrix: Soil

MS Sample Id: 687297-012 S

Prep Method: SW5035A

Date Prep: 02.05.2021

MSD Sample Id: 687297-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.0888	88	70-130	25	35	mg/kg	02.05.2021 17:05	
Toluene	<0.00200	0.100	0.111	111	0.0736	73	70-130	41	35	mg/kg	02.05.2021 17:05	F
Ethylbenzene	<0.00200	0.100	0.109	109	0.0758	75	70-130	36	35	mg/kg	02.05.2021 17:05	F
m,p-Xylenes	<0.00401	0.200	0.225	113	0.156	78	70-130	36	35	mg/kg	02.05.2021 17:05	F
o-Xylene	<0.00200	0.100	0.110	110	0.0767	76	70-130	36	35	mg/kg	02.05.2021 17:05	F

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		111		70-130	%	02.05.2021 17:05
4-Bromofluorobenzene	135	**	83		70-130	%	02.05.2021 17:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150285

Parent Sample Id: 687223-001

Matrix: Soil

MS Sample Id: 687223-001 S

Prep Method: SW5035A

Date Prep: 02.05.2021

MSD Sample Id: 687223-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0713	72	0.0782	78	70-130	9	35	mg/kg	02.06.2021 10:22	
Toluene	<0.00199	0.0996	0.0665	67	0.0724	73	70-130	8	35	mg/kg	02.06.2021 10:22	X
Ethylbenzene	<0.00199	0.0996	0.0702	70	0.0761	76	70-130	8	35	mg/kg	02.06.2021 10:22	
m,p-Xylenes	<0.00398	0.199	0.103	52	0.0985	49	70-130	4	35	mg/kg	02.06.2021 10:22	X
o-Xylene	<0.00199	0.0996	0.0687	69	0.0751	75	70-130	9	35	mg/kg	02.06.2021 10:22	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		101		70-130	%	02.06.2021 10:22
4-Bromofluorobenzene	100		98		70-130	%	02.06.2021 10:22

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD 13 SWD Corridor Line

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150311

Parent Sample Id: 687483-001

Matrix: Soil

MS Sample Id: 687483-001 S

Prep Method: SW5035A

Date Prep: 02.07.2021

MSD Sample Id: 687483-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0805	81	0.0578	58	70-130	33	35	mg/kg	02.07.2021 13:04	X
Toluene	<0.00200	0.0998	0.0826	83	0.0569	57	70-130	37	35	mg/kg	02.07.2021 13:04	XF
Ethylbenzene	<0.00200	0.0998	0.0778	78	0.0527	53	70-130	38	35	mg/kg	02.07.2021 13:04	XF
m,p-Xylenes	<0.00399	0.200	0.157	79	0.106	53	70-130	39	35	mg/kg	02.07.2021 13:04	XF
o-Xylene	<0.00200	0.0998	0.0778	78	0.0539	54	70-130	36	35	mg/kg	02.07.2021 13:04	XF

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		98		70-130	%	02.07.2021 13:04
4-Bromofluorobenzene	129		85		70-130	%	02.07.2021 13:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150409

Parent Sample Id: 687584-001

Matrix: Soil

MS Sample Id: 687584-001 S

Prep Method: SW5035A

Date Prep: 02.08.2021

MSD Sample Id: 687584-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.0487	0.100	0.120	71	0.104	56	70-130	14	35	mg/kg	02.08.2021 12:56	X
Toluene	0.0357	0.100	0.0864	51	0.0826	47	70-130	4	35	mg/kg	02.08.2021 12:56	X
Ethylbenzene	0.0350	0.100	0.0827	48	0.0812	47	70-130	2	35	mg/kg	02.08.2021 12:56	X
m,p-Xylenes	0.0798	0.200	0.170	45	0.163	42	70-130	4	35	mg/kg	02.08.2021 12:56	X
o-Xylene	0.0414	0.100	0.0806	39	0.0823	41	70-130	2	35	mg/kg	02.08.2021 12:56	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		112		70-130	%	02.08.2021 12:56
4-Bromofluorobenzene	109		102		70-130	%	02.08.2021 12:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150520

Parent Sample Id: 687306-006

Matrix: Soil

MS Sample Id: 687306-006 S

Prep Method: SW5035A

Date Prep: 02.09.2021

MSD Sample Id: 687306-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0738	74	0.111	112	70-130	40	35	mg/kg	02.09.2021 11:03	F
Toluene	<0.00200	0.100	0.0711	71	0.0926	93	70-130	26	35	mg/kg	02.09.2021 11:03	
Ethylbenzene	<0.00200	0.100	0.0626	63	0.0767	77	70-130	20	35	mg/kg	02.09.2021 11:03	X
m,p-Xylenes	<0.00400	0.200	0.128	64	0.155	78	70-130	19	35	mg/kg	02.09.2021 11:03	X
o-Xylene	<0.00200	0.100	0.0613	61	0.0834	84	70-130	31	35	mg/kg	02.09.2021 11:03	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		105		70-130	%	02.09.2021 11:03
4-Bromofluorobenzene	107		99		70-130	%	02.09.2021 11:03

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Final 1,000

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 02.04.2021 09.34.00 AM

Work Order #: 687297

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-11.9
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 02.04.2021

Checklist reviewed by:



Holly Taylor

Date: 02.08.2021

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Wed 03.10.2021 08:21
Report Date: 03.18.2021 17:48
Project Manager: Holly Taylor

Certificate of Analysis Summary 691113
Larson and Associates, Inc., Midland, TX

Project Name: SD SWD 13

<i>Analysis Requested</i>	<i>Lab Id:</i>	<i>Field Id:</i>	<i>Depth:</i>	<i>Matrix:</i>	<i>Sampled:</i>	<i>691113-001</i>	<i>691113-002</i>	<i>691113-003</i>	<i>691113-004</i>	<i>691113-005</i>	<i>691113-006</i>
	<i>Extracted:</i>	<i>Analyzed:</i>	<i>Units/RL:</i>								
BTEX by EPA 8021B	Benzene					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
	Toluene					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
	Ethylbenzene					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
	m,p-Xylenes					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00396 0.00396	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00398 0.00398	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00400 0.00400	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00402 0.00402	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00398 0.00398	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00399 0.00399
	o-Xylene					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
	Total Xylenes					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
Chloride by EPA 300	Total BTEX					03.16.2021 16:30 03.17.2021 03:17 mg/kg RL <0.00198 0.00198	03.16.2021 16:30 03.17.2021 03:43 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 04:09 mg/kg RL <0.00200 0.00200	03.16.2021 16:30 03.17.2021 04:36 mg/kg RL <0.00201 0.00201	03.16.2021 16:30 03.17.2021 05:01 mg/kg RL <0.00199 0.00199	03.16.2021 16:30 03.17.2021 05:27 mg/kg RL <0.00200 0.00200
	Extracted:					03.12.2021 14:30	03.12.2021 14:30	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00
	Analyzed:					03.12.2021 18:24	03.12.2021 18:29	03.12.2021 18:11	03.12.2021 18:28	03.12.2021 18:33	03.12.2021 18:39
TPH by SW8015 Mod	Chloride					20.1 5.00	1450 25.0	179 5.00	147 4.96	201 49.9	154 4.97
	Extracted:					03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00
	Analyzed:					03.13.2021 23:02	03.14.2021 00:04	03.14.2021 00:25	03.14.2021 00:45	03.14.2021 01:06	03.14.2021 01:27
	Units/RL:					mg/kg RL <49.9 49.9	mg/kg RL <49.9 49.9	mg/kg RL <50.0 50.0	mg/kg RL <50.0 50.0	mg/kg RL <50.0 50.0	mg/kg RL <49.9 49.9
	Gasoline Range Hydrocarbons (GRO)					<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
	Diesel Range Organics (DRO)					<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)						<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
	Total TPH					<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Wed 03.10.2021 08:21
Report Date: 03.18.2021 17:48
Project Manager: Holly Taylor

Certificate of Analysis Summary 691113
Larson and Associates, Inc., Midland, TX

Project Name: SD SWD 13

<i>Analysis Requested</i>	<i>Lab Id:</i>	691113-007	691113-008	691113-009	691113-010	691113-011	691113-012
	<i>Field Id:</i>	S-7 3'	S-7 5'	S-7 10'	S-8 1'	S-8 3'	S-8 5'
	<i>Depth:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Matrix:</i>						
BTEX by EPA 8021B	<i>Sampled:</i>	03.09.2021 10:46	03.09.2021 10:48	03.09.2021 10:50	03.09.2021 10:34	03.09.2021 10:36	03.09.2021 10:38
	<i>Extracted:</i>	03.16.2021 16:45	03.16.2021 16:45	03.16.2021 16:45	03.16.2021 16:45	03.16.2021 16:45	03.16.2021 16:45
	<i>Analyzed:</i>	03.17.2021 09:48	03.17.2021 10:13	03.17.2021 10:38	03.17.2021 11:04	03.17.2021 11:29	03.17.2021 11:54
	<i>Units/RL:</i>	mg/kg RL <0.00198 0.00198	mg/kg RL <0.00200 0.00200	mg/kg RL <0.00198 0.00198	mg/kg RL <0.00201 0.00201	mg/kg RL <0.00198 0.00198	mg/kg RL <0.00200 0.00200
Benzene							
Toluene							
Ethylbenzene							
m,p-Xylenes							
o-Xylene							
Total Xylenes							
Total BTEX							
Chloride by EPA 300	<i>Extracted:</i>	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00	03.12.2021 16:00
	<i>Analyzed:</i>	03.12.2021 18:44	03.12.2021 19:01	03.12.2021 19:06	03.12.2021 19:12	03.12.2021 19:17	03.12.2021 19:23
	<i>Units/RL:</i>	mg/kg RL 132 4.95	mg/kg RL 174 4.95	mg/kg RL 126 5.00	mg/kg RL 124 5.02	mg/kg RL 182 4.98	mg/kg RL 133 4.98
	Chloride						
TPH by SW8015 Mod	<i>Extracted:</i>	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00	03.13.2021 10:00
	<i>Analyzed:</i>	03.14.2021 01:48	03.14.2021 03:08	03.14.2021 03:29	03.14.2021 03:50	03.14.2021 04:32	03.14.2021 04:53
	<i>Units/RL:</i>	mg/kg RL <49.9 49.9	mg/kg RL <50.0 50.0	mg/kg RL <49.9 49.9	mg/kg RL <49.9 49.9	mg/kg RL <49.8 49.8	mg/kg RL <50.0 50.0
	Gasoline Range Hydrocarbons (GRO)						
Diesel Range Organics (DRO)							
Motor Oil Range Hydrocarbons (MRO)							
Total TPH							

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Certificate of Analysis Summary 691113
Larson and Associates, Inc., Midland, TX

Project Name: SD SWD 13

Date Received in Lab: Wed 03.10.2021 08:21
Report Date: 03.18.2021 17:48
Project Manager: Holly Taylor

Project Id: 21-0100-03
Contact: Mark Larson
Project Location:

Analysis Requested	Lab Id: Field Id: Depth: Matrix: Sampled:	691113-013 S-8 10' SOIL 03.09.2021 10:40				
	Extracted: Analyzed: Units/RL:	03.16.2021 16:45 03.17.2021 12:19 mg/kg RL <0.00200 0.00200				
	Benzene	<0.00200 0.00200				
	Toluene	<0.00200 0.00200				
	Ethylbenzene	<0.00200 0.00200				
	m,p-Xylenes	<0.00400 0.00400				
	o-Xylene	<0.00200 0.00200				
	Total Xylenes	<0.00200 0.00200				
	Total BTEX	<0.00200 0.00200				
	Chloride by EPA 300	Extracted: Analyzed: Units/RL:	03.12.2021 16:00 03.12.2021 19:28 mg/kg RL 56.1 4.98			
TPH by SW8015 Mod	Extracted: Analyzed: Units/RL:	03.13.2021 10:00 03.14.2021 05:14 mg/kg RL <49.9 49.9				
	Gasoline Range Hydrocarbons (GRO)	<49.9 49.9				
	Diesel Range Organics (DRO)	<49.9 49.9				
	Motor Oil Range Hydrocarbons (MRO)	<49.9 49.9				
	Total TPH	<49.9 49.9				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Holly Taylor

Analytical Report 691113

for

Larson and Associates, Inc.

Project Manager: Mark Larson

SD SWD 13

21-0100-03

03.18.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



03.18.2021

Project Manager: **Mark Larson**
Larson and Associates, Inc.
P. O. Box 50685
Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **691113**
SD SWD 13
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 691113. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 691113 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Holly Taylor".

Holly Taylor
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 691113****Larson and Associates, Inc., Midland, TX**

SD SWD 13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-10 1'	S	03.09.2021 10:08		691113-001
S-3 1'	S	03.09.2021 10:14		691113-002
S-3 3'	S	03.09.2021 10:16		691113-003
S-3 5'	S	03.09.2021 10:18		691113-004
S-3 10'	S	03.09.2021 10:20		691113-005
S-7 1'	S	03.09.2021 10:44		691113-006
S-7 3'	S	03.09.2021 10:46		691113-007
S-7 5'	S	03.09.2021 10:48		691113-008
S-7 10'	S	03.09.2021 10:50		691113-009
S-8 1'	S	03.09.2021 10:34		691113-010
S-8 3'	S	03.09.2021 10:36		691113-011
S-8 5'	S	03.09.2021 10:38		691113-012
S-8 10'	S	03.09.2021 10:40		691113-013



CASE NARRATIVE

Client Name: *Larson and Associates, Inc.*

Project Name: *SD SWD 13*

Project ID: 21-0100-03

Work Order Number(s): 691113

Report Date: 03.18.2021

Date Received: 03.10.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3153889 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7723457-1-BLK.



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-10 1'**
Lab Sample Id: 691113-001

Matrix: Soil
Date Collected: 03.09.2021 10:08

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 14:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153617

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.1	5.00	mg/kg	03.12.2021 18:24		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.13.2021 23:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.13.2021 23:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.13.2021 23:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.13.2021 23:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	03.13.2021 23:02	
o-Terphenyl	84-15-1	114	%	70-130	03.13.2021 23:02	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-10 1'**
Lab Sample Id: 691113-001

Matrix: Soil
Date Collected: 03.09.2021 10:08

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.17.2021 03:17	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.17.2021 03:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.17.2021 03:17		
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.17.2021 03:17		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 1'**
Lab Sample Id: 691113-002

Matrix: Soil
Date Collected: 03.09.2021 10:14

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 14:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153617

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1450	25.0	mg/kg	03.12.2021 18:29		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 00:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 00:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 00:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 00:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	03.14.2021 00:04	
o-Terphenyl	84-15-1	106	%	70-130	03.14.2021 00:04	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 1'**
Lab Sample Id: 691113-002

Matrix: Soil
Date Collected: 03.09.2021 10:14

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.17.2021 03:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.17.2021 03:43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	03.17.2021 03:43		
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.17.2021 03:43		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 3'**
 Lab Sample Id: 691113-003

Matrix: Soil
 Date Collected: 03.09.2021 10:16

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	179	5.00	mg/kg	03.12.2021 18:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.14.2021 00:25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.14.2021 00:25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.14.2021 00:25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.14.2021 00:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	03.14.2021 00:25	
o-Terphenyl	84-15-1	105	%	70-130	03.14.2021 00:25	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 3'**
Lab Sample Id: 691113-003

Matrix: Soil
Date Collected: 03.09.2021 10:16

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.17.2021 04:09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.2021 04:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.17.2021 04:09	
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.17.2021 04:09	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 5'**
Lab Sample Id: 691113-004

Matrix: Soil
Date Collected: 03.09.2021 10:18

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	147	4.96	mg/kg	03.12.2021 18:28		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.14.2021 00:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.14.2021 00:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.14.2021 00:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.14.2021 00:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	03.14.2021 00:45	
o-Terphenyl	84-15-1	110	%	70-130	03.14.2021 00:45	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 5'**
Lab Sample Id: 691113-004

Matrix: Soil
Date Collected: 03.09.2021 10:18

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.17.2021 04:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.17.2021 04:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	03.17.2021 04:36	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.17.2021 04:36	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 10'**
Lab Sample Id: 691113-005

Matrix: Soil
Date Collected: 03.09.2021 10:20

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	201	49.9	mg/kg	03.12.2021 18:33		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.14.2021 01:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.14.2021 01:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.14.2021 01:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.14.2021 01:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	108	%	70-130	03.14.2021 01:06		
o-Terphenyl	84-15-1	114	%	70-130	03.14.2021 01:06		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-3 10'**
Lab Sample Id: 691113-005

Matrix: Soil
Date Collected: 03.09.2021 10:20

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.17.2021 05:01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.17.2021 05:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	03.17.2021 05:01	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.17.2021 05:01	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 1'**
Lab Sample Id: 691113-006

Matrix: Soil
Date Collected: 03.09.2021 10:44

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	154	4.97	mg/kg	03.12.2021 18:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 01:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 01:27	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 01:27	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 01:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	03.14.2021 01:27	
o-Terphenyl	84-15-1	103	%	70-130	03.14.2021 01:27	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 1'**
Lab Sample Id: 691113-006

Matrix: Soil
Date Collected: 03.09.2021 10:44

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:30

% Moisture:
Basis: Wet Weight

Seq Number: 3153889

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.17.2021 05:27	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.2021 05:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.17.2021 05:27	
1,4-Difluorobenzene	540-36-3	99	%	70-130	03.17.2021 05:27	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 3'**
 Lab Sample Id: 691113-007

Matrix: Soil
 Date Collected: 03.09.2021 10:46

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	132	4.95	mg/kg	03.12.2021 18:44		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 01:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 01:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 01:48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 01:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	03.14.2021 01:48	
o-Terphenyl	84-15-1	119	%	70-130	03.14.2021 01:48	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 3'**
Lab Sample Id: 691113-007

Matrix: Soil
Date Collected: 03.09.2021 10:46

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.17.2021 09:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.17.2021 09:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	03.17.2021 09:48	
1,4-Difluorobenzene	540-36-3	103	%	70-130	03.17.2021 09:48	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 5'**
Lab Sample Id: 691113-008

Matrix: Soil
Date Collected: 03.09.2021 10:48

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	174	4.95	mg/kg	03.12.2021 19:01		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.14.2021 03:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.14.2021 03:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.14.2021 03:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.14.2021 03:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	03.14.2021 03:08	
o-Terphenyl	84-15-1	105	%	70-130	03.14.2021 03:08	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 5'**
Lab Sample Id: 691113-008

Matrix: Soil
Date Collected: 03.09.2021 10:48

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.17.2021 10:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.2021 10:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	70-130	03.17.2021 10:13	
1,4-Difluorobenzene	540-36-3	105	%	70-130	03.17.2021 10:13	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 10'**
Lab Sample Id: 691113-009

Matrix: Soil
Date Collected: 03.09.2021 10:50

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	126	5.00	mg/kg	03.12.2021 19:06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 03:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 03:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 03:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 03:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.14.2021 03:29	
o-Terphenyl	84-15-1	106	%	70-130	03.14.2021 03:29	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-7 10'**
 Lab Sample Id: 691113-009

Matrix: Soil
 Date Collected: 03.09.2021 10:50

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
 Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	03.17.2021 10:38	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.17.2021 10:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.17.2021 10:38		
4-Bromofluorobenzene	460-00-4	100	%	70-130	03.17.2021 10:38		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 1'**
Lab Sample Id: 691113-010

Matrix: Soil
Date Collected: 03.09.2021 10:34

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	124	5.02	mg/kg	03.12.2021 19:12		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 03:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 03:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 03:50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 03:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-130	03.14.2021 03:50		
o-Terphenyl	84-15-1	102	%	70-130	03.14.2021 03:50		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 1'**
Lab Sample Id: 691113-010

Matrix: Soil
Date Collected: 03.09.2021 10:34

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.17.2021 11:04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.17.2021 11:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	120	%	70-130	03.17.2021 11:04		
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.17.2021 11:04		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 3'**
Lab Sample Id: 691113-011

Matrix: Soil
Date Collected: 03.09.2021 10:36

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	182	4.98	mg/kg	03.12.2021 19:17		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.14.2021 04:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.14.2021 04:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.14.2021 04:32	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.14.2021 04:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	03.14.2021 04:32	
o-Terphenyl	84-15-1	106	%	70-130	03.14.2021 04:32	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 3'**
Lab Sample Id: 691113-011

Matrix: Soil
Date Collected: 03.09.2021 10:36

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.17.2021 11:29	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.17.2021 11:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	03.17.2021 11:29	
1,4-Difluorobenzene	540-36-3	115	%	70-130	03.17.2021 11:29	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 5'**
Lab Sample Id: 691113-012

Matrix: Soil
Date Collected: 03.09.2021 10:38

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	133	4.98	mg/kg	03.12.2021 19:23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.14.2021 04:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.14.2021 04:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.14.2021 04:53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.14.2021 04:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.14.2021 04:53	
o-Terphenyl	84-15-1	106	%	70-130	03.14.2021 04:53	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 5'**
 Lab Sample Id: 691113-012

Matrix: Soil
 Date Collected: 03.09.2021 10:38

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
 Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.17.2021 11:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.2021 11:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.17.2021 11:54		
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.17.2021 11:54		



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 10'**
Lab Sample Id: 691113-013

Matrix: Soil
Date Collected: 03.09.2021 10:40

Date Received: 03.10.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.12.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153623

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.1	4.98	mg/kg	03.12.2021 19:28		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.13.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153698

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.14.2021 05:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.14.2021 05:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.14.2021 05:14	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.14.2021 05:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.14.2021 05:14	
o-Terphenyl	84-15-1	106	%	70-130	03.14.2021 05:14	



Certificate of Analytical Results 691113

Larson and Associates, Inc., Midland, TX

SD SWD 13

Sample Id: **S-8 10'**
Lab Sample Id: 691113-013

Matrix: Soil
Date Collected: 03.09.2021 10:40

Date Received: 03.10.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.16.2021 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3154070

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	03.17.2021 12:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.17.2021 12:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	03.17.2021 12:19		
1,4-Difluorobenzene	540-36-3	117	%	70-130	03.17.2021 12:19		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Larson and Associates, Inc.
SD SWD 13

Analytical Method: Chloride by EPA 300

Seq Number: 3153617

MB Sample Id: 7723213-1-BLK

Matrix: Solid

LCS Sample Id: 7723213-1-BKS

Prep Method: E300P

Date Prep: 03.12.2021

LCSD Sample Id: 7723213-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	245	98	245	98	90-110	0	20	mg/kg	03.12.2021 16:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3153623

MB Sample Id: 7723214-1-BLK

Matrix: Solid

LCS Sample Id: 7723214-1-BKS

Prep Method: E300P

Date Prep: 03.12.2021

LCSD Sample Id: 7723214-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	250	100	90-110	0	20	mg/kg	03.12.2021 18:00	

Analytical Method: Chloride by EPA 300

Seq Number: 3153617

Parent Sample Id: 690846-007

Matrix: Soil

MS Sample Id: 690846-007 S

Prep Method: E300P

Date Prep: 03.12.2021

MSD Sample Id: 690846-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.54	249	271	105	272	105	90-110	0	20	mg/kg	03.12.2021 17:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3153623

Parent Sample Id: 690851-002

Matrix: Soil

MS Sample Id: 690851-002 S

Prep Method: E300P

Date Prep: 03.12.2021

MSD Sample Id: 690851-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2460	1250	3860	112	3870	113	90-110	0	20	mg/kg	03.12.2021 16:19	X

Analytical Method: Chloride by EPA 300

Seq Number: 3153623

Parent Sample Id: 691113-003

Matrix: Soil

MS Sample Id: 691113-003 S

Prep Method: E300P

Date Prep: 03.12.2021

MSD Sample Id: 691113-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	179	250	434	102	433	102	90-110	0	20	mg/kg	03.12.2021 18:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3153623

Parent Sample Id: 691113-013

Matrix: Soil

MS Sample Id: 691113-013 S

Prep Method: E300P

Date Prep: 03.12.2021

MSD Sample Id: 691113-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	56.1	249	314	104	314	104	90-110	0	20	mg/kg	03.12.2021 19:34	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.

SD SWD 13

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153698

MB Sample Id: 7723336-1-BLK

Matrix: Solid

LCS Sample Id: 7723336-1-BKS

Prep Method: SW8015P

Date Prep: 03.13.2021

LCSD Sample Id: 7723336-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1170	117	1140	114	70-130	3	20	mg/kg	03.13.2021 22:20	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	1100	110	70-130	3	20	mg/kg	03.13.2021 22:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		128		125		70-130	%	03.13.2021 22:20
o-Terphenyl	113		113		111		70-130	%	03.13.2021 22:20

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153698

Matrix: Solid

MB Sample Id: 7723336-1-BLK

Prep Method: SW8015P

Date Prep: 03.13.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.13.2021 21:59	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153698

Matrix: Soil

Parent Sample Id: 691113-001

MS Sample Id: 691113-001 S

Prep Method: SW8015P

Date Prep: 03.13.2021

MSD Sample Id: 691113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.8	996	921	92	1070	107	70-130	15	20	mg/kg	03.13.2021 23:23	
Diesel Range Organics (DRO)	<49.8	996	889	89	1010	101	70-130	13	20	mg/kg	03.13.2021 23:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	97		109		70-130	%	03.13.2021 23:23
o-Terphenyl	86		96		70-130	%	03.13.2021 23:23

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153889

Matrix: Solid

MB Sample Id: 7723457-1-BLK

LCS Sample Id: 7723457-1-BKS

Prep Method: SW5035A

Date Prep: 03.16.2021

LCSD Sample Id: 7723457-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.113	113	70-130	5	35	mg/kg	03.16.2021 17:12	
Toluene	<0.00200	0.100	0.0915	92	0.101	101	70-130	10	35	mg/kg	03.16.2021 17:12	
Ethylbenzene	<0.00200	0.100	0.0993	99	0.108	108	70-130	8	35	mg/kg	03.16.2021 17:12	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.224	112	70-130	9	35	mg/kg	03.16.2021 17:12	
o-Xylene	<0.00200	0.100	0.105	105	0.111	111	70-130	6	35	mg/kg	03.16.2021 17:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		114		126		70-130	%	03.16.2021 17:12
4-Bromofluorobenzene	62	**	96		104		70-130	%	03.16.2021 17:12

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Larson and Associates, Inc.
SD SWD 13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3154070

Matrix: Solid

Prep Method: SW5035A

Date Prep: 03.16.2021

MB Sample Id: 7723460-1-BLK

LCS Sample Id: 7723460-1-BKS

LCSD Sample Id: 7723460-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0910	91	0.0983	98	70-130	8	35	mg/kg	03.17.2021 06:45	
Toluene	<0.00200	0.100	0.0909	91	0.0964	96	70-130	6	35	mg/kg	03.17.2021 06:45	
Ethylbenzene	<0.00200	0.100	0.0895	90	0.0939	94	70-130	5	35	mg/kg	03.17.2021 06:45	
m,p-Xylenes	<0.00400	0.200	0.183	92	0.192	96	70-130	5	35	mg/kg	03.17.2021 06:45	
o-Xylene	<0.00200	0.100	0.0921	92	0.0962	96	70-130	4	35	mg/kg	03.17.2021 06:45	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		107		105		70-130	%	03.17.2021 06:45
4-Bromofluorobenzene	70		87		86		70-130	%	03.17.2021 06:45

Analytical Method: BTEX by EPA 8021B

Seq Number: 3153889

Matrix: Soil

Prep Method: SW5035A

Date Prep: 03.16.2021

Parent Sample Id: 691386-037

MS Sample Id: 691386-037 S

MSD Sample Id: 691386-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0915	91	0.0795	79	70-130	14	35	mg/kg	03.16.2021 18:02	
Toluene	<0.00202	0.101	0.0750	74	0.0716	71	70-130	5	35	mg/kg	03.16.2021 18:02	
Ethylbenzene	<0.00202	0.101	0.0758	75	0.0721	71	70-130	5	35	mg/kg	03.16.2021 18:02	
m,p-Xylenes	<0.00404	0.202	0.164	81	0.157	78	70-130	4	35	mg/kg	03.16.2021 18:02	
o-Xylene	<0.00202	0.101	0.0817	81	0.0776	77	70-130	5	35	mg/kg	03.16.2021 18:02	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	119		111		70-130	%	03.16.2021 18:02
4-Bromofluorobenzene	100		101		70-130	%	03.16.2021 18:02

Analytical Method: BTEX by EPA 8021B

Seq Number: 3154070

Matrix: Soil

Prep Method: SW5035A

Date Prep: 03.16.2021

Parent Sample Id: 691113-007

MS Sample Id: 691113-007 S

MSD Sample Id: 691113-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0863	87	0.0832	83	70-130	4	35	mg/kg	03.17.2021 07:38	
Toluene	<0.00199	0.0994	0.0835	84	0.0792	79	70-130	5	35	mg/kg	03.17.2021 07:38	
Ethylbenzene	<0.00199	0.0994	0.0802	81	0.0746	75	70-130	7	35	mg/kg	03.17.2021 07:38	
m,p-Xylenes	<0.00398	0.199	0.163	82	0.152	76	70-130	7	35	mg/kg	03.17.2021 07:38	
o-Xylene	<0.00199	0.0994	0.0804	81	0.0744	75	70-130	8	35	mg/kg	03.17.2021 07:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		103		70-130	%	03.17.2021 07:38
4-Bromofluorobenzene	95		87		70-130	%	03.17.2021 07:38

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 03.10.2021 08.21.00 AM

Work Order #: 691113

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 03.10.2021

Checklist reviewed by:



Holly Taylor

Date: 03.15.2021



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-13850-1

Laboratory Sample Delivery Group: 22-0105-08

Client Project/Site: Salado Draw 13 Corridor Line 2nd Spill

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:
4/25/2022 5:49:06 PM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Laboratory Job ID: 880-13850-1
SDG: 22-0105-08

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	27
QC Sample Results	30
QC Association Summary	40
Lab Chronicle	48
Certification Summary	57
Method Summary	58
Sample Summary	59
Chain of Custody	60
Receipt Checklists	62

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Job ID: 880-13850-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-13850-1

Comments

No additional comments.

Receipt

The samples were received on 4/19/2022 9:17 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-23966 and analytical batch 880-23985 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-24111 and analytical batch 880-24110 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-23782 and analytical batch 880-23971 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 300.0: The continuing calibration blank (CCB) for analytical batch 880-23971 contained Chloride above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-23783 and analytical batch 880-23995 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.

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 0.5'

Lab Sample ID: 880-13850-1

Date Collected: 04/18/22 10:50

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:37	1
Toluene	<0.00200	U F1	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:37	1
m,p-Xylenes	<0.00401	U F1	0.00401	mg/Kg		04/24/22 22:21	04/25/22 01:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:37	1
Xylenes, Total	<0.00401	U F1	0.00401	mg/Kg		04/24/22 22:21	04/25/22 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	04/24/22 22:21	04/25/22 01:37	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/24/22 22:21	04/25/22 01:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 11:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 11:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	04/19/22 09:47	04/19/22 11:38	1
o-Terphenyl (Surr)	97		70 - 130	04/19/22 09:47	04/19/22 11:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6330	F1	49.9	mg/Kg			04/25/22 12:45	10

Client Sample ID: S-1 1'

Lab Sample ID: 880-13850-2

Date Collected: 04/18/22 10:51

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:58	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/24/22 22:21	04/25/22 01:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:58	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/24/22 22:21	04/25/22 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	04/24/22 22:21	04/25/22 01:58	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/24/22 22:21	04/25/22 01:58	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 1'

Lab Sample ID: 880-13850-2

Date Collected: 04/18/22 10:51

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 12:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 12:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 12:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	86		70 - 130			04/19/22 09:47	04/19/22 12:40	1
o-Terphenyl (Surr)	104		70 - 130			04/19/22 09:47	04/19/22 12:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7490		50.0	mg/Kg			04/25/22 13:13	10

Client Sample ID: S-1 2'

Lab Sample ID: 880-13850-3

Date Collected: 04/18/22 10:52

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			04/24/22 22:21	04/25/22 02:18	1
1,4-Difluorobenzene (Surr)	100		70 - 130			04/24/22 22:21	04/25/22 02:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 13:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 13:00	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 2'

Lab Sample ID: 880-13850-3

Date Collected: 04/18/22 10:52

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 09:47	04/19/22 13:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	86		70 - 130			04/19/22 09:47	04/19/22 13:00	1
o-Terphenyl (Surr)	102		70 - 130			04/19/22 09:47	04/19/22 13:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6260		49.8	mg/Kg			04/25/22 13:22	10

Client Sample ID: S-1 3'

Lab Sample ID: 880-13850-4

Date Collected: 04/18/22 10:53

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 02:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			04/24/22 22:21	04/25/22 02:39	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/24/22 22:21	04/25/22 02:39	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 13:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 13:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130			04/19/22 09:47	04/19/22 13:21	1
o-Terphenyl (Surr)	102		70 - 130			04/19/22 09:47	04/19/22 13:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2600		24.8	mg/Kg			04/25/22 13:31	5

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 4'

Lab Sample ID: 880-13850-5

Date Collected: 04/18/22 10:54

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 02:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 02:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 02:59	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/24/22 22:21	04/25/22 02:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 02:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/24/22 22:21	04/25/22 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	04/24/22 22:21	04/25/22 02:59	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/24/22 22:21	04/25/22 02:59	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 13:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 13:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 13:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	04/19/22 09:47	04/19/22 13:42	1
o-Terphenyl (Surr)	94		70 - 130	04/19/22 09:47	04/19/22 13:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1350		25.1	mg/Kg			04/25/22 13:40	5

Client Sample ID: S-2 0.5'

Lab Sample ID: 880-13850-6

Date Collected: 04/18/22 11:06

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 03:19	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 03:19	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 03:19	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 03:19	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/24/22 22:21	04/25/22 03:19	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/24/22 22:21	04/25/22 03:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/24/22 22:21	04/25/22 03:19	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/24/22 22:21	04/25/22 03:19	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-2 0.5'

Lab Sample ID: 880-13850-6

Date Collected: 04/18/22 11:06

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 14:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 14:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 14:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130			04/19/22 09:47	04/19/22 14:03	1
o-Terphenyl (Surr)	113		70 - 130			04/19/22 09:47	04/19/22 14:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7880		49.7	mg/Kg			04/25/22 14:08	10

Client Sample ID: S-2 1'

Lab Sample ID: 880-13850-7

Date Collected: 04/18/22 11:07

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1	0.00202	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
m,p-Xylenes	<0.00403	U F1	0.00403	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		04/21/22 15:50	04/23/22 08:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			04/21/22 15:50	04/23/22 08:37	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/21/22 15:50	04/23/22 08:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 14:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 14:24	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-2 1'

Lab Sample ID: 880-13850-7

Date Collected: 04/18/22 11:07

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 09:47	04/19/22 14:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	83		70 - 130			04/19/22 09:47	04/19/22 14:24	1
o-Terphenyl (Surr)	99		70 - 130			04/19/22 09:47	04/19/22 14:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	331		4.96	mg/Kg			04/25/22 14:17	1

Client Sample ID: S-2 2'

Lab Sample ID: 880-13850-8

Date Collected: 04/18/22 11:08

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			04/21/22 15:50	04/23/22 11:56	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/21/22 15:50	04/23/22 11:56	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 14:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 14:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 14:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130			04/19/22 09:47	04/19/22 14:45	1
o-Terphenyl (Surr)	92		70 - 130			04/19/22 09:47	04/19/22 14:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	735		4.98	mg/Kg			04/25/22 14:26	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-2 3'

Lab Sample ID: 880-13850-9

Date Collected: 04/18/22 11:09

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:17	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 12:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 12:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/21/22 15:50	04/23/22 12:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/21/22 15:50	04/23/22 12:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 15:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 15:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	04/19/22 09:47	04/19/22 15:06	1
o-Terphenyl (Surr)	90		70 - 130	04/19/22 09:47	04/19/22 15:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	877		4.95	mg/Kg			04/25/22 14:35	1

Client Sample ID: S-3 0.5'

Lab Sample ID: 880-13850-10

Date Collected: 04/18/22 11:25

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:37	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 12:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 12:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 12:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	04/21/22 15:50	04/23/22 12:37	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/21/22 15:50	04/23/22 12:37	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-3 0.5'

Lab Sample ID: 880-13850-10

Date Collected: 04/18/22 11:25

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 15:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 15:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 15:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130			04/19/22 09:47	04/19/22 15:26	1
o-Terphenyl (Surr)	102		70 - 130			04/19/22 09:47	04/19/22 15:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10300		99.8	mg/Kg			04/25/22 14:44	20

Client Sample ID: S-3 1'

Lab Sample ID: 880-13850-11

Date Collected: 04/18/22 11:26

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/21/22 15:50	04/23/22 12:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			04/21/22 15:50	04/23/22 12:57	1
1,4-Difluorobenzene (Surr)	98		70 - 130			04/21/22 15:50	04/23/22 12:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 16:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 16:08	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-3 1'

Lab Sample ID: 880-13850-11

Date Collected: 04/18/22 11:26

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 09:47	04/19/22 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	94		70 - 130			04/19/22 09:47	04/19/22 16:08	1
o-Terphenyl (Surr)	113		70 - 130			04/19/22 09:47	04/19/22 16:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1920		24.9	mg/Kg			04/25/22 14:54	5

Client Sample ID: S-3 2'

Lab Sample ID: 880-13850-12

Date Collected: 04/18/22 11:27

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/21/22 15:50	04/23/22 13:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			04/21/22 15:50	04/23/22 13:18	1
1,4-Difluorobenzene (Surr)	96		70 - 130			04/21/22 15:50	04/23/22 13:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 16:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 16:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130			04/19/22 09:47	04/19/22 16:29	1
o-Terphenyl (Surr)	106		70 - 130			04/19/22 09:47	04/19/22 16:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1610		24.8	mg/Kg			04/25/22 15:21	5

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-3 3'

Lab Sample ID: 880-13850-13

Date Collected: 04/18/22 11:28

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 13:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 13:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 13:38	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 13:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 13:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/21/22 15:50	04/23/22 13:38	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/21/22 15:50	04/23/22 13:38	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 16:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 16:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130	04/19/22 09:47	04/19/22 16:50	1
o-Terphenyl (Surr)	114		70 - 130	04/19/22 09:47	04/19/22 16:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3340		25.2	mg/Kg			04/25/22 15:30	5

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-13850-14

Date Collected: 04/18/22 11:36

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 13:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 13:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 13:59	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 13:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 13:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/21/22 15:50	04/23/22 13:59	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/21/22 15:50	04/23/22 13:59	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-13850-14

Date Collected: 04/18/22 11:36

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 17:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 17:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 17:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	83		70 - 130			04/19/22 09:47	04/19/22 17:11	1
o-Terphenyl (Surr)	98		70 - 130			04/19/22 09:47	04/19/22 17:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10600		99.4	mg/Kg			04/25/22 15:58	20

Client Sample ID: S-4 1'

Lab Sample ID: 880-13850-15

Date Collected: 04/18/22 11:37

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 14:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			04/21/22 15:50	04/23/22 14:19	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/21/22 15:50	04/23/22 14:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 17:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 17:32	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-4 1'

Lab Sample ID: 880-13850-15

Date Collected: 04/18/22 11:37

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 09:47	04/19/22 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130			04/19/22 09:47	04/19/22 17:32	1
o-Terphenyl (Surr)	108		70 - 130			04/19/22 09:47	04/19/22 17:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	730		4.95	mg/Kg			04/25/22 16:07	1

Client Sample ID: S-4 2'

Lab Sample ID: 880-13850-16

Date Collected: 04/18/22 11:38

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			04/21/22 15:50	04/23/22 14:40	1
1,4-Difluorobenzene (Surr)	98		70 - 130			04/21/22 15:50	04/23/22 14:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 17:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 17:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 17:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	94		70 - 130			04/19/22 09:47	04/19/22 17:52	1
o-Terphenyl (Surr)	113		70 - 130			04/19/22 09:47	04/19/22 17:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	422		4.99	mg/Kg			04/25/22 16:16	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-4 3'

Lab Sample ID: 880-13850-17

Date Collected: 04/18/22 11:39

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 16:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 16:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 16:02	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 16:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 16:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/21/22 15:50	04/23/22 16:02	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/21/22 15:50	04/23/22 16:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 18:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 18:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	83		70 - 130	04/19/22 09:47	04/19/22 18:13	1
o-Terphenyl (Surr)	94		70 - 130	04/19/22 09:47	04/19/22 18:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	619		5.01	mg/Kg			04/25/22 16:26	1

Client Sample ID: S-5 0.5'

Lab Sample ID: 880-13850-18

Date Collected: 04/18/22 12:04

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:23	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:23	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:23	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 16:23	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:23	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/21/22 15:50	04/23/22 16:23	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/21/22 15:50	04/23/22 16:23	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-5 0.5'

Lab Sample ID: 880-13850-18

Date Collected: 04/18/22 12:04

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 18:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 18:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	04/19/22 09:47	04/19/22 18:34	1
o-Terphenyl (Surr)	112		70 - 130	04/19/22 09:47	04/19/22 18:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11700		99.6	mg/Kg			04/25/22 16:35	20

Client Sample ID: S-5 1'

Lab Sample ID: 880-13850-19

Date Collected: 04/18/22 12:05

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:43	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:43	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:43	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 16:43	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 16:43	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/21/22 15:50	04/23/22 16:43	1
1,4-Difluorobenzene (Surr)	87		70 - 130	04/21/22 15:50	04/23/22 16:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 18:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 18:55	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-5 1'

Lab Sample ID: 880-13850-19

Date Collected: 04/18/22 12:05

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 09:47	04/19/22 18:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130			04/19/22 09:47	04/19/22 18:55	1
o-Terphenyl (Surr)	105		70 - 130			04/19/22 09:47	04/19/22 18:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	461		4.95	mg/Kg			04/25/22 16:44	1

Client Sample ID: S-5 2'

Lab Sample ID: 880-13850-20

Date Collected: 04/18/22 12:06

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/21/22 15:50	04/23/22 17:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			04/21/22 15:50	04/23/22 17:04	1
1,4-Difluorobenzene (Surr)	95		70 - 130			04/21/22 15:50	04/23/22 17:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 09:47	04/19/22 19:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 19:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 09:47	04/19/22 19:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	84		70 - 130			04/19/22 09:47	04/19/22 19:16	1
o-Terphenyl (Surr)	95		70 - 130			04/19/22 09:47	04/19/22 19:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	717		5.04	mg/Kg			04/25/22 16:53	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-5 3'

Lab Sample ID: 880-13850-21

Date Collected: 04/18/22 12:07

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 17:24	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 17:24	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 17:24	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 17:24	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 17:24	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/21/22 15:50	04/23/22 17:24	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/21/22 15:50	04/23/22 17:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 21:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 21:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130	04/19/22 10:31	04/19/22 21:01	1
o-Terphenyl (Surr)	118		70 - 130	04/19/22 10:31	04/19/22 21:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	476	F1	5.04	mg/Kg			04/22/22 00:18	1

Client Sample ID: S-6 0.5'

Lab Sample ID: 880-13850-22

Date Collected: 04/18/22 13:01

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:45	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 17:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 17:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/21/22 15:50	04/23/22 17:45	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/21/22 15:50	04/23/22 17:45	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-6 0.5'

Lab Sample ID: 880-13850-22

Date Collected: 04/18/22 13:01

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 22:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 22:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	76		70 - 130			04/19/22 10:31	04/19/22 22:05	1
o-Terphenyl (Surr)	88		70 - 130			04/19/22 10:31	04/19/22 22:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.0		4.98	mg/Kg			04/22/22 00:37	1

Client Sample ID: S-6 1'

Lab Sample ID: 880-13850-23

Date Collected: 04/18/22 13:02

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/21/22 15:50	04/23/22 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			04/21/22 15:50	04/23/22 18:05	1
1,4-Difluorobenzene (Surr)	96		70 - 130			04/21/22 15:50	04/23/22 18:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 22:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 22:26	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-6 1'

Lab Sample ID: 880-13850-23

Date Collected: 04/18/22 13:02

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 10:31	04/19/22 22:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	79		70 - 130			04/19/22 10:31	04/19/22 22:26	1
o-Terphenyl (Surr)	90		70 - 130			04/19/22 10:31	04/19/22 22:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.2		4.98	mg/Kg			04/22/22 00:44	1

Client Sample ID: S-7 0.5'

Lab Sample ID: 880-13850-24

Date Collected: 04/18/22 13:05

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/21/22 15:50	04/23/22 18:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			04/21/22 15:50	04/23/22 18:26	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/21/22 15:50	04/23/22 18:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 22:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 22:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 22:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	79		70 - 130			04/19/22 10:31	04/19/22 22:47	1
o-Terphenyl (Surr)	92		70 - 130			04/19/22 10:31	04/19/22 22:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.1		4.95	mg/Kg			04/22/22 00:50	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-7 1'

Lab Sample ID: 880-13850-25

Date Collected: 04/18/22 13:06

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 18:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 18:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 18:46	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 18:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 18:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/21/22 15:50	04/23/22 18:46	1
1,4-Difluorobenzene (Surr)	90		70 - 130	04/21/22 15:50	04/23/22 18:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 23:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 23:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/19/22 23:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	76		70 - 130	04/19/22 10:31	04/19/22 23:08	1
o-Terphenyl (Surr)	84		70 - 130	04/19/22 10:31	04/19/22 23:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		5.00	mg/Kg			04/22/22 00:56	1

Client Sample ID: S-8 0.5'

Lab Sample ID: 880-13850-26

Date Collected: 04/18/22 13:11

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 19:07	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 19:07	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 19:07	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 19:07	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 15:50	04/23/22 19:07	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 15:50	04/23/22 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	04/21/22 15:50	04/23/22 19:07	1
1,4-Difluorobenzene (Surr)	97		70 - 130	04/21/22 15:50	04/23/22 19:07	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-8 0.5'

Lab Sample ID: 880-13850-26

Date Collected: 04/18/22 13:11

Matrix: Solid

Date Received: 04/19/22 09:17

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 23:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 23:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	76		70 - 130	04/19/22 10:31	04/19/22 23:29	1
o-Terphenyl (Surr)	85		70 - 130	04/19/22 10:31	04/19/22 23:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9		4.99	mg/Kg			04/22/22 01:15	1

Client Sample ID: S-8 1'

Lab Sample ID: 880-13850-27

Date Collected: 04/18/22 13:12

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 02:19	1
Toluene	<0.00200	U F1	0.00200	mg/Kg		04/21/22 16:00	04/25/22 02:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 02:19	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		04/21/22 16:00	04/25/22 02:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 02:19	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/21/22 16:00	04/25/22 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/21/22 16:00	04/25/22 02:19	1
1,4-Difluorobenzene (Surr)	92		70 - 130	04/21/22 16:00	04/25/22 02:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/19/22 23:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 23:50	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-8 1'

Lab Sample ID: 880-13850-27

Date Collected: 04/18/22 13:12

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 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		04/19/22 10:31	04/19/22 23:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	89		70 - 130			04/19/22 10:31	04/19/22 23:50	1
o-Terphenyl (Surr)	99		70 - 130			04/19/22 10:31	04/19/22 23:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.32		5.01	mg/Kg			04/22/22 01:22	1

Client Sample ID: S-9 0.5'

Lab Sample ID: 880-13850-28

Date Collected: 04/18/22 13:17

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/21/22 16:00	04/25/22 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			04/21/22 16:00	04/25/22 02:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130			04/21/22 16:00	04/25/22 02:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 00:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/20/22 00:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/20/22 00:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	77		70 - 130			04/19/22 10:31	04/20/22 00:11	1
o-Terphenyl (Surr)	89		70 - 130			04/19/22 10:31	04/20/22 00:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.1		4.97	mg/Kg			04/22/22 01:28	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-9 1'

Lab Sample ID: 880-13850-29

Date Collected: 04/18/22 13:18

Matrix: Solid

Date Received: 04/19/22 09:17

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 03:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 03:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 03:00	1
m,p-Xylenes	0.00404		0.00399	mg/Kg		04/21/22 16:00	04/25/22 03:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 03:00	1
Xylenes, Total	0.00404		0.00399	mg/Kg		04/21/22 16:00	04/25/22 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/21/22 16:00	04/25/22 03:00	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/21/22 16:00	04/25/22 03:00	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00404		0.00399	mg/Kg			04/25/22 12:21	1

Method: 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			04/20/22 15:20	1

Method: 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		04/19/22 10:31	04/20/22 00:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/20/22 00:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/19/22 10:31	04/20/22 00:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	87		70 - 130			04/19/22 10:31	04/20/22 00:32	1
o-Terphenyl (Surr)	98		70 - 130			04/19/22 10:31	04/20/22 00:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.1		4.98	mg/Kg			04/22/22 01:34	1

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-13850-1	S-1 0.5'	100	100
880-13850-1 MS	S-1 0.5'	102	95
880-13850-1 MSD	S-1 0.5'	97	99
880-13850-2	S-1 1'	103	98
880-13850-3	S-1 2'	98	100
880-13850-4	S-1 3'	103	97
880-13850-5	S-1 4'	100	95
880-13850-6	S-2 0.5'	105	99
880-13850-7	S-2 1'	107	97
880-13850-7 MS	S-2 1'	104	99
880-13850-7 MSD	S-2 1'	104	98
880-13850-8	S-2 2'	106	97
880-13850-9	S-2 3'	106	98
880-13850-10	S-3 0.5'	109	100
880-13850-11	S-3 1'	109	98
880-13850-12	S-3 2'	107	96
880-13850-13	S-3 3'	108	97
880-13850-14	S-4 0.5'	110	97
880-13850-15	S-4 1'	110	97
880-13850-16	S-4 2'	109	98
880-13850-17	S-4 3'	108	97
880-13850-18	S-5 0.5'	108	97
880-13850-19	S-5 1'	105	87
880-13850-20	S-5 2'	104	95
880-13850-21	S-5 3'	105	96
880-13850-22	S-6 0.5'	104	96
880-13850-23	S-6 1'	107	96
880-13850-24	S-7 0.5'	106	97
880-13850-25	S-7 1'	110	90
880-13850-26	S-8 0.5'	107	97
880-13850-27	S-8 1'	101	92
880-13850-27 MS	S-8 1'	109	111
880-13850-27 MSD	S-8 1'	79	82
880-13850-28	S-9 0.5'	108	95
880-13850-29	S-9 1'	105	93
LCS 880-23966/1-A	Lab Control Sample	105	100
LCS 880-23967/1-A	Lab Control Sample	101	93
LCS 880-24111/1-A	Lab Control Sample	97	95
LCSD 880-23966/2-A	Lab Control Sample Dup	102	99
LCSD 880-23967/2-A	Lab Control Sample Dup	102	92
LCSD 880-24111/2-A	Lab Control Sample Dup	99	99
MB 880-23949/5-A	Method Blank	105	93
MB 880-23966/5-A	Method Blank	104	91
MB 880-23967/5-A	Method Blank	105	88
MB 880-24111/5-A	Method Blank	99	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc.

Job ID: 880-13850-1

Project/Site: Salado Draw 13 Corridor Line 2nd Spill

SDG: 22-0105-08

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)
880-13850-1	S-1 0.5'	81	97
880-13850-1 MS	S-1 0.5'	77	82
880-13850-1 MSD	S-1 0.5'	77	82
880-13850-2	S-1 1'	86	104
880-13850-3	S-1 2'	86	102
880-13850-4	S-1 3'	85	102
880-13850-5	S-1 4'	81	94
880-13850-6	S-2 0.5'	95	113
880-13850-7	S-2 1'	83	99
880-13850-8	S-2 2'	81	92
880-13850-9	S-2 3'	81	90
880-13850-10	S-3 0.5'	85	102
880-13850-11	S-3 1'	94	113
880-13850-12	S-3 2'	92	106
880-13850-13	S-3 3'	96	114
880-13850-14	S-4 0.5'	83	98
880-13850-15	S-4 1'	92	108
880-13850-16	S-4 2'	94	113
880-13850-17	S-4 3'	83	94
880-13850-18	S-5 0.5'	95	112
880-13850-19	S-5 1'	90	105
880-13850-20	S-5 2'	84	95
880-13850-21	S-5 3'	97	118
880-13850-21 MS	S-5 3'	82	90
880-13850-21 MSD	S-5 3'	77	81
880-13850-22	S-6 0.5'	76	88
880-13850-23	S-6 1'	79	90
880-13850-24	S-7 0.5'	79	92
880-13850-25	S-7 1'	76	84
880-13850-26	S-8 0.5'	76	85
880-13850-27	S-8 1'	89	99
880-13850-28	S-9 0.5'	77	89
880-13850-29	S-9 1'	87	98

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (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	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-23777/2-A	Lab Control Sample	98	118
LCS 880-23780/2-A	Lab Control Sample	92	108
LCSD 880-23777/3-A	Lab Control Sample Dup	105	126
LCSD 880-23780/3-A	Lab Control Sample Dup	100	116
MB 880-23777/1-A	Method Blank	85	105
MB 880-23780/1-A	Method Blank	98	120

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1

SDG: 22-0105-08

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

1

2

3

4

5

6

7

8

9

10

11

12

13

14

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-23949/5-A

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23949

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:53	04/22/22 21:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:53	04/22/22 21:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:53	04/22/22 21:42	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/21/22 14:53	04/22/22 21:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 14:53	04/22/22 21:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 14:53	04/22/22 21:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/21/22 14:53	04/22/22 21:42	1
1,4-Difluorobenzene (Surr)	93		70 - 130	04/21/22 14:53	04/22/22 21:42	1

Lab Sample ID: MB 880-23966/5-A

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23966

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 08:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 08:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 08:16	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 08:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 15:50	04/23/22 08:16	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 15:50	04/23/22 08:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/21/22 15:50	04/23/22 08:16	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/21/22 15:50	04/23/22 08:16	1

Lab Sample ID: LCS 880-23966/1-A

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09406		mg/Kg		94	70 - 130
Toluene	0.100	0.09361		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09466		mg/Kg		95	70 - 130
m,p-Xylenes	0.200	0.1930		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09917		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-23966/2-A

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23966

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08775		mg/Kg		88	70 - 130	7	35

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: LCSD 880-23966/2-A

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23966

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08736		mg/Kg		87	70 - 130	7	35
Ethylbenzene	0.100	0.08704		mg/Kg		87	70 - 130	8	35
m,p-Xylenes	0.200	0.1772		mg/Kg		89	70 - 130	9	35
o-Xylene	0.100	0.09070		mg/Kg		91	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-13850-7 MS

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: S-2 1'

Prep Type: Total/NA

Prep Batch: 23966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F1	0.100	0.07734		mg/Kg		77	70 - 130
Toluene	<0.00202	U F1	0.100	0.07582		mg/Kg		76	70 - 130
Ethylbenzene	<0.00202	U F1	0.100	0.07504		mg/Kg		75	70 - 130
m,p-Xylenes	<0.00403	U F1	0.200	0.1515		mg/Kg		76	70 - 130
o-Xylene	<0.00202	U F1	0.100	0.07767		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-13850-7 MSD

Matrix: Solid

Analysis Batch: 23985

Client Sample ID: S-2 1'

Prep Type: Total/NA

Prep Batch: 23966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.0990	0.06612	F1	mg/Kg		67	70 - 130	16	35
Toluene	<0.00202	U F1	0.0990	0.06508	F1	mg/Kg		66	70 - 130	15	35
Ethylbenzene	<0.00202	U F1	0.0990	0.06329	F1	mg/Kg		64	70 - 130	17	35
m,p-Xylenes	<0.00403	U F1	0.198	0.1278	F1	mg/Kg		65	70 - 130	17	35
o-Xylene	<0.00202	U F1	0.0990	0.06650	F1	mg/Kg		67	70 - 130	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-23967/5-A

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23967

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 01:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 01:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 01:58	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/21/22 16:00	04/25/22 01:58	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: MB 880-23967/5-A

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23967

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/21/22 16:00	04/25/22 01:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/21/22 16:00	04/25/22 01:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/21/22 16:00	04/25/22 01:58	1
1,4-Difluorobenzene (Surr)	88		70 - 130	04/21/22 16:00	04/25/22 01:58	1

Lab Sample ID: LCS 880-23967/1-A

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08769		mg/Kg		88	70 - 130
Toluene	0.100	0.09042		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09356		mg/Kg		94	70 - 130
m,p-Xylenes	0.200	0.1927		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09654		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-23967/2-A

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23967

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08077		mg/Kg		81	70 - 130	8	35
Toluene	0.100	0.08128		mg/Kg		81	70 - 130	11	35
Ethylbenzene	0.100	0.08200		mg/Kg		82	70 - 130	13	35
m,p-Xylenes	0.200	0.1675		mg/Kg		84	70 - 130	14	35
o-Xylene	0.100	0.08663		mg/Kg		87	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-13850-27 MS

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: S-8 1'

Prep Type: Total/NA

Prep Batch: 23967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.1069		mg/Kg		107	70 - 130
Toluene	<0.00200	U F1	0.0998	0.1327	F1	mg/Kg		133	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.1129		mg/Kg		113	70 - 130
m,p-Xylenes	<0.00401	U	0.200	0.2220		mg/Kg		111	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1165		mg/Kg		117	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: 880-13850-27 MS

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: S-8 1'

Prep Type: Total/NA

Prep Batch: 23967

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-13850-27 MSD

Matrix: Solid

Analysis Batch: 24109

Client Sample ID: S-8 1'

Prep Type: Total/NA

Prep Batch: 23967

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.08759		mg/Kg		88	70 - 130	20	35
Toluene	<0.00200	U F1	0.0996	0.1108		mg/Kg		111	70 - 130	18	35
Ethylbenzene	<0.00200	U	0.0996	0.09973		mg/Kg		100	70 - 130	12	35
m,p-Xylenes	<0.00401	U	0.199	0.1967		mg/Kg		99	70 - 130	12	35
o-Xylene	<0.00200	U	0.0996	0.09755		mg/Kg		98	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	79		70 - 130
1,4-Difluorobenzene (Surr)	82		70 - 130

Lab Sample ID: MB 880-24111/5-A

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 24111

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:09	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		04/24/22 22:21	04/25/22 01:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/24/22 22:21	04/25/22 01:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/24/22 22:21	04/25/22 01:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/24/22 22:21	04/25/22 01:09	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/24/22 22:21	04/25/22 01:09	1

Lab Sample ID: LCS 880-24111/1-A

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07124		mg/Kg		71	70 - 130
Toluene	0.100	0.09089		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09549		mg/Kg		95	70 - 130
m,p-Xylenes	0.200	0.1938		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09767		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: LCS 880-24111/1-A

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 24111

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

Lab Sample ID: LCSD 880-24111/2-A

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 24111

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07926		mg/Kg		79	70 - 130	11	35
Toluene	0.100	0.09758		mg/Kg		98	70 - 130	7	35
Ethylbenzene	0.100	0.1017		mg/Kg		102	70 - 130	6	35
m,p-Xylenes	0.200	0.2056		mg/Kg		103	70 - 130	6	35
o-Xylene	0.100	0.1035		mg/Kg		104	70 - 130	6	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-13850-1 MS

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: S-1 0.5'

Prep Type: Total/NA

Prep Batch: 24111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09875		mg/Kg		99	70 - 130
Toluene	<0.00200	U F1	0.100	0.1308	F1	mg/Kg		131	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1271		mg/Kg		127	70 - 130
m,p-Xylenes	<0.00401	U F1	0.200	0.2702	F1	mg/Kg		135	70 - 130
o-Xylene	<0.00200	U	0.100	0.1254		mg/Kg		125	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-13850-1 MSD

Matrix: Solid

Analysis Batch: 24110

Client Sample ID: S-1 0.5'

Prep Type: Total/NA

Prep Batch: 24111

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.1096		mg/Kg		110	70 - 130	10	35
Toluene	<0.00200	U F1	0.0996	0.1232		mg/Kg		124	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.0996	0.1164		mg/Kg		117	70 - 130	9	35
m,p-Xylenes	<0.00401	U F1	0.199	0.2439		mg/Kg		122	70 - 130	10	35
o-Xylene	<0.00200	U	0.0996	0.1147		mg/Kg		115	70 - 130	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: MB 880-23777/1-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23777

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		04/19/22 09:47	04/19/22 10:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 10:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 09:47	04/19/22 10:36	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130			04/19/22 09:47	04/19/22 10:36	1
o-Terphenyl (Surr)	105		70 - 130			04/19/22 09:47	04/19/22 10:36	1

Lab Sample ID: LCS 880-23777/2-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23777

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1027		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	1000	922.5		mg/Kg		92	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane (Surr)	98		70 - 130				
o-Terphenyl (Surr)	118		70 - 130				

Lab Sample ID: LCSD 880-23777/3-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23777

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1051		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	916.4		mg/Kg		92	70 - 130	1	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	105		70 - 130						
o-Terphenyl (Surr)	126		70 - 130						

Lab Sample ID: 880-13850-1 MS

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: S-1 0.5'

Prep Type: Total/NA

Prep Batch: 23777

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	1000	848.6		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	764.1		mg/Kg		72	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: 880-13850-1 MS

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: S-1 0.5'

Prep Type: Total/NA

Prep Batch: 23777

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	77		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Lab Sample ID: 880-13850-1 MSD

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: S-1 0.5'

Prep Type: Total/NA

Prep Batch: 23777

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	998	878.7		mg/Kg		85	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	770.4		mg/Kg		73	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	77		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Lab Sample ID: MB 880-23780/1-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 23780

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		04/19/22 10:31	04/19/22 19:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 19:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/19/22 10:31	04/19/22 19:58	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane (Surr)	98		70 - 130	04/19/22 10:31	04/19/22 19:58	1
o-Terphenyl (Surr)	120		70 - 130	04/19/22 10:31	04/19/22 19:58	1

Lab Sample ID: LCS 880-23780/2-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 23780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	835.6		mg/Kg		84	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	92		70 - 130
o-Terphenyl (Surr)	108		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

Lab Sample ID: LCSD 880-23780/3-A

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 23780

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1010		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	840.2		mg/Kg		84	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	100		70 - 130						
o-Terphenyl (Surr)	116		70 - 130						

Lab Sample ID: 880-13850-21 MS

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: S-5 3'

Prep Type: Total/NA

Prep Batch: 23780

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	<49.9	U	1000	866.7		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	812.9		mg/Kg		79	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane (Surr)	82		70 - 130								
o-Terphenyl (Surr)	90		70 - 130								

Lab Sample ID: 880-13850-21 MSD

Matrix: Solid

Analysis Batch: 23761

Client Sample ID: S-5 3'

Prep Type: Total/NA

Prep Batch: 23780

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	998	802.0		mg/Kg		78	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	745.7		mg/Kg		73	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane (Surr)	77		70 - 130								
o-Terphenyl (Surr)	81		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-23782/1-A

Matrix: Solid

Analysis Batch: 23971

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			04/21/22 23:59	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-23782/2-A

Matrix: Solid

Analysis Batch: 23971

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	233.1		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-23782/3-A

Matrix: Solid

Analysis Batch: 23971

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	247.0		mg/Kg		99	90 - 110	6	20

Lab Sample ID: 880-13850-21 MS

Matrix: Solid

Analysis Batch: 23971

Client Sample ID: S-5 3'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	476	F1	252	759.6	F1	mg/Kg		113	90 - 110

Lab Sample ID: 880-13850-21 MSD

Matrix: Solid

Analysis Batch: 23971

Client Sample ID: S-5 3'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	476	F1	252	714.8		mg/Kg		95	90 - 110	6	20

Lab Sample ID: 890-2196-A-1-D MS

Matrix: Solid

Analysis Batch: 23971

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7110	F1	2480	10210	F1	mg/Kg		125	90 - 110

Lab Sample ID: 890-2196-A-1-D MSD

Matrix: Solid

Analysis Batch: 23971

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7110	F1	2480	9834		mg/Kg		110	90 - 110	4	20

Lab Sample ID: MB 880-23783/1-A

Matrix: Solid

Analysis Batch: 23995

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			04/25/22 12:17	1

Lab Sample ID: LCS 880-23783/2-A

Matrix: Solid

Analysis Batch: 23995

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.6		mg/Kg		101	90 - 110

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-23783/3-A

Matrix: Solid

Analysis Batch: 23995

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	247.9		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-13850-1 MS

Matrix: Solid

Analysis Batch: 23995

Client Sample ID: S-1 0.5'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6330	F1	2500	8999		mg/Kg		107	90 - 110		

Lab Sample ID: 880-13850-1 MSD

Matrix: Solid

Analysis Batch: 23995

Client Sample ID: S-1 0.5'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6330	F1	2500	8432	F1	mg/Kg		84	90 - 110	6	20

Lab Sample ID: 880-13850-11 MS

Matrix: Solid

Analysis Batch: 23995

Client Sample ID: S-3 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1920		1250	3231		mg/Kg		105	90 - 110		

Lab Sample ID: 880-13850-11 MSD

Matrix: Solid

Analysis Batch: 23995

Client Sample ID: S-3 1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1920		1250	3201		mg/Kg		103	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

GC VOA

Prep Batch: 23949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-23949/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 23966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-7	S-2 1'	Total/NA	Solid	5035	
880-13850-8	S-2 2'	Total/NA	Solid	5035	
880-13850-9	S-2 3'	Total/NA	Solid	5035	
880-13850-10	S-3 0.5'	Total/NA	Solid	5035	
880-13850-11	S-3 1'	Total/NA	Solid	5035	
880-13850-12	S-3 2'	Total/NA	Solid	5035	
880-13850-13	S-3 3'	Total/NA	Solid	5035	
880-13850-14	S-4 0.5'	Total/NA	Solid	5035	
880-13850-15	S-4 1'	Total/NA	Solid	5035	
880-13850-16	S-4 2'	Total/NA	Solid	5035	
880-13850-17	S-4 3'	Total/NA	Solid	5035	
880-13850-18	S-5 0.5'	Total/NA	Solid	5035	
880-13850-19	S-5 1'	Total/NA	Solid	5035	
880-13850-20	S-5 2'	Total/NA	Solid	5035	
880-13850-21	S-5 3'	Total/NA	Solid	5035	
880-13850-22	S-6 0.5'	Total/NA	Solid	5035	
880-13850-23	S-6 1'	Total/NA	Solid	5035	
880-13850-24	S-7 0.5'	Total/NA	Solid	5035	
880-13850-25	S-7 1'	Total/NA	Solid	5035	
880-13850-26	S-8 0.5'	Total/NA	Solid	5035	
MB 880-23966/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23966/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23966/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13850-7 MS	S-2 1'	Total/NA	Solid	5035	
880-13850-7 MSD	S-2 1'	Total/NA	Solid	5035	

Prep Batch: 23967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-27	S-8 1'	Total/NA	Solid	5035	
880-13850-28	S-9 0.5'	Total/NA	Solid	5035	
880-13850-29	S-9 1'	Total/NA	Solid	5035	
MB 880-23967/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-23967/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-23967/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13850-27 MS	S-8 1'	Total/NA	Solid	5035	
880-13850-27 MSD	S-8 1'	Total/NA	Solid	5035	

Analysis Batch: 23985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-7	S-2 1'	Total/NA	Solid	8021B	23966
880-13850-8	S-2 2'	Total/NA	Solid	8021B	23966
880-13850-9	S-2 3'	Total/NA	Solid	8021B	23966
880-13850-10	S-3 0.5'	Total/NA	Solid	8021B	23966
880-13850-11	S-3 1'	Total/NA	Solid	8021B	23966
880-13850-12	S-3 2'	Total/NA	Solid	8021B	23966
880-13850-13	S-3 3'	Total/NA	Solid	8021B	23966
880-13850-14	S-4 0.5'	Total/NA	Solid	8021B	23966

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

GC VOA (Continued)

Analysis Batch: 23985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-15	S-4 1'	Total/NA	Solid	8021B	23966
880-13850-16	S-4 2'	Total/NA	Solid	8021B	23966
880-13850-17	S-4 3'	Total/NA	Solid	8021B	23966
880-13850-18	S-5 0.5'	Total/NA	Solid	8021B	23966
880-13850-19	S-5 1'	Total/NA	Solid	8021B	23966
880-13850-20	S-5 2'	Total/NA	Solid	8021B	23966
880-13850-21	S-5 3'	Total/NA	Solid	8021B	23966
880-13850-22	S-6 0.5'	Total/NA	Solid	8021B	23966
880-13850-23	S-6 1'	Total/NA	Solid	8021B	23966
880-13850-24	S-7 0.5'	Total/NA	Solid	8021B	23966
880-13850-25	S-7 1'	Total/NA	Solid	8021B	23966
880-13850-26	S-8 0.5'	Total/NA	Solid	8021B	23966
MB 880-23949/5-A	Method Blank	Total/NA	Solid	8021B	23949
MB 880-23966/5-A	Method Blank	Total/NA	Solid	8021B	23966
LCS 880-23966/1-A	Lab Control Sample	Total/NA	Solid	8021B	23966
LCSD 880-23966/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23966
880-13850-7 MS	S-2 1'	Total/NA	Solid	8021B	23966
880-13850-7 MSD	S-2 1'	Total/NA	Solid	8021B	23966

Analysis Batch: 24109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-27	S-8 1'	Total/NA	Solid	8021B	23967
880-13850-28	S-9 0.5'	Total/NA	Solid	8021B	23967
880-13850-29	S-9 1'	Total/NA	Solid	8021B	23967
MB 880-23967/5-A	Method Blank	Total/NA	Solid	8021B	23967
LCS 880-23967/1-A	Lab Control Sample	Total/NA	Solid	8021B	23967
LCSD 880-23967/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	23967
880-13850-27 MS	S-8 1'	Total/NA	Solid	8021B	23967
880-13850-27 MSD	S-8 1'	Total/NA	Solid	8021B	23967

Analysis Batch: 24110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	8021B	24111
880-13850-2	S-1 1'	Total/NA	Solid	8021B	24111
880-13850-3	S-1 2'	Total/NA	Solid	8021B	24111
880-13850-4	S-1 3'	Total/NA	Solid	8021B	24111
880-13850-5	S-1 4'	Total/NA	Solid	8021B	24111
880-13850-6	S-2 0.5'	Total/NA	Solid	8021B	24111
MB 880-24111/5-A	Method Blank	Total/NA	Solid	8021B	24111
LCS 880-24111/1-A	Lab Control Sample	Total/NA	Solid	8021B	24111
LCSD 880-24111/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	24111
880-13850-1 MS	S-1 0.5'	Total/NA	Solid	8021B	24111
880-13850-1 MSD	S-1 0.5'	Total/NA	Solid	8021B	24111

Prep Batch: 24111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	5035	
880-13850-2	S-1 1'	Total/NA	Solid	5035	
880-13850-3	S-1 2'	Total/NA	Solid	5035	
880-13850-4	S-1 3'	Total/NA	Solid	5035	
880-13850-5	S-1 4'	Total/NA	Solid	5035	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

GC VOA (Continued)

Prep Batch: 24111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-6	S-2 0.5'	Total/NA	Solid	5035	
MB 880-24111/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-24111/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-24111/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-13850-1 MS	S-1 0.5'	Total/NA	Solid	5035	
880-13850-1 MSD	S-1 0.5'	Total/NA	Solid	5035	

Analysis Batch: 24175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	Total BTEX	
880-13850-2	S-1 1'	Total/NA	Solid	Total BTEX	
880-13850-3	S-1 2'	Total/NA	Solid	Total BTEX	
880-13850-4	S-1 3'	Total/NA	Solid	Total BTEX	
880-13850-5	S-1 4'	Total/NA	Solid	Total BTEX	
880-13850-6	S-2 0.5'	Total/NA	Solid	Total BTEX	
880-13850-7	S-2 1'	Total/NA	Solid	Total BTEX	
880-13850-8	S-2 2'	Total/NA	Solid	Total BTEX	
880-13850-9	S-2 3'	Total/NA	Solid	Total BTEX	
880-13850-10	S-3 0.5'	Total/NA	Solid	Total BTEX	
880-13850-11	S-3 1'	Total/NA	Solid	Total BTEX	
880-13850-12	S-3 2'	Total/NA	Solid	Total BTEX	
880-13850-13	S-3 3'	Total/NA	Solid	Total BTEX	
880-13850-14	S-4 0.5'	Total/NA	Solid	Total BTEX	
880-13850-15	S-4 1'	Total/NA	Solid	Total BTEX	
880-13850-16	S-4 2'	Total/NA	Solid	Total BTEX	
880-13850-17	S-4 3'	Total/NA	Solid	Total BTEX	
880-13850-18	S-5 0.5'	Total/NA	Solid	Total BTEX	
880-13850-19	S-5 1'	Total/NA	Solid	Total BTEX	
880-13850-20	S-5 2'	Total/NA	Solid	Total BTEX	
880-13850-21	S-5 3'	Total/NA	Solid	Total BTEX	
880-13850-22	S-6 0.5'	Total/NA	Solid	Total BTEX	
880-13850-23	S-6 1'	Total/NA	Solid	Total BTEX	
880-13850-24	S-7 0.5'	Total/NA	Solid	Total BTEX	
880-13850-25	S-7 1'	Total/NA	Solid	Total BTEX	
880-13850-26	S-8 0.5'	Total/NA	Solid	Total BTEX	
880-13850-27	S-8 1'	Total/NA	Solid	Total BTEX	
880-13850-28	S-9 0.5'	Total/NA	Solid	Total BTEX	
880-13850-29	S-9 1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 23761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-2	S-1 1'	Total/NA	Solid	8015B NM	23777
880-13850-3	S-1 2'	Total/NA	Solid	8015B NM	23777
880-13850-4	S-1 3'	Total/NA	Solid	8015B NM	23777
880-13850-5	S-1 4'	Total/NA	Solid	8015B NM	23777
880-13850-6	S-2 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-7	S-2 1'	Total/NA	Solid	8015B NM	23777
880-13850-8	S-2 2'	Total/NA	Solid	8015B NM	23777

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
 Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
 SDG: 22-0105-08

GC Semi VOA (Continued)

Analysis Batch: 23761 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-9	S-2 3'	Total/NA	Solid	8015B NM	23777
880-13850-10	S-3 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-11	S-3 1'	Total/NA	Solid	8015B NM	23777
880-13850-12	S-3 2'	Total/NA	Solid	8015B NM	23777
880-13850-13	S-3 3'	Total/NA	Solid	8015B NM	23777
880-13850-14	S-4 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-15	S-4 1'	Total/NA	Solid	8015B NM	23777
880-13850-16	S-4 2'	Total/NA	Solid	8015B NM	23777
880-13850-17	S-4 3'	Total/NA	Solid	8015B NM	23777
880-13850-18	S-5 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-19	S-5 1'	Total/NA	Solid	8015B NM	23777
880-13850-20	S-5 2'	Total/NA	Solid	8015B NM	23777
880-13850-21	S-5 3'	Total/NA	Solid	8015B NM	23780
880-13850-22	S-6 0.5'	Total/NA	Solid	8015B NM	23780
880-13850-23	S-6 1'	Total/NA	Solid	8015B NM	23780
880-13850-24	S-7 0.5'	Total/NA	Solid	8015B NM	23780
880-13850-25	S-7 1'	Total/NA	Solid	8015B NM	23780
880-13850-26	S-8 0.5'	Total/NA	Solid	8015B NM	23780
880-13850-27	S-8 1'	Total/NA	Solid	8015B NM	23780
880-13850-28	S-9 0.5'	Total/NA	Solid	8015B NM	23780
880-13850-29	S-9 1'	Total/NA	Solid	8015B NM	23780
MB 880-23777/1-A	Method Blank	Total/NA	Solid	8015B NM	23777
MB 880-23780/1-A	Method Blank	Total/NA	Solid	8015B NM	23780
LCS 880-23777/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23777
LCS 880-23780/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	23780
LCSD 880-23777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23777
LCSD 880-23780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	23780
880-13850-1 MS	S-1 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-1 MSD	S-1 0.5'	Total/NA	Solid	8015B NM	23777
880-13850-21 MS	S-5 3'	Total/NA	Solid	8015B NM	23780
880-13850-21 MSD	S-5 3'	Total/NA	Solid	8015B NM	23780

Prep Batch: 23777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-2	S-1 1'	Total/NA	Solid	8015NM Prep	
880-13850-3	S-1 2'	Total/NA	Solid	8015NM Prep	
880-13850-4	S-1 3'	Total/NA	Solid	8015NM Prep	
880-13850-5	S-1 4'	Total/NA	Solid	8015NM Prep	
880-13850-6	S-2 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-7	S-2 1'	Total/NA	Solid	8015NM Prep	
880-13850-8	S-2 2'	Total/NA	Solid	8015NM Prep	
880-13850-9	S-2 3'	Total/NA	Solid	8015NM Prep	
880-13850-10	S-3 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-11	S-3 1'	Total/NA	Solid	8015NM Prep	
880-13850-12	S-3 2'	Total/NA	Solid	8015NM Prep	
880-13850-13	S-3 3'	Total/NA	Solid	8015NM Prep	
880-13850-14	S-4 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-15	S-4 1'	Total/NA	Solid	8015NM Prep	
880-13850-16	S-4 2'	Total/NA	Solid	8015NM Prep	
880-13850-17	S-4 3'	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

GC Semi VOA (Continued)

Prep Batch: 23777 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-18	S-5 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-19	S-5 1'	Total/NA	Solid	8015NM Prep	
880-13850-20	S-5 2'	Total/NA	Solid	8015NM Prep	
MB 880-23777/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23777/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-13850-1 MS	S-1 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-1 MSD	S-1 0.5'	Total/NA	Solid	8015NM Prep	

Prep Batch: 23780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-21	S-5 3'	Total/NA	Solid	8015NM Prep	
880-13850-22	S-6 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-23	S-6 1'	Total/NA	Solid	8015NM Prep	
880-13850-24	S-7 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-25	S-7 1'	Total/NA	Solid	8015NM Prep	
880-13850-26	S-8 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-27	S-8 1'	Total/NA	Solid	8015NM Prep	
880-13850-28	S-9 0.5'	Total/NA	Solid	8015NM Prep	
880-13850-29	S-9 1'	Total/NA	Solid	8015NM Prep	
MB 880-23780/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-23780/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-23780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-13850-21 MS	S-5 3'	Total/NA	Solid	8015NM Prep	
880-13850-21 MSD	S-5 3'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 23852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Total/NA	Solid	8015 NM	
880-13850-2	S-1 1'	Total/NA	Solid	8015 NM	
880-13850-3	S-1 2'	Total/NA	Solid	8015 NM	
880-13850-4	S-1 3'	Total/NA	Solid	8015 NM	
880-13850-5	S-1 4'	Total/NA	Solid	8015 NM	
880-13850-6	S-2 0.5'	Total/NA	Solid	8015 NM	
880-13850-7	S-2 1'	Total/NA	Solid	8015 NM	
880-13850-8	S-2 2'	Total/NA	Solid	8015 NM	
880-13850-9	S-2 3'	Total/NA	Solid	8015 NM	
880-13850-10	S-3 0.5'	Total/NA	Solid	8015 NM	
880-13850-11	S-3 1'	Total/NA	Solid	8015 NM	
880-13850-12	S-3 2'	Total/NA	Solid	8015 NM	
880-13850-13	S-3 3'	Total/NA	Solid	8015 NM	
880-13850-14	S-4 0.5'	Total/NA	Solid	8015 NM	
880-13850-15	S-4 1'	Total/NA	Solid	8015 NM	
880-13850-16	S-4 2'	Total/NA	Solid	8015 NM	
880-13850-17	S-4 3'	Total/NA	Solid	8015 NM	
880-13850-18	S-5 0.5'	Total/NA	Solid	8015 NM	
880-13850-19	S-5 1'	Total/NA	Solid	8015 NM	
880-13850-20	S-5 2'	Total/NA	Solid	8015 NM	
880-13850-21	S-5 3'	Total/NA	Solid	8015 NM	
880-13850-22	S-6 0.5'	Total/NA	Solid	8015 NM	
880-13850-23	S-6 1'	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

GC Semi VOA (Continued)

Analysis Batch: 23852 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-24	S-7 0.5'	Total/NA	Solid	8015 NM	
880-13850-25	S-7 1'	Total/NA	Solid	8015 NM	
880-13850-26	S-8 0.5'	Total/NA	Solid	8015 NM	
880-13850-27	S-8 1'	Total/NA	Solid	8015 NM	
880-13850-28	S-9 0.5'	Total/NA	Solid	8015 NM	
880-13850-29	S-9 1'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 23782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-21	S-5 3'	Soluble	Solid	DI Leach	
880-13850-22	S-6 0.5'	Soluble	Solid	DI Leach	
880-13850-23	S-6 1'	Soluble	Solid	DI Leach	
880-13850-24	S-7 0.5'	Soluble	Solid	DI Leach	
880-13850-25	S-7 1'	Soluble	Solid	DI Leach	
880-13850-26	S-8 0.5'	Soluble	Solid	DI Leach	
880-13850-27	S-8 1'	Soluble	Solid	DI Leach	
880-13850-28	S-9 0.5'	Soluble	Solid	DI Leach	
880-13850-29	S-9 1'	Soluble	Solid	DI Leach	
MB 880-23782/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-23782/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23782/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-13850-21 MS	S-5 3'	Soluble	Solid	DI Leach	
880-13850-21 MSD	S-5 3'	Soluble	Solid	DI Leach	
890-2196-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2196-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 23783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Soluble	Solid	DI Leach	
880-13850-2	S-1 1'	Soluble	Solid	DI Leach	
880-13850-3	S-1 2'	Soluble	Solid	DI Leach	
880-13850-4	S-1 3'	Soluble	Solid	DI Leach	
880-13850-5	S-1 4'	Soluble	Solid	DI Leach	
880-13850-6	S-2 0.5'	Soluble	Solid	DI Leach	
880-13850-7	S-2 1'	Soluble	Solid	DI Leach	
880-13850-8	S-2 2'	Soluble	Solid	DI Leach	
880-13850-9	S-2 3'	Soluble	Solid	DI Leach	
880-13850-10	S-3 0.5'	Soluble	Solid	DI Leach	
880-13850-11	S-3 1'	Soluble	Solid	DI Leach	
880-13850-12	S-3 2'	Soluble	Solid	DI Leach	
880-13850-13	S-3 3'	Soluble	Solid	DI Leach	
880-13850-14	S-4 0.5'	Soluble	Solid	DI Leach	
880-13850-15	S-4 1'	Soluble	Solid	DI Leach	
880-13850-16	S-4 2'	Soluble	Solid	DI Leach	
880-13850-17	S-4 3'	Soluble	Solid	DI Leach	
880-13850-18	S-5 0.5'	Soluble	Solid	DI Leach	
880-13850-19	S-5 1'	Soluble	Solid	DI Leach	
880-13850-20	S-5 2'	Soluble	Solid	DI Leach	
MB 880-23783/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

HPLC/IC (Continued)

Leach Batch: 23783 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-23783/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-23783/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-13850-1 MS	S-1 0.5'	Soluble	Solid	DI Leach	
880-13850-1 MSD	S-1 0.5'	Soluble	Solid	DI Leach	
880-13850-11 MS	S-3 1'	Soluble	Solid	DI Leach	
880-13850-11 MSD	S-3 1'	Soluble	Solid	DI Leach	

Analysis Batch: 23971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-21	S-5 3'	Soluble	Solid	300.0	23782
880-13850-22	S-6 0.5'	Soluble	Solid	300.0	23782
880-13850-23	S-6 1'	Soluble	Solid	300.0	23782
880-13850-24	S-7 0.5'	Soluble	Solid	300.0	23782
880-13850-25	S-7 1'	Soluble	Solid	300.0	23782
880-13850-26	S-8 0.5'	Soluble	Solid	300.0	23782
880-13850-27	S-8 1'	Soluble	Solid	300.0	23782
880-13850-28	S-9 0.5'	Soluble	Solid	300.0	23782
880-13850-29	S-9 1'	Soluble	Solid	300.0	23782
MB 880-23782/1-A	Method Blank	Soluble	Solid	300.0	23782
LCS 880-23782/2-A	Lab Control Sample	Soluble	Solid	300.0	23782
LCSD 880-23782/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23782
880-13850-21 MS	S-5 3'	Soluble	Solid	300.0	23782
880-13850-21 MSD	S-5 3'	Soluble	Solid	300.0	23782
890-2196-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	23782
890-2196-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	23782

Analysis Batch: 23995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1	S-1 0.5'	Soluble	Solid	300.0	23783
880-13850-2	S-1 1'	Soluble	Solid	300.0	23783
880-13850-3	S-1 2'	Soluble	Solid	300.0	23783
880-13850-4	S-1 3'	Soluble	Solid	300.0	23783
880-13850-5	S-1 4'	Soluble	Solid	300.0	23783
880-13850-6	S-2 0.5'	Soluble	Solid	300.0	23783
880-13850-7	S-2 1'	Soluble	Solid	300.0	23783
880-13850-8	S-2 2'	Soluble	Solid	300.0	23783
880-13850-9	S-2 3'	Soluble	Solid	300.0	23783
880-13850-10	S-3 0.5'	Soluble	Solid	300.0	23783
880-13850-11	S-3 1'	Soluble	Solid	300.0	23783
880-13850-12	S-3 2'	Soluble	Solid	300.0	23783
880-13850-13	S-3 3'	Soluble	Solid	300.0	23783
880-13850-14	S-4 0.5'	Soluble	Solid	300.0	23783
880-13850-15	S-4 1'	Soluble	Solid	300.0	23783
880-13850-16	S-4 2'	Soluble	Solid	300.0	23783
880-13850-17	S-4 3'	Soluble	Solid	300.0	23783
880-13850-18	S-5 0.5'	Soluble	Solid	300.0	23783
880-13850-19	S-5 1'	Soluble	Solid	300.0	23783
880-13850-20	S-5 2'	Soluble	Solid	300.0	23783
MB 880-23783/1-A	Method Blank	Soluble	Solid	300.0	23783
LCS 880-23783/2-A	Lab Control Sample	Soluble	Solid	300.0	23783
LCSD 880-23783/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	23783

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

HPLC/IC (Continued)

Analysis Batch: 23995 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-13850-1 MS	S-1 0.5'	Soluble	Solid	300.0	23783
880-13850-1 MSD	S-1 0.5'	Soluble	Solid	300.0	23783
880-13850-11 MS	S-3 1'	Soluble	Solid	300.0	23783
880-13850-11 MSD	S-3 1'	Soluble	Solid	300.0	23783

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 0.5'

Lab Sample ID: 880-13850-1

Date Collected: 04/18/22 10:50

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 01:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 11:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		10			23995	04/25/22 12:45	CH	XEN MID

Client Sample ID: S-1 1'

Lab Sample ID: 880-13850-2

Date Collected: 04/18/22 10:51

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 01:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 12:40	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		10			23995	04/25/22 13:13	CH	XEN MID

Client Sample ID: S-1 2'

Lab Sample ID: 880-13850-3

Date Collected: 04/18/22 10:52

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 02:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 13:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		10			23995	04/25/22 13:22	CH	XEN MID

Client Sample ID: S-1 3'

Lab Sample ID: 880-13850-4

Date Collected: 04/18/22 10:53

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 02:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-1 3'

Lab Sample ID: 880-13850-4

Date Collected: 04/18/22 10:53

Matrix: Solid

Date Received: 04/19/22 09:17

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			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 13:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		5			23995	04/25/22 13:31	CH	XEN MID

Client Sample ID: S-1 4'

Lab Sample ID: 880-13850-5

Date Collected: 04/18/22 10:54

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 02:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 13:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		5			23995	04/25/22 13:40	CH	XEN MID

Client Sample ID: S-2 0.5'

Lab Sample ID: 880-13850-6

Date Collected: 04/18/22 11:06

Matrix: Solid

Date Received: 04/19/22 09:17

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	24111	04/24/22 22:21	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	24110	04/25/22 03:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 14:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		10			23995	04/25/22 14:08	CH	XEN MID

Client Sample ID: S-2 1'

Lab Sample ID: 880-13850-7

Date Collected: 04/18/22 11:07

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 08:37	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 14:24	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-2 1'

Lab Sample ID: 880-13850-7

Date Collected: 04/18/22 11:07

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 14:17	CH	XEN MID

Client Sample ID: S-2 2'

Lab Sample ID: 880-13850-8

Date Collected: 04/18/22 11:08

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 11:56	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 14:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 14:26	CH	XEN MID

Client Sample ID: S-2 3'

Lab Sample ID: 880-13850-9

Date Collected: 04/18/22 11:09

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 12:17	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 15:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 14:35	CH	XEN MID

Client Sample ID: S-3 0.5'

Lab Sample ID: 880-13850-10

Date Collected: 04/18/22 11:25

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 12:37	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 15:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		20			23995	04/25/22 14:44	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-3 1'

Lab Sample ID: 880-13850-11

Date Collected: 04/18/22 11:26

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 12:57	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 16:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		5			23995	04/25/22 14:54	CH	XEN MID

Client Sample ID: S-3 2'

Lab Sample ID: 880-13850-12

Date Collected: 04/18/22 11:27

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 13:18	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 16:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		5			23995	04/25/22 15:21	CH	XEN MID

Client Sample ID: S-3 3'

Lab Sample ID: 880-13850-13

Date Collected: 04/18/22 11:28

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 13:38	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 16:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		5			23995	04/25/22 15:30	CH	XEN MID

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-13850-14

Date Collected: 04/18/22 11:36

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 13:59	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-13850-14

Date Collected: 04/18/22 11:36

Matrix: Solid

Date Received: 04/19/22 09:17

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			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		20			23995	04/25/22 15:58	CH	XEN MID

Client Sample ID: S-4 1'

Lab Sample ID: 880-13850-15

Date Collected: 04/18/22 11:37

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 14:19	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 17:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 16:07	CH	XEN MID

Client Sample ID: S-4 2'

Lab Sample ID: 880-13850-16

Date Collected: 04/18/22 11:38

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 14:40	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 17:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 16:16	CH	XEN MID

Client Sample ID: S-4 3'

Lab Sample ID: 880-13850-17

Date Collected: 04/18/22 11:39

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 16:02	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 18:13	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-4 3'

Lab Sample ID: 880-13850-17

Date Collected: 04/18/22 11:39

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 16:26	CH	XEN MID

Client Sample ID: S-5 0.5'

Lab Sample ID: 880-13850-18

Date Collected: 04/18/22 12:04

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 16:23	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 18:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		20			23995	04/25/22 16:35	CH	XEN MID

Client Sample ID: S-5 1'

Lab Sample ID: 880-13850-19

Date Collected: 04/18/22 12:05

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 16:43	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 18:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 16:44	CH	XEN MID

Client Sample ID: S-5 2'

Lab Sample ID: 880-13850-20

Date Collected: 04/18/22 12:06

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 17:04	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23777	04/19/22 09:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 19:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23783	04/19/22 11:58	CH	XEN MID
Soluble	Analysis	300.0		1			23995	04/25/22 16:53	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-5 3'

Lab Sample ID: 880-13850-21

Date Collected: 04/18/22 12:07

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 17:24	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 21:01	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 00:18	CH	XEN MID

Client Sample ID: S-6 0.5'

Lab Sample ID: 880-13850-22

Date Collected: 04/18/22 13:01

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 17:45	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 22:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 00:37	CH	XEN MID

Client Sample ID: S-6 1'

Lab Sample ID: 880-13850-23

Date Collected: 04/18/22 13:02

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 18:05	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 22:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 00:44	CH	XEN MID

Client Sample ID: S-7 0.5'

Lab Sample ID: 880-13850-24

Date Collected: 04/18/22 13:05

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 18:26	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-7 0.5'

Lab Sample ID: 880-13850-24

Date Collected: 04/18/22 13:05

Matrix: Solid

Date Received: 04/19/22 09:17

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			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 22:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 00:50	CH	XEN MID

Client Sample ID: S-7 1'

Lab Sample ID: 880-13850-25

Date Collected: 04/18/22 13:06

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 18:46	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 23:08	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 00:56	CH	XEN MID

Client Sample ID: S-8 0.5'

Lab Sample ID: 880-13850-26

Date Collected: 04/18/22 13:11

Matrix: Solid

Date Received: 04/19/22 09:17

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	23966	04/21/22 15:50	MR	XEN MID
Total/NA	Analysis	8021B		1			23985	04/23/22 19:07	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 23:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 01:15	CH	XEN MID

Client Sample ID: S-8 1'

Lab Sample ID: 880-13850-27

Date Collected: 04/18/22 13:12

Matrix: Solid

Date Received: 04/19/22 09:17

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	23967	04/21/22 16:00	MR	XEN MID
Total/NA	Analysis	8021B		1			24109	04/25/22 02:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/19/22 23:50	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Client Sample ID: S-8 1'

Lab Sample ID: 880-13850-27

Date Collected: 04/18/22 13:12

Matrix: Solid

Date Received: 04/19/22 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 01:22	CH	XEN MID

Client Sample ID: S-9 0.5'

Lab Sample ID: 880-13850-28

Date Collected: 04/18/22 13:17

Matrix: Solid

Date Received: 04/19/22 09:17

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	23967	04/21/22 16:00	MR	XEN MID
Total/NA	Analysis	8021B		1			24109	04/25/22 02:40	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 00:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 01:28	CH	XEN MID

Client Sample ID: S-9 1'

Lab Sample ID: 880-13850-29

Date Collected: 04/18/22 13:18

Matrix: Solid

Date Received: 04/19/22 09:17

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	23967	04/21/22 16:00	MR	XEN MID
Total/NA	Analysis	8021B		1			24109	04/25/22 03:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			24175	04/25/22 12:21	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			23852	04/20/22 15:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	23780	04/19/22 10:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1			23761	04/20/22 00:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	23782	04/19/22 11:57	CH	XEN MID
Soluble	Analysis	300.0		1			23971	04/22/22 01:34	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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	T104704400-21-22	06-30-22
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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-13850-1
SDG: 22-0105-08

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-13850-1	S-1 0.5'	Solid	04/18/22 10:50	04/19/22 09:17
880-13850-2	S-1 1'	Solid	04/18/22 10:51	04/19/22 09:17
880-13850-3	S-1 2'	Solid	04/18/22 10:52	04/19/22 09:17
880-13850-4	S-1 3'	Solid	04/18/22 10:53	04/19/22 09:17
880-13850-5	S-1 4'	Solid	04/18/22 10:54	04/19/22 09:17
880-13850-6	S-2 0.5'	Solid	04/18/22 11:06	04/19/22 09:17
880-13850-7	S-2 1'	Solid	04/18/22 11:07	04/19/22 09:17
880-13850-8	S-2 2'	Solid	04/18/22 11:08	04/19/22 09:17
880-13850-9	S-2 3'	Solid	04/18/22 11:09	04/19/22 09:17
880-13850-10	S-3 0.5'	Solid	04/18/22 11:25	04/19/22 09:17
880-13850-11	S-3 1'	Solid	04/18/22 11:26	04/19/22 09:17
880-13850-12	S-3 2'	Solid	04/18/22 11:27	04/19/22 09:17
880-13850-13	S-3 3'	Solid	04/18/22 11:28	04/19/22 09:17
880-13850-14	S-4 0.5'	Solid	04/18/22 11:36	04/19/22 09:17
880-13850-15	S-4 1'	Solid	04/18/22 11:37	04/19/22 09:17
880-13850-16	S-4 2'	Solid	04/18/22 11:38	04/19/22 09:17
880-13850-17	S-4 3'	Solid	04/18/22 11:39	04/19/22 09:17
880-13850-18	S-5 0.5'	Solid	04/18/22 12:04	04/19/22 09:17
880-13850-19	S-5 1'	Solid	04/18/22 12:05	04/19/22 09:17
880-13850-20	S-5 2'	Solid	04/18/22 12:06	04/19/22 09:17
880-13850-21	S-5 3'	Solid	04/18/22 12:07	04/19/22 09:17
880-13850-22	S-6 0.5'	Solid	04/18/22 13:01	04/19/22 09:17
880-13850-23	S-6 1'	Solid	04/18/22 13:02	04/19/22 09:17
880-13850-24	S-7 0.5'	Solid	04/18/22 13:05	04/19/22 09:17
880-13850-25	S-7 1'	Solid	04/18/22 13:06	04/19/22 09:17
880-13850-26	S-8 0.5'	Solid	04/18/22 13:11	04/19/22 09:17
880-13850-27	S-8 1'	Solid	04/18/22 13:12	04/19/22 09:17
880-13850-28	S-9 0.5'	Solid	04/18/22 13:17	04/19/22 09:17
880-13850-29	S-9 1'	Solid	04/18/22 13:18	04/19/22 09:17

[illegible]

Larson & Associates, Inc.

Environmental Consultants

507 N Warrenfield, Ste 202
Midland, TX 79701
432-687-0901

DATE: 4/19/2022

PO#: _____

LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: SALADO HWY 13 CORRIDOR LINE 2nd SPILL

LAI PROJECT # 22-0105-08 COLLECTOR: DSG

PAGE 2 OF 2

Data Reported to

TRRP report? ☐ Yes ☒ No

TIME ZONE _____

Time zone/State _____

S=SOIL
W=WATER
A=AIR

P=PAINT
SL=SLUDGE
OT=OTHER

Field Sample ID	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION				ANALYSES	FIELD NOTES		
						HCl	HNO ₃	H ₂ SO ₄ ☐ NaOH ☐	ICE			UNPRESERVED	
S-4 2'		4/18/22	1138	S	1				X				
S-4 3			1139						X				
S-5 0.5'			1204						X				
S-5 1'			1205						X				
S-5 2'			1206						X				
S-5 3'			1207						X				
S-6 0.5'			1301						X				
S-6 1'			1302						X				
S-7 0.5'			1305						X				
S-7 1			1306						X				
S-8 0.5			1311						X				
S-8 1'			1312						X				
S-9 0.5			1317						X				
S-9 1'			1318						X				
TOTAL 14													

RELINQUISHED BY (Signature) [Signature] DATE/TIME 4/19/22 0917

RELINQUISHED BY (Signature) _____ DATE/TIME _____

RELINQUISHED BY (Signature) _____ DATE/TIME _____

LABORATORY XENCO

RECEIVED BY (Signature) [Signature]

RECEIVED BY (Signature) _____

RECEIVED BY (Signature) _____

TURN AROUND TIME

NORMAL ☒ 1 DAY ☐ 2 DAY ☐ OTHER ☐

LABORATORY USE ONLY:

RECEIVING TEMP: 31.2 THERM# 108

CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED

CARRIER BILL # _____

HAND DELIVERED ☒

Loc: 880

13850

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-13850-1

SDG Number: 22-0105-08

Login Number: 13850**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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-14580-1

Laboratory Sample Delivery Group: 22-0105-08

Client Project/Site: Salado Draw 13 Corridor Liene

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:
5/11/2022 2:57:07 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Laboratory Job ID: 880-14580-1
SDG: 22-0105-08

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	15
Lab Chronicle	18
Certification Summary	20
Method Summary	21
Sample Summary	22
Chain of Custody	23
Receipt Checklists	24

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Job ID: 880-14580-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-14580-1

Comments

No additional comments.

Receipt

The samples were received on 5/10/2022 8:43 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3° C.

GC VOA

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

GC Semi VOA

Method 8015B NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25270 and analytical batch 880-25229 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Client Sample ID: S-1 1.0'

Lab Sample ID: 880-14580-1

Date Collected: 05/09/22 12:05

Matrix: Solid

Date Received: 05/10/22 08:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 05:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 05:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 05:46	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/10/22 10:17	05/11/22 05:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 05:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/10/22 10:17	05/11/22 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/10/22 10:17	05/11/22 05:46	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/10/22 10:17	05/11/22 05:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/11/22 08:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	81.9		50.0	mg/Kg			05/11/22 13:40	1

Method: 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		05/10/22 11:04	05/10/22 12:26	1
Diesel Range Organics (Over C10-C28)	81.9	F1	50.0	mg/Kg		05/10/22 11:04	05/10/22 12:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	05/10/22 11:04	05/10/22 12:26	1
o-Terphenyl (Surr)	109		70 - 130	05/10/22 11:04	05/10/22 12:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9500		101	mg/Kg			05/10/22 16:40	20

Client Sample ID: S-1 3.0'

Lab Sample ID: 880-14580-2

Date Collected: 05/09/22 12:06

Matrix: Solid

Date Received: 05/10/22 08:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 06:07	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 06:07	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 06:07	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/10/22 10:17	05/11/22 06:07	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/10/22 10:17	05/11/22 06:07	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/10/22 10:17	05/11/22 06:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/10/22 10:17	05/11/22 06:07	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/10/22 10:17	05/11/22 06:07	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Client Sample ID: S-1 3.0'

Lab Sample ID: 880-14580-2

Date Collected: 05/09/22 12:06

Matrix: Solid

Date Received: 05/10/22 08:43

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/11/22 08:04	1

Method: 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			05/11/22 13:40	1

Method: 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		05/10/22 11:04	05/10/22 13:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/10/22 11:04	05/10/22 13:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/10/22 11:04	05/10/22 13:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130			05/10/22 11:04	05/10/22 13:31	1
o-Terphenyl (Surr)	114		70 - 130			05/10/22 11:04	05/10/22 13:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3020		24.8	mg/Kg			05/10/22 17:05	5

Client Sample ID: S-1 5.0'

Lab Sample ID: 880-14580-3

Date Collected: 05/09/22 12:07

Matrix: Solid

Date Received: 05/10/22 08:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/10/22 10:17	05/11/22 06:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			05/10/22 10:17	05/11/22 06:27	1
1,4-Difluorobenzene (Surr)	88		70 - 130			05/10/22 10:17	05/11/22 06:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/11/22 08:04	1

Method: 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			05/11/22 13:40	1

Method: 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		05/10/22 11:04	05/10/22 13:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 13:53	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Client Sample ID: S-1 5.0'

Lab Sample ID: 880-14580-3

Date Collected: 05/09/22 12:07

Matrix: Solid

Date Received: 05/10/22 08:43

Method: 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		05/10/22 11:04	05/10/22 13:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	77		70 - 130			05/10/22 11:04	05/10/22 13:53	1
o-Terphenyl (Surr)	85		70 - 130			05/10/22 11:04	05/10/22 13:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6650		49.7	mg/Kg			05/10/22 17:13	10

Client Sample ID: S-1 10.0'

Lab Sample ID: 880-14580-4

Date Collected: 05/09/22 12:08

Matrix: Solid

Date Received: 05/10/22 08:43

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/10/22 10:52	05/11/22 03:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			05/10/22 10:52	05/11/22 03:33	1
1,4-Difluorobenzene (Surr)	100		70 - 130			05/10/22 10:52	05/11/22 03:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/11/22 08:04	1

Method: 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			05/11/22 13:40	1

Method: 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		05/10/22 11:04	05/10/22 14:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 14:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 14:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130			05/10/22 11:04	05/10/22 14:14	1
o-Terphenyl (Surr)	101		70 - 130			05/10/22 11:04	05/10/22 14:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		24.9	mg/Kg			05/10/22 17:21	5

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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)
880-14479-A-6-D MS	Matrix Spike	108	95
880-14479-A-6-E MSD	Matrix Spike Duplicate	117	90
880-14580-1	S-1 1.0'	112	92
880-14580-2	S-1 3.0'	113	92
880-14580-3	S-1 5.0'	108	88
880-14580-4	S-1 10.0'	113	100
880-14580-4 MS	S-1 10.0'	104	98
880-14580-4 MSD	S-1 10.0'	106	101
LCS 880-25242/1-A	Lab Control Sample	107	95
LCS 880-25266/1-A	Lab Control Sample	99	99
LCSD 880-25242/2-A	Lab Control Sample Dup	112	93
LCSD 880-25266/2-A	Lab Control Sample Dup	100	97
MB 880-25078/5-A	Method Blank	100	91
MB 880-25110/5-A	Method Blank	101	95
MB 880-25242/5-A	Method Blank	100	91
MB 880-25266/5-A	Method Blank	98	95
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)
880-14580-1	S-1 1.0'	108	109
880-14580-1 MS	S-1 1.0'	81	73
880-14580-1 MSD	S-1 1.0'	82	74
880-14580-2	S-1 3.0'	108	114
880-14580-3	S-1 5.0'	77	85
880-14580-4	S-1 10.0'	92	101
LCS 880-25270/2-A	Lab Control Sample	102	99
LCSD 880-25270/3-A	Lab Control Sample Dup	103	101
MB 880-25270/1-A	Method Blank	88	99
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25078/5-A

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25078

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/09/22 11:34	05/10/22 11:39	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/09/22 11:34	05/10/22 11:39	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/09/22 11:34	05/10/22 11:39	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/09/22 11:34	05/10/22 11:39	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/09/22 11:34	05/10/22 11:39	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/09/22 11:34	05/10/22 11:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/09/22 11:34	05/10/22 11:39	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/09/22 11:34	05/10/22 11:39	1

Lab Sample ID: MB 880-25110/5-A

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25110

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/09/22 13:08	05/10/22 12:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/09/22 13:08	05/10/22 12:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/09/22 13:08	05/10/22 12:02	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/09/22 13:08	05/10/22 12:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/09/22 13:08	05/10/22 12:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/09/22 13:08	05/10/22 12:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/09/22 13:08	05/10/22 12:02	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/09/22 13:08	05/10/22 12:02	1

Lab Sample ID: MB 880-25242/5-A

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25242

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:17	05/10/22 22:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:17	05/10/22 22:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:17	05/10/22 22:34	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/10/22 10:17	05/10/22 22:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:17	05/10/22 22:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/10/22 10:17	05/10/22 22:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/10/22 10:17	05/10/22 22:34	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/10/22 10:17	05/10/22 22:34	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

Lab Sample ID: LCS 880-25242/1-A

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09934		mg/Kg		99	70 - 130
Toluene	0.100	0.1085		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1135		mg/Kg		114	70 - 130
m,p-Xylenes	0.200	0.2280		mg/Kg		114	70 - 130
o-Xylene	0.100	0.1170		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-25242/2-A

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08092		mg/Kg		81	70 - 130	20	35
Toluene	0.100	0.09358		mg/Kg		94	70 - 130	15	35
Ethylbenzene	0.100	0.09993		mg/Kg		100	70 - 130	13	35
m,p-Xylenes	0.200	0.2043		mg/Kg		102	70 - 130	11	35
o-Xylene	0.100	0.1052		mg/Kg		105	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 880-14479-A-6-D MS

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25242

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.09344		mg/Kg		94	70 - 130
Toluene	<0.00202	U	0.0998	0.1023		mg/Kg		103	70 - 130
Ethylbenzene	<0.00202	U	0.0998	0.1059		mg/Kg		106	70 - 130
m,p-Xylenes	<0.00403	U	0.200	0.2174		mg/Kg		109	70 - 130
o-Xylene	<0.00202	U	0.0998	0.1094		mg/Kg		110	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-14479-A-6-E MSD

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08899		mg/Kg		89	70 - 130	5	35
Toluene	<0.00202	U	0.0996	0.1075		mg/Kg		108	70 - 130	5	35
Ethylbenzene	<0.00202	U	0.0996	0.1151		mg/Kg		116	70 - 130	8	35

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

Lab Sample ID: 880-14479-A-6-E MSD

Matrix: Solid

Analysis Batch: 25225

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m,p-Xylenes	<0.00403	U	0.199	0.2406		mg/Kg		121	70 - 130	10	35
o-Xylene	<0.00202	U	0.0996	0.1216		mg/Kg		122	70 - 130	11	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	117		70 - 130								
1,4-Difluorobenzene (Surr)	90		70 - 130								

Lab Sample ID: MB 880-25266/5-A

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25266

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/10/22 10:52	05/11/22 03:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			05/10/22 10:52	05/11/22 03:04	1
1,4-Difluorobenzene (Surr)	95		70 - 130			05/10/22 10:52	05/11/22 03:04	1

Lab Sample ID: LCS 880-25266/1-A

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	0.100	0.08603		mg/Kg		86	70 - 130	
Toluene	0.100	0.08465		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08620		mg/Kg		86	70 - 130	
m,p-Xylenes	0.200	0.1796		mg/Kg		90	70 - 130	
o-Xylene	0.100	0.09780		mg/Kg		98	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	99		70 - 130					
1,4-Difluorobenzene (Surr)	99		70 - 130					

Lab Sample ID: LCSD 880-25266/2-A

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07230		mg/Kg		72	70 - 130	17	35
Toluene	0.100	0.07434		mg/Kg		74	70 - 130	13	35
Ethylbenzene	0.100	0.07575		mg/Kg		76	70 - 130	13	35
m,p-Xylenes	0.200	0.1592		mg/Kg		80	70 - 130	12	35
o-Xylene	0.100	0.08755		mg/Kg		88	70 - 130	11	35

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-14580-4 MS

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: S-1 10.0'

Prep Type: Total/NA

Prep Batch: 25266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.07959		mg/Kg		80	70 - 130
Toluene	<0.00201	U	0.0998	0.07831		mg/Kg		78	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.08032		mg/Kg		80	70 - 130
m,p-Xylenes	<0.00402	U	0.200	0.1674		mg/Kg		84	70 - 130
o-Xylene	<0.00201	U	0.0998	0.09136		mg/Kg		92	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-14580-4 MSD

Matrix: Solid

Analysis Batch: 25224

Client Sample ID: S-1 10.0'

Prep Type: Total/NA

Prep Batch: 25266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.08680		mg/Kg		87	70 - 130	9	35
Toluene	<0.00201	U	0.100	0.08529		mg/Kg		85	70 - 130	9	35
Ethylbenzene	<0.00201	U	0.100	0.08679		mg/Kg		87	70 - 130	8	35
m,p-Xylenes	<0.00402	U	0.200	0.1811		mg/Kg		90	70 - 130	8	35
o-Xylene	<0.00201	U	0.100	0.09802		mg/Kg		98	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-25270/1-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25270

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		05/10/22 11:04	05/10/22 11:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 11:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/10/22 11:04	05/10/22 11:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130	05/10/22 11:04	05/10/22 11:21	1
o-Terphenyl (Surr)	99		70 - 130	05/10/22 11:04	05/10/22 11:21	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

Lab Sample ID: LCS 880-25270/2-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25270

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	871.9		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	978.6		mg/Kg		98	70 - 130		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
1-Chlorooctane (Surr)	102		70 - 130								
o-Terphenyl (Surr)	99		70 - 130								

Lab Sample ID: LCSD 880-25270/3-A

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25270

Top Bottom 2020											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Gasoline Range Organics (GRO)-C6-C10			1000	814.5		mg/Kg		81	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	987.6		mg/Kg		99	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane (Surr)	103		70 - 130								
o-Terphenyl (Surr)	101		70 - 130								

Lab Sample ID: 880-14580-1 MS

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: S-1 1.0'

Prep Type: Total/NA

Prep Batch: 25270

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1003		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	81.9	F1	1000	747.7	F1	mg/Kg		67	70 - 130		
Surrogate	MS	MS									
	%Recovery	Qualifier	Limits								
1-Chlorooctane (Surr)	81		70 - 130								
o-Terphenyl (Surr)	73		70 - 130								

Lab Sample ID: 880-14580-1 MSD

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: S-1 1.0'

Prep Type: Total/NA

Prep Batch: 25270

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	998	1026		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	81.9	F1	998	761.4	F1	mg/Kg		68	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane (Surr)	82		70 - 130								

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

Lab Sample ID: 880-14580-1 MSD

Matrix: Solid

Analysis Batch: 25229

Client Sample ID: S-1 1.0'

Prep Type: Total/NA

Prep Batch: 25270

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	74		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25241/1-A

Matrix: Solid

Analysis Batch: 25278

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			05/10/22 16:07	1

Lab Sample ID: LCS 880-25241/2-A

Matrix: Solid

Analysis Batch: 25278

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier			Limits		
Chloride	250	257.0		mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-25241/3-A

Matrix: Solid

Analysis Batch: 25278

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier			Limits		Limit	
Chloride	250	254.6		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-14580-1 MS

Matrix: Solid

Analysis Batch: 25278

Client Sample ID: S-1 1.0'

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier			Limits		
Chloride	9500		5040	14730		mg/Kg		104	90 - 110	

Lab Sample ID: 880-14580-1 MSD

Matrix: Solid

Analysis Batch: 25278

Client Sample ID: S-1 1.0'

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier			Limits		Limit	
Chloride	9500		5040	14680		mg/Kg		103	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

GC VOA

Prep Batch: 25078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-25078/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 25110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-25110/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 25224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-4	S-1 10.0'	Total/NA	Solid	8021B	25266
MB 880-25110/5-A	Method Blank	Total/NA	Solid	8021B	25110
MB 880-25266/5-A	Method Blank	Total/NA	Solid	8021B	25266
LCS 880-25266/1-A	Lab Control Sample	Total/NA	Solid	8021B	25266
LCSD 880-25266/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25266
880-14580-4 MS	S-1 10.0'	Total/NA	Solid	8021B	25266
880-14580-4 MSD	S-1 10.0'	Total/NA	Solid	8021B	25266

Analysis Batch: 25225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	8021B	25242
880-14580-2	S-1 3.0'	Total/NA	Solid	8021B	25242
880-14580-3	S-1 5.0'	Total/NA	Solid	8021B	25242
MB 880-25078/5-A	Method Blank	Total/NA	Solid	8021B	25078
MB 880-25242/5-A	Method Blank	Total/NA	Solid	8021B	25242
LCS 880-25242/1-A	Lab Control Sample	Total/NA	Solid	8021B	25242
LCSD 880-25242/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25242
880-14479-A-6-D MS	Matrix Spike	Total/NA	Solid	8021B	25242
880-14479-A-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25242

Prep Batch: 25242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	5035	
880-14580-2	S-1 3.0'	Total/NA	Solid	5035	
880-14580-3	S-1 5.0'	Total/NA	Solid	5035	
MB 880-25242/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25242/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25242/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14479-A-6-D MS	Matrix Spike	Total/NA	Solid	5035	
880-14479-A-6-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 25266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-4	S-1 10.0'	Total/NA	Solid	5035	
MB 880-25266/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25266/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25266/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-14580-4 MS	S-1 10.0'	Total/NA	Solid	5035	
880-14580-4 MSD	S-1 10.0'	Total/NA	Solid	5035	

Analysis Batch: 25298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	Total BTEX	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

GC VOA (Continued)

Analysis Batch: 25298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-2	S-1 3.0'	Total/NA	Solid	Total BTEX	
880-14580-3	S-1 5.0'	Total/NA	Solid	Total BTEX	
880-14580-4	S-1 10.0'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	8015B NM	25270
880-14580-2	S-1 3.0'	Total/NA	Solid	8015B NM	25270
880-14580-3	S-1 5.0'	Total/NA	Solid	8015B NM	25270
880-14580-4	S-1 10.0'	Total/NA	Solid	8015B NM	25270
MB 880-25270/1-A	Method Blank	Total/NA	Solid	8015B NM	25270
LCS 880-25270/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25270
LCSD 880-25270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25270
880-14580-1 MS	S-1 1.0'	Total/NA	Solid	8015B NM	25270
880-14580-1 MSD	S-1 1.0'	Total/NA	Solid	8015B NM	25270

Prep Batch: 25270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	8015NM Prep	
880-14580-2	S-1 3.0'	Total/NA	Solid	8015NM Prep	
880-14580-3	S-1 5.0'	Total/NA	Solid	8015NM Prep	
880-14580-4	S-1 10.0'	Total/NA	Solid	8015NM Prep	
MB 880-25270/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25270/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14580-1 MS	S-1 1.0'	Total/NA	Solid	8015NM Prep	
880-14580-1 MSD	S-1 1.0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Total/NA	Solid	8015 NM	
880-14580-2	S-1 3.0'	Total/NA	Solid	8015 NM	
880-14580-3	S-1 5.0'	Total/NA	Solid	8015 NM	
880-14580-4	S-1 10.0'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Soluble	Solid	DI Leach	
880-14580-2	S-1 3.0'	Soluble	Solid	DI Leach	
880-14580-3	S-1 5.0'	Soluble	Solid	DI Leach	
880-14580-4	S-1 10.0'	Soluble	Solid	DI Leach	
MB 880-25241/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25241/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25241/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14580-1 MS	S-1 1.0'	Soluble	Solid	DI Leach	
880-14580-1 MSD	S-1 1.0'	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

HPLC/IC

Analysis Batch: 25278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14580-1	S-1 1.0'	Soluble	Solid	300.0	25241
880-14580-2	S-1 3.0'	Soluble	Solid	300.0	25241
880-14580-3	S-1 5.0'	Soluble	Solid	300.0	25241
880-14580-4	S-1 10.0'	Soluble	Solid	300.0	25241
MB 880-25241/1-A	Method Blank	Soluble	Solid	300.0	25241
LCS 880-25241/2-A	Lab Control Sample	Soluble	Solid	300.0	25241
LCSD 880-25241/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25241
880-14580-1 MS	S-1 1.0'	Soluble	Solid	300.0	25241
880-14580-1 MSD	S-1 1.0'	Soluble	Solid	300.0	25241

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Client Sample ID: S-1 1.0'

Lab Sample ID: 880-14580-1

Date Collected: 05/09/22 12:05

Matrix: Solid

Date Received: 05/10/22 08:43

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	25242	05/10/22 10:17	MR	XEN MID
Total/NA	Analysis	8021B		1			25225	05/11/22 05:46	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25298	05/11/22 08:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25355	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 12:26	SM	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25241	05/10/22 10:17	SC	XEN MID
Soluble	Analysis	300.0		20			25278	05/10/22 16:40	CH	XEN MID

Client Sample ID: S-1 3.0'

Lab Sample ID: 880-14580-2

Date Collected: 05/09/22 12:06

Matrix: Solid

Date Received: 05/10/22 08:43

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	25242	05/10/22 10:17	MR	XEN MID
Total/NA	Analysis	8021B		1			25225	05/11/22 06:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25298	05/11/22 08:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25355	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 13:31	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	25241	05/10/22 10:17	SC	XEN MID
Soluble	Analysis	300.0		5			25278	05/10/22 17:05	CH	XEN MID

Client Sample ID: S-1 5.0'

Lab Sample ID: 880-14580-3

Date Collected: 05/09/22 12:07

Matrix: Solid

Date Received: 05/10/22 08:43

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	25242	05/10/22 10:17	MR	XEN MID
Total/NA	Analysis	8021B		1			25225	05/11/22 06:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25298	05/11/22 08:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25355	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 13:53	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25241	05/10/22 10:17	SC	XEN MID
Soluble	Analysis	300.0		10			25278	05/10/22 17:13	CH	XEN MID

Client Sample ID: S-1 10.0'

Lab Sample ID: 880-14580-4

Date Collected: 05/09/22 12:08

Matrix: Solid

Date Received: 05/10/22 08:43

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	25266	05/10/22 10:52	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25224	05/11/22 03:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25298	05/11/22 08:04	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Client Sample ID: S-1 10.0'**Lab Sample ID: 880-14580-4****Date Collected: 05/09/22 12:08****Matrix: Solid****Date Received: 05/10/22 08:43**

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			25355	05/11/22 13:40	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25270	05/10/22 11:04	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25229	05/10/22 14:14	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25241	05/10/22 10:17	SC	XEN MID
Soluble	Analysis	300.0		5			25278	05/10/22 17:21	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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	T104704400-21-22	06-30-22
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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Liene

Job ID: 880-14580-1
SDG: 22-0105-08

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14580-1	S-1 1.0'	Solid	05/09/22 12:05	05/10/22 08:43
880-14580-2	S-1 3.0'	Solid	05/09/22 12:06	05/10/22 08:43
880-14580-3	S-1 5.0'	Solid	05/09/22 12:07	05/10/22 08:43
880-14580-4	S-1 10.0'	Solid	05/09/22 12:08	05/10/22 08:43

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

No. 2236

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-14580-1

SDG Number: 22-0105-08

Login Number: 14580

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-15898-1

Laboratory Sample Delivery Group: 22-0105-08

Client Project/Site: Salado Draw 13 Corridor Line 2nd Spill

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:

6/22/2022 5:02:58 PM

Holly Taylor, Project Manager
(806)794-1296

Holly.Taylor@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Laboratory Job ID: 880-15898-1
SDG: 22-0105-08

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	14
QC Sample Results	15
QC Association Summary	21
Lab Chronicle	25
Certification Summary	29
Method Summary	30
Sample Summary	31
Chain of Custody	32
Receipt Checklists	33

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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
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.
⌘	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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Job ID: 880-15898-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-15898-1

Comments

No additional comments.

Receipt

The samples were received on 6/15/2022 8:41 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-4 5' (880-15898-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-27899 and analytical batch 880-27896 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: CCV biased low, however an acceptable CCV was analyzed within the 12 hour window, therefore data was qualified and reported.
(CCV 880-27896/20)

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

GC Semi VOA

Method 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-27556 and analytical batch 880-27563 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-27811 and analytical batch 880-28046 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.

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-2 1'

Lab Sample ID: 880-15898-1

Date Collected: 06/14/22 10:30

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 21:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 21:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 21:34	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 21:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 21:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	06/20/22 11:18	06/20/22 21:34	1
1,4-Difluorobenzene (Surr)	100		70 - 130	06/20/22 11:18	06/20/22 21:34	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 01:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 01:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 01:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130	06/15/22 15:05	06/16/22 01:08	1
o-Terphenyl (Surr)	104		70 - 130	06/15/22 15:05	06/16/22 01:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		4.99	mg/Kg			06/21/22 19:43	1

Client Sample ID: S-2 3'

Lab Sample ID: 880-15898-2

Date Collected: 06/14/22 10:31

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 21:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 21:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 21:55	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/20/22 11:18	06/20/22 21:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 21:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/20/22 11:18	06/20/22 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/20/22 11:18	06/20/22 21:55	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/20/22 11:18	06/20/22 21:55	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-2 3'

Lab Sample ID: 880-15898-2

Date Collected: 06/14/22 10:31

Matrix: Solid

Date Received: 06/15/22 08:41

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 01:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 01:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 01:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	89		70 - 130			06/15/22 15:05	06/16/22 01:29	1
o-Terphenyl (Surr)	107		70 - 130			06/15/22 15:05	06/16/22 01:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	234		5.00	mg/Kg			06/21/22 19:53	1

Client Sample ID: S-2 5'

Lab Sample ID: 880-15898-3

Date Collected: 06/14/22 10:32

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/20/22 11:18	06/20/22 22:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			06/20/22 11:18	06/20/22 22:15	1
1,4-Difluorobenzene (Surr)	104		70 - 130			06/20/22 11:18	06/20/22 22:15	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 01:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 01:49	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-2 5'

Lab Sample ID: 880-15898-3

Date Collected: 06/14/22 10:32

Matrix: Solid

Date Received: 06/15/22 08:41

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 01:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130			06/15/22 15:05	06/16/22 01:49	1
o-Terphenyl (Surr)	107		70 - 130			06/15/22 15:05	06/16/22 01:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	174		5.05	mg/Kg			06/21/22 20:02	1

Client Sample ID: S-2 10'

Lab Sample ID: 880-15898-4

Date Collected: 06/14/22 10:33

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 22:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			06/20/22 11:18	06/20/22 22:36	1
1,4-Difluorobenzene (Surr)	101		70 - 130			06/20/22 11:18	06/20/22 22:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 02:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 02:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 02:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130			06/15/22 15:05	06/16/22 02:09	1
o-Terphenyl (Surr)	106		70 - 130			06/15/22 15:05	06/16/22 02:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.8		4.98	mg/Kg			06/21/22 23:25	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-3 1'

Lab Sample ID: 880-15898-5

Date Collected: 06/14/22 11:00

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/20/22 11:18	06/20/22 22:56	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/20/22 11:18	06/20/22 22:56	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/20/22 11:18	06/20/22 22:56	1
m,p-Xylenes	<0.00404	U	0.00404	mg/Kg		06/20/22 11:18	06/20/22 22:56	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/20/22 11:18	06/20/22 22:56	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		06/20/22 11:18	06/20/22 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/20/22 11:18	06/20/22 22:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	06/20/22 11:18	06/20/22 22:56	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 02:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 02:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 02:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	86		70 - 130	06/15/22 15:05	06/16/22 02:49	1
o-Terphenyl (Surr)	99		70 - 130	06/15/22 15:05	06/16/22 02:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2430		24.9	mg/Kg			06/21/22 23:52	5

Client Sample ID: S-3 3'

Lab Sample ID: 880-15898-6

Date Collected: 06/14/22 11:01

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 23:17	1
Toluene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 23:17	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 23:17	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 23:17	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/20/22 11:18	06/20/22 23:17	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/20/22 11:18	06/20/22 23:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	06/20/22 11:18	06/20/22 23:17	1
1,4-Difluorobenzene (Surr)	101		70 - 130	06/20/22 11:18	06/20/22 23:17	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-3 3'

Lab Sample ID: 880-15898-6

Date Collected: 06/14/22 11:01

Matrix: Solid

Date Received: 06/15/22 08:41

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 03:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 03:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 03:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	89		70 - 130			06/15/22 15:05	06/16/22 03:10	1
o-Terphenyl (Surr)	105		70 - 130			06/15/22 15:05	06/16/22 03:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7170		50.2	mg/Kg			06/22/22 00:01	10

Client Sample ID: S-3 5'

Lab Sample ID: 880-15898-7

Date Collected: 06/14/22 11:02

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/20/22 11:18	06/20/22 23:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			06/20/22 11:18	06/20/22 23:37	1
1,4-Difluorobenzene (Surr)	101		70 - 130			06/20/22 11:18	06/20/22 23:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 03:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 03:30	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-3 5'

Lab Sample ID: 880-15898-7

Date Collected: 06/14/22 11:02

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 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		06/15/22 15:05	06/16/22 03:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130			06/15/22 15:05	06/16/22 03:30	1
o-Terphenyl (Surr)	107		70 - 130			06/15/22 15:05	06/16/22 03:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5800		49.5	mg/Kg			06/22/22 00:29	10

Client Sample ID: S-3 10'

Lab Sample ID: 880-15898-8

Date Collected: 06/14/22 11:03

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		06/20/22 11:18	06/20/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			06/20/22 11:18	06/20/22 23:57	1
1,4-Difluorobenzene (Surr)	102		70 - 130			06/20/22 11:18	06/20/22 23:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 03:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 03:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 03:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130			06/15/22 15:05	06/16/22 03:50	1
o-Terphenyl (Surr)	105		70 - 130			06/15/22 15:05	06/16/22 03:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2850		49.8	mg/Kg			06/21/22 16:02	10

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-4 1'

Lab Sample ID: 880-15898-9

Date Collected: 06/14/22 11:45

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/21/22 00:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/21/22 00:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/21/22 00:18	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		06/20/22 11:18	06/21/22 00:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/21/22 00:18	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/20/22 11:18	06/21/22 00:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/20/22 11:18	06/21/22 00:18	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/20/22 11:18	06/21/22 00:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 04:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 04:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/15/22 15:05	06/16/22 04:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	102		70 - 130	06/15/22 15:05	06/16/22 04:11	1
o-Terphenyl (Surr)	119		70 - 130	06/15/22 15:05	06/16/22 04:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		4.95	mg/Kg			06/21/22 16:08	1

Client Sample ID: S-4 3'

Lab Sample ID: 880-15898-10

Date Collected: 06/14/22 11:46

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 14:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 14:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 14:41	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		06/17/22 16:16	06/20/22 14:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 14:41	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/17/22 16:16	06/20/22 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	06/17/22 16:16	06/20/22 14:41	1
1,4-Difluorobenzene (Surr)	90		70 - 130	06/17/22 16:16	06/20/22 14:41	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-4 3'

Lab Sample ID: 880-15898-10

Date Collected: 06/14/22 11:46

Matrix: Solid

Date Received: 06/15/22 08:41

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 04:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 04:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 04:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130			06/15/22 15:05	06/16/22 04:31	1
o-Terphenyl (Surr)	109		70 - 130			06/15/22 15:05	06/16/22 04:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	955		4.95	mg/Kg			06/21/22 16:14	1

Client Sample ID: S-4 5'

Lab Sample ID: 880-15898-11

Date Collected: 06/14/22 11:47

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/17/22 16:16	06/20/22 15:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130			06/17/22 16:16	06/20/22 15:07	1
1,4-Difluorobenzene (Surr)	93		70 - 130			06/17/22 16:16	06/20/22 15:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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		06/15/22 15:05	06/16/22 04:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/16/22 04:50	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-4 5'

Lab Sample ID: 880-15898-11

Date Collected: 06/14/22 11:47

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 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		06/15/22 15:05	06/16/22 04:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130			06/15/22 15:05	06/16/22 04:50	1
o-Terphenyl (Surr)	105		70 - 130			06/15/22 15:05	06/16/22 04:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273		5.01	mg/Kg			06/21/22 16:20	1

Client Sample ID: S-4 10'

Lab Sample ID: 880-15898-12

Date Collected: 06/14/22 11:48

Matrix: Solid

Date Received: 06/15/22 08:41

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
m,p-Xylenes	<0.00397	U	0.00397	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/17/22 16:16	06/20/22 15:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			06/17/22 16:16	06/20/22 15:33	1
1,4-Difluorobenzene (Surr)	89		70 - 130			06/17/22 16:16	06/20/22 15:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			06/21/22 10:44	1

Method: 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			06/16/22 09:49	1

Method: 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 *1	49.9	mg/Kg		06/15/22 11:30	06/15/22 20:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/15/22 11:30	06/15/22 20:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/15/22 11:30	06/15/22 20:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	112		70 - 130			06/15/22 11:30	06/15/22 20:34	1
o-Terphenyl (Surr)	131	S1+	70 - 130			06/15/22 11:30	06/15/22 20:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.7	F1	5.04	mg/Kg			06/21/22 16:27	1

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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)
880-15898-1	S-2 1'	103	100
880-15898-2	S-2 3'	97	102
880-15898-3	S-2 5'	101	104
880-15898-4	S-2 10'	95	101
880-15898-5	S-3 1'	98	104
880-15898-6	S-3 3'	94	101
880-15898-7	S-3 5'	96	101
880-15898-8	S-3 10'	103	102
880-15898-9	S-4 1'	93	97
880-15898-10	S-4 3'	127	90
880-15898-11	S-4 5'	131 S1+	93
880-15898-12	S-4 10'	126	89
LCS 880-27836/1-A	Lab Control Sample	113	104
LCS 880-27899/1-A	Lab Control Sample	95	94
LCSD 880-27836/2-A	Lab Control Sample Dup	115	90
LCSD 880-27899/2-A	Lab Control Sample Dup	95	101
MB 880-27836/5-A	Method Blank	93	89
MB 880-27899/5-A	Method Blank	95	97
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)
880-15898-1	S-2 1'	88	104
880-15898-2	S-2 3'	89	107
880-15898-3	S-2 5'	88	107
880-15898-4	S-2 10'	90	106
880-15898-5	S-3 1'	86	99
880-15898-6	S-3 3'	89	105
880-15898-7	S-3 5'	90	107
880-15898-8	S-3 10'	88	105
880-15898-9	S-4 1'	102	119
880-15898-10	S-4 3'	90	109
880-15898-11	S-4 5'	88	105
880-15898-12	S-4 10'	112	131 S1+
LCS 880-27556/2-A	Lab Control Sample	103	113
LCS 880-27626/2-A	Lab Control Sample	101	111
LCSD 880-27556/3-A	Lab Control Sample Dup	93	106
LCSD 880-27626/3-A	Lab Control Sample Dup	107	121
MB 880-27556/1-A	Method Blank	99	114
MB 880-27626/1-A	Method Blank	107	128
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27836/5-A

Matrix: Solid

Analysis Batch: 27881

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27836

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 12:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 12:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 12:57	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/17/22 16:16	06/20/22 12:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/17/22 16:16	06/20/22 12:57	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/17/22 16:16	06/20/22 12:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/17/22 16:16	06/20/22 12:57	1
1,4-Difluorobenzene (Surr)	89		70 - 130	06/17/22 16:16	06/20/22 12:57	1

Lab Sample ID: LCS 880-27836/1-A

Matrix: Solid

Analysis Batch: 27881

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 27836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1013		mg/Kg		101	70 - 130
Toluene	0.100	0.1006		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130
m,p-Xylenes	0.200	0.2125		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-27836/2-A

Matrix: Solid

Analysis Batch: 27881

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 27836

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1040		mg/Kg		104	70 - 130	3	35
Toluene	0.100	0.1061		mg/Kg		106	70 - 130	5	35
Ethylbenzene	0.100	0.1136		mg/Kg		114	70 - 130	7	35
m,p-Xylenes	0.200	0.2260		mg/Kg		113	70 - 130	6	35
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-27899/5-A

Matrix: Solid

Analysis Batch: 27896

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27899

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 16:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 16:10	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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

Lab Sample ID: MB 880-27899/5-A

Matrix: Solid

Analysis Batch: 27896

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27899

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 16:10	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/20/22 11:18	06/20/22 16:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/20/22 11:18	06/20/22 16:10	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/20/22 11:18	06/20/22 16:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	06/20/22 11:18	06/20/22 16:10	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/20/22 11:18	06/20/22 16:10	1

Lab Sample ID: LCS 880-27899/1-A

Matrix: Solid

Analysis Batch: 27896

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 27899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08552		mg/Kg		86	70 - 130
Toluene	0.100	0.08969		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09456		mg/Kg		95	70 - 130
m,p-Xylenes	0.200	0.1908		mg/Kg		95	70 - 130
o-Xylene	0.100	0.1043		mg/Kg		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-27899/2-A

Matrix: Solid

Analysis Batch: 27896

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 27899

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08468		mg/Kg		85	70 - 130	1	35
Toluene	0.100	0.08207		mg/Kg		82	70 - 130	9	35
Ethylbenzene	0.100	0.08606		mg/Kg		86	70 - 130	9	35
m,p-Xylenes	0.200	0.1721		mg/Kg		86	70 - 130	10	35
o-Xylene	0.100	0.09374		mg/Kg		94	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-27556/1-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27556

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		06/15/22 08:52	06/15/22 11:07	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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

Lab Sample ID: MB 880-27556/1-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27556

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 08:52	06/15/22 11:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 08:52	06/15/22 11:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	99		70 - 130			06/15/22 08:52	06/15/22 11:07	1
o-Terphenyl (Surr)	114		70 - 130			06/15/22 08:52	06/15/22 11:07	1

Lab Sample ID: LCS 880-27556/2-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 27556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1104		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1083		mg/Kg		108	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane (Surr)	103		70 - 130				
o-Terphenyl (Surr)	113		70 - 130				

Lab Sample ID: LCSD 880-27556/3-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 27556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	837.3	*1	mg/Kg		84	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	1000	1017		mg/Kg		102	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	93		70 - 130						
o-Terphenyl (Surr)	106		70 - 130						

Lab Sample ID: MB 880-27626/1-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27626

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		06/15/22 15:05	06/15/22 21:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/15/22 21:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/15/22 15:05	06/15/22 21:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			06/15/22 15:05	06/15/22 21:18	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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

Lab Sample ID: MB 880-27626/1-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27626

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	128		70 - 130	06/15/22 15:05	06/15/22 21:18	1

Lab Sample ID: LCS 880-27626/2-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 27626

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	939.7		mg/Kg		94		70 - 130	
Diesel Range Organics (Over C10-C28)			1000	1072		mg/Kg		107		70 - 130	

Lab Sample ID: LCSD 880-27626/3-A

Matrix: Solid

Analysis Batch: 27563

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 27626

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	977.4		mg/Kg		98	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
1-Chlorooctane (Surr)	107		70 - 130								
o-Terphenyl (Surr)	121		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27806/1-A

Matrix: Solid

Analysis Batch: 28041

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			06/21/22 13:25	1

Lab Sample ID: LCS 880-27806/2-A

Matrix: Solid

Analysis Batch: 28041

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.4		mg/Kg		102	90 - 110

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-27806/3-A

Matrix: Solid

Analysis Batch: 28041

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	254.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-27808/1-A

Matrix: Solid

Analysis Batch: 28042

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			06/21/22 20:48	1

Lab Sample ID: LCS 880-27808/2-A

Matrix: Solid

Analysis Batch: 28042

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.7		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-27808/3-A

Matrix: Solid

Analysis Batch: 28042

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	263.0		mg/Kg		105	90 - 110	1	20

Lab Sample ID: 880-15898-4 MS

Matrix: Solid

Analysis Batch: 28042

Client Sample ID: S-2 10'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	65.8		249	303.4		mg/Kg		95	90 - 110

Lab Sample ID: 880-15898-4 MSD

Matrix: Solid

Analysis Batch: 28042

Client Sample ID: S-2 10'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	65.8		249	303.6		mg/Kg		96	90 - 110	0	20

Lab Sample ID: MB 880-27811/1-A

Matrix: Solid

Analysis Batch: 28046

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			06/21/22 14:40	1

Lab Sample ID: LCS 880-27811/2-A

Matrix: Solid

Analysis Batch: 28046

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	260.0		mg/Kg		104	90 - 110

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-27811/3-A

Matrix: Solid

Analysis Batch: 28046

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	267.3		mg/Kg		107	90 - 110	3	20

Lab Sample ID: 880-15898-12 MS

Matrix: Solid

Analysis Batch: 28046

Client Sample ID: S-4 10'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	85.7	F1	252	319.4		mg/Kg		93	90 - 110		

Lab Sample ID: 880-15898-12 MSD

Matrix: Solid

Analysis Batch: 28046

Client Sample ID: S-4 10'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	85.7	F1	252	305.2	F1	mg/Kg		87	90 - 110	5	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

GC VOA

Prep Batch: 27836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-10	S-4 3'	Total/NA	Solid	5035	
880-15898-11	S-4 5'	Total/NA	Solid	5035	
880-15898-12	S-4 10'	Total/NA	Solid	5035	
MB 880-27836/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-27836/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-27836/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 27881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-10	S-4 3'	Total/NA	Solid	8021B	27836
880-15898-11	S-4 5'	Total/NA	Solid	8021B	27836
880-15898-12	S-4 10'	Total/NA	Solid	8021B	27836
MB 880-27836/5-A	Method Blank	Total/NA	Solid	8021B	27836
LCS 880-27836/1-A	Lab Control Sample	Total/NA	Solid	8021B	27836
LCSD 880-27836/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	27836

Analysis Batch: 27896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	8021B	27899
880-15898-2	S-2 3'	Total/NA	Solid	8021B	27899
880-15898-3	S-2 5'	Total/NA	Solid	8021B	27899
880-15898-4	S-2 10'	Total/NA	Solid	8021B	27899
880-15898-5	S-3 1'	Total/NA	Solid	8021B	27899
880-15898-6	S-3 3'	Total/NA	Solid	8021B	27899
880-15898-7	S-3 5'	Total/NA	Solid	8021B	27899
880-15898-8	S-3 10'	Total/NA	Solid	8021B	27899
880-15898-9	S-4 1'	Total/NA	Solid	8021B	27899
MB 880-27899/5-A	Method Blank	Total/NA	Solid	8021B	27899
LCS 880-27899/1-A	Lab Control Sample	Total/NA	Solid	8021B	27899
LCSD 880-27899/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	27899

Prep Batch: 27899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	5035	
880-15898-2	S-2 3'	Total/NA	Solid	5035	
880-15898-3	S-2 5'	Total/NA	Solid	5035	
880-15898-4	S-2 10'	Total/NA	Solid	5035	
880-15898-5	S-3 1'	Total/NA	Solid	5035	
880-15898-6	S-3 3'	Total/NA	Solid	5035	
880-15898-7	S-3 5'	Total/NA	Solid	5035	
880-15898-8	S-3 10'	Total/NA	Solid	5035	
880-15898-9	S-4 1'	Total/NA	Solid	5035	
MB 880-27899/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-27899/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-27899/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 28036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	Total BTEX	
880-15898-2	S-2 3'	Total/NA	Solid	Total BTEX	
880-15898-3	S-2 5'	Total/NA	Solid	Total BTEX	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

GC VOA (Continued)

Analysis Batch: 28036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-4	S-2 10'	Total/NA	Solid	Total BTEX	
880-15898-5	S-3 1'	Total/NA	Solid	Total BTEX	
880-15898-6	S-3 3'	Total/NA	Solid	Total BTEX	
880-15898-7	S-3 5'	Total/NA	Solid	Total BTEX	
880-15898-8	S-3 10'	Total/NA	Solid	Total BTEX	
880-15898-9	S-4 1'	Total/NA	Solid	Total BTEX	
880-15898-10	S-4 3'	Total/NA	Solid	Total BTEX	
880-15898-11	S-4 5'	Total/NA	Solid	Total BTEX	
880-15898-12	S-4 10'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 27556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-12	S-4 10'	Total/NA	Solid	8015NM Prep	
MB 880-27556/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-27556/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-27556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 27563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	8015B NM	27626
880-15898-2	S-2 3'	Total/NA	Solid	8015B NM	27626
880-15898-3	S-2 5'	Total/NA	Solid	8015B NM	27626
880-15898-4	S-2 10'	Total/NA	Solid	8015B NM	27626
880-15898-5	S-3 1'	Total/NA	Solid	8015B NM	27626
880-15898-6	S-3 3'	Total/NA	Solid	8015B NM	27626
880-15898-7	S-3 5'	Total/NA	Solid	8015B NM	27626
880-15898-8	S-3 10'	Total/NA	Solid	8015B NM	27626
880-15898-9	S-4 1'	Total/NA	Solid	8015B NM	27626
880-15898-10	S-4 3'	Total/NA	Solid	8015B NM	27626
880-15898-11	S-4 5'	Total/NA	Solid	8015B NM	27626
880-15898-12	S-4 10'	Total/NA	Solid	8015B NM	27556
MB 880-27556/1-A	Method Blank	Total/NA	Solid	8015B NM	27556
MB 880-27626/1-A	Method Blank	Total/NA	Solid	8015B NM	27626
LCS 880-27556/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	27556
LCS 880-27626/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	27626
LCSD 880-27556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	27556
LCSD 880-27626/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	27626

Prep Batch: 27626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	8015NM Prep	
880-15898-2	S-2 3'	Total/NA	Solid	8015NM Prep	
880-15898-3	S-2 5'	Total/NA	Solid	8015NM Prep	
880-15898-4	S-2 10'	Total/NA	Solid	8015NM Prep	
880-15898-5	S-3 1'	Total/NA	Solid	8015NM Prep	
880-15898-6	S-3 3'	Total/NA	Solid	8015NM Prep	
880-15898-7	S-3 5'	Total/NA	Solid	8015NM Prep	
880-15898-8	S-3 10'	Total/NA	Solid	8015NM Prep	
880-15898-9	S-4 1'	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
 Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
 SDG: 22-0105-08

GC Semi VOA (Continued)

Prep Batch: 27626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-10	S-4 3'	Total/NA	Solid	8015NM Prep	
880-15898-11	S-4 5'	Total/NA	Solid	8015NM Prep	
MB 880-27626/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-27626/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-27626/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 27672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Total/NA	Solid	8015 NM	
880-15898-2	S-2 3'	Total/NA	Solid	8015 NM	
880-15898-3	S-2 5'	Total/NA	Solid	8015 NM	
880-15898-4	S-2 10'	Total/NA	Solid	8015 NM	
880-15898-5	S-3 1'	Total/NA	Solid	8015 NM	
880-15898-6	S-3 3'	Total/NA	Solid	8015 NM	
880-15898-7	S-3 5'	Total/NA	Solid	8015 NM	
880-15898-8	S-3 10'	Total/NA	Solid	8015 NM	
880-15898-9	S-4 1'	Total/NA	Solid	8015 NM	
880-15898-10	S-4 3'	Total/NA	Solid	8015 NM	
880-15898-11	S-4 5'	Total/NA	Solid	8015 NM	
880-15898-12	S-4 10'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 27806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Soluble	Solid	DI Leach	
880-15898-2	S-2 3'	Soluble	Solid	DI Leach	
880-15898-3	S-2 5'	Soluble	Solid	DI Leach	
MB 880-27806/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27806/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27806/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 27808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-4	S-2 10'	Soluble	Solid	DI Leach	
880-15898-5	S-3 1'	Soluble	Solid	DI Leach	
880-15898-6	S-3 3'	Soluble	Solid	DI Leach	
880-15898-7	S-3 5'	Soluble	Solid	DI Leach	
MB 880-27808/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27808/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27808/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-15898-4 MS	S-2 10'	Soluble	Solid	DI Leach	
880-15898-4 MSD	S-2 10'	Soluble	Solid	DI Leach	

Leach Batch: 27811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-8	S-3 10'	Soluble	Solid	DI Leach	
880-15898-9	S-4 1'	Soluble	Solid	DI Leach	
880-15898-10	S-4 3'	Soluble	Solid	DI Leach	
880-15898-11	S-4 5'	Soluble	Solid	DI Leach	
880-15898-12	S-4 10'	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

HPLC/IC (Continued)

Leach Batch: 27811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-27811/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27811/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27811/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-15898-12 MS	S-4 10'	Soluble	Solid	DI Leach	
880-15898-12 MSD	S-4 10'	Soluble	Solid	DI Leach	

Analysis Batch: 28041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-1	S-2 1'	Soluble	Solid	300.0	27806
880-15898-2	S-2 3'	Soluble	Solid	300.0	27806
880-15898-3	S-2 5'	Soluble	Solid	300.0	27806
MB 880-27806/1-A	Method Blank	Soluble	Solid	300.0	27806
LCS 880-27806/2-A	Lab Control Sample	Soluble	Solid	300.0	27806
LCSD 880-27806/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27806

Analysis Batch: 28042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-4	S-2 10'	Soluble	Solid	300.0	27808
880-15898-5	S-3 1'	Soluble	Solid	300.0	27808
880-15898-6	S-3 3'	Soluble	Solid	300.0	27808
880-15898-7	S-3 5'	Soluble	Solid	300.0	27808
MB 880-27808/1-A	Method Blank	Soluble	Solid	300.0	27808
LCS 880-27808/2-A	Lab Control Sample	Soluble	Solid	300.0	27808
LCSD 880-27808/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27808
880-15898-4 MS	S-2 10'	Soluble	Solid	300.0	27808
880-15898-4 MSD	S-2 10'	Soluble	Solid	300.0	27808

Analysis Batch: 28046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-15898-8	S-3 10'	Soluble	Solid	300.0	27811
880-15898-9	S-4 1'	Soluble	Solid	300.0	27811
880-15898-10	S-4 3'	Soluble	Solid	300.0	27811
880-15898-11	S-4 5'	Soluble	Solid	300.0	27811
880-15898-12	S-4 10'	Soluble	Solid	300.0	27811
MB 880-27811/1-A	Method Blank	Soluble	Solid	300.0	27811
LCS 880-27811/2-A	Lab Control Sample	Soluble	Solid	300.0	27811
LCSD 880-27811/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27811
880-15898-12 MS	S-4 10'	Soluble	Solid	300.0	27811
880-15898-12 MSD	S-4 10'	Soluble	Solid	300.0	27811

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-2 1'

Lab Sample ID: 880-15898-1

Date Collected: 06/14/22 10:30

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 21:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 01:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	27806	06/17/22 11:40	SC	XEN MID
Soluble	Analysis	300.0		1			28041	06/21/22 19:43	CH	XEN MID

Client Sample ID: S-2 3'

Lab Sample ID: 880-15898-2

Date Collected: 06/14/22 10:31

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 21:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 01:29	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	27806	06/17/22 11:40	SC	XEN MID
Soluble	Analysis	300.0		1			28041	06/21/22 19:53	CH	XEN MID

Client Sample ID: S-2 5'

Lab Sample ID: 880-15898-3

Date Collected: 06/14/22 10:32

Matrix: Solid

Date Received: 06/15/22 08:41

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	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 22:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 01:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	27806	06/17/22 11:40	SC	XEN MID
Soluble	Analysis	300.0		1			28041	06/21/22 20:02	CH	XEN MID

Client Sample ID: S-2 10'

Lab Sample ID: 880-15898-4

Date Collected: 06/14/22 10:33

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 22:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-2 10'

Lab Sample ID: 880-15898-4

Date Collected: 06/14/22 10:33

Matrix: Solid

Date Received: 06/15/22 08:41

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			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 02:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27808	06/17/22 11:47	SC	XEN MID
Soluble	Analysis	300.0		1			28042	06/21/22 23:25	CH	XEN MID

Client Sample ID: S-3 1'

Lab Sample ID: 880-15898-5

Date Collected: 06/14/22 11:00

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 22:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 02:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27808	06/17/22 11:47	SC	XEN MID
Soluble	Analysis	300.0		5			28042	06/21/22 23:52	CH	XEN MID

Client Sample ID: S-3 3'

Lab Sample ID: 880-15898-6

Date Collected: 06/14/22 11:01

Matrix: Solid

Date Received: 06/15/22 08:41

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	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 23:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 03:10	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	27808	06/17/22 11:47	SC	XEN MID
Soluble	Analysis	300.0		10			28042	06/22/22 00:01	CH	XEN MID

Client Sample ID: S-3 5'

Lab Sample ID: 880-15898-7

Date Collected: 06/14/22 11:02

Matrix: Solid

Date Received: 06/15/22 08:41

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	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 23:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 03:30	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-3 5'

Lab Sample ID: 880-15898-7

Date Collected: 06/14/22 11:02

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	27808	06/17/22 11:47	SC	XEN MID
Soluble	Analysis	300.0		10			28042	06/22/22 00:29	CH	XEN MID

Client Sample ID: S-3 10'

Lab Sample ID: 880-15898-8

Date Collected: 06/14/22 11:03

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/20/22 23:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 03:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	27811	06/17/22 11:51	SC	XEN MID
Soluble	Analysis	300.0		10			28046	06/21/22 16:02	CH	XEN MID

Client Sample ID: S-4 1'

Lab Sample ID: 880-15898-9

Date Collected: 06/14/22 11:45

Matrix: Solid

Date Received: 06/15/22 08:41

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	27899	06/20/22 11:18	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	27896	06/21/22 00:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 04:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	27811	06/17/22 11:51	SC	XEN MID
Soluble	Analysis	300.0		1			28046	06/21/22 16:08	CH	XEN MID

Client Sample ID: S-4 3'

Lab Sample ID: 880-15898-10

Date Collected: 06/14/22 11:46

Matrix: Solid

Date Received: 06/15/22 08:41

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	27836	06/17/22 16:16	MR	XEN MID
Total/NA	Analysis	8021B		1			27881	06/20/22 14:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 04:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	27811	06/17/22 11:51	SC	XEN MID
Soluble	Analysis	300.0		1			28046	06/21/22 16:14	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

Client Sample ID: S-4 5'

Lab Sample ID: 880-15898-11

Date Collected: 06/14/22 11:47

Matrix: Solid

Date Received: 06/15/22 08:41

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	27836	06/17/22 16:16	MR	XEN MID
Total/NA	Analysis	8021B		1			27881	06/20/22 15:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	27626	06/15/22 15:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/16/22 04:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	27811	06/17/22 11:51	SC	XEN MID
Soluble	Analysis	300.0		1			28046	06/21/22 16:20	CH	XEN MID

Client Sample ID: S-4 10'

Lab Sample ID: 880-15898-12

Date Collected: 06/14/22 11:48

Matrix: Solid

Date Received: 06/15/22 08:41

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	27836	06/17/22 16:16	MR	XEN MID
Total/NA	Analysis	8021B		1			27881	06/20/22 15:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28036	06/21/22 10:44	SM	XEN MID
Total/NA	Analysis	8015 NM		1			27672	06/16/22 09:49	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	27556	06/15/22 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27563	06/15/22 20:34	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	27811	06/17/22 11:51	SC	XEN MID
Soluble	Analysis	300.0		1			28046	06/21/22 16:27	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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	T104704400-21-22	06-30-22
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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line 2nd Spill

Job ID: 880-15898-1
SDG: 22-0105-08

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.

Job ID: 880-15898-1

Project/Site: Salado Draw 13 Corridor Line 2nd Spill

SDG: 22-0105-08

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-15898-1	S-2 1'	Solid	06/14/22 10:30	06/15/22 08:41
880-15898-2	S-2 3'	Solid	06/14/22 10:31	06/15/22 08:41
880-15898-3	S-2 5'	Solid	06/14/22 10:32	06/15/22 08:41
880-15898-4	S-2 10'	Solid	06/14/22 10:33	06/15/22 08:41
880-15898-5	S-3 1'	Solid	06/14/22 11:00	06/15/22 08:41
880-15898-6	S-3 3'	Solid	06/14/22 11:01	06/15/22 08:41
880-15898-7	S-3 5'	Solid	06/14/22 11:02	06/15/22 08:41
880-15898-8	S-3 10'	Solid	06/14/22 11:03	06/15/22 08:41
880-15898-9	S-4 1'	Solid	06/14/22 11:45	06/15/22 08:41
880-15898-10	S-4 3'	Solid	06/14/22 11:46	06/15/22 08:41
880-15898-11	S-4 5'	Solid	06/14/22 11:47	06/15/22 08:41
880-15898-12	S-4 10'	Solid	06/14/22 11:48	06/15/22 08:41

6/22/2022

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-15898-1

SDG Number: 22-0105-08

Login Number: 15898**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	

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: SD 13 Corridor Line

Project Number: 21-0100-03

Location: New Mexico

Lab Order Number: 2H09003



Current Certification

Report Date: 08/11/22

Larson & Associates, Inc.	Project: SD 13 Corridor Line
P.O. Box 50685	Project Number: 21-0100-03
Midland TX, 79710	Project Manager: Mark Larson

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C-8, 4.1	2H09003-01	Soil	08/08/22 11:45	08-09-2022 09:36
C-9, 4.1	2H09003-02	Soil	08/08/22 12:00	08-09-2022 09:36

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-8, 4.1
2H09003-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00103	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	34.5 %		80-120		P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	118 %		80-120		P2H1015	08/10/22 15:32	08/10/22 21:21	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	2210	5.15	mg/kg dry	5	P2H0914	08/09/22 16:32	08/09/22 20:03	EPA 300.0	
% Moisture	3.0	0.1	%	1	P2H0912	08/09/22 15:12	08/09/22 15:14	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.8	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 16:57	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 16:57	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 16:57	TPH 8015M	
Surrogate: 1-Chlorooctane	106 %		70-130		P2H0904	08/09/22 10:55	08/09/22 16:57	TPH 8015M	
Surrogate: o-Terphenyl	115 %		70-130		P2H0904	08/09/22 10:55	08/09/22 16:57	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	08/09/22 10:55	08/09/22 16:57	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-9, 4.1
2H09003-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00104	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	29.4 %		80-120		P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	105 %		80-120		P2H1015	08/10/22 15:32	08/10/22 21:42	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	3260	5.21	mg/kg dry	5	P2H0914	08/09/22 16:32	08/09/22 20:18	EPA 300.0	
% Moisture	4.0	0.1	%	1	P2H0912	08/09/22 15:12	08/09/22 15:14	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.0	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 17:19	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 17:19	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P2H0904	08/09/22 10:55	08/09/22 17:19	TPH 8015M	
Surrogate: 1-Chlorooctane	111 %		70-130		P2H0904	08/09/22 10:55	08/09/22 17:19	TPH 8015M	
Surrogate: o-Terphenyl	121 %		70-130		P2H0904	08/09/22 10:55	08/09/22 17:19	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	08/09/22 10:55	08/09/22 17:19	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H1015 - * DEFAULT PREP *****

Blank (P2H1015-BLK1)

Prepared & Analyzed: 08/10/22

Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.144		"	0.120		120	80-120			
Surrogate: 4-Bromofluorobenzene	0.0944		"	0.120		78.7	80-120			S-GC

LCS (P2H1015-BS1)

Prepared & Analyzed: 08/10/22

Benzene	0.0932	0.00100	mg/kg	0.100		93.2	80-120			
Toluene	0.0865	0.00100	"	0.100		86.5	80-120			
Ethylbenzene	0.107	0.00100	"	0.100		107	80-120			
Xylene (p/m)	0.207	0.00200	"	0.200		103	80-120			
Xylene (o)	0.0915	0.00100	"	0.100		91.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.110		"	0.120		91.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.136		"	0.120		113	80-120			

LCS Dup (P2H1015-BSD1)

Prepared & Analyzed: 08/10/22

Benzene	0.0994	0.00100	mg/kg	0.100		99.4	80-120	6.40	20	
Toluene	0.0930	0.00100	"	0.100		93.0	80-120	7.29	20	
Ethylbenzene	0.109	0.00100	"	0.100		109	80-120	0.991	20	
Xylene (p/m)	0.215	0.00200	"	0.200		107	80-120	3.85	20	
Xylene (o)	0.0974	0.00100	"	0.100		97.4	80-120	6.23	20	
Surrogate: 4-Bromofluorobenzene	0.104		"	0.120		86.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.139		"	0.120		115	80-120			

Calibration Blank (P2H1015-CCB1)

Prepared & Analyzed: 08/10/22

Benzene	0.160		ug/kg							
Toluene	0.520		"							
Ethylbenzene	0.340		"							
Xylene (p/m)	0.530		"							
Xylene (o)	0.380		"							
Surrogate: 1,4-Difluorobenzene	0.128		"	0.120		107	80-120			
Surrogate: 4-Bromofluorobenzene	0.109		"	0.120		90.6	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1015 - * DEFAULT PREP *****

Calibration Blank (P2H1015-CCB2)

Prepared & Analyzed: 08/10/22

Benzene	0.00		ug/kg							
Toluene	0.460		"							
Ethylbenzene	0.210		"							
Xylene (p/m)	0.330		"							
Xylene (o)	0.190		"							
Surrogate: 4-Bromofluorobenzene	0.0461		"	0.120		38.4	80-120			S-GC1
Surrogate: 1,4-Difluorobenzene	0.199		"	0.120		166	80-120			S-GC1

Calibration Check (P2H1015-CCV1)

Prepared & Analyzed: 08/10/22

Benzene	0.103	0.00100	mg/kg	0.102		101	80-120			
Toluene	0.0932	0.00100	"	0.102		91.4	80-120			
Ethylbenzene	0.0975	0.00100	"	0.102		95.6	80-120			
Xylene (p/m)	0.209	0.00200	"	0.204		103	80-120			
Xylene (o)	0.0958	0.00100	"	0.102		93.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.116		"	0.120		96.4	75-125			
Surrogate: 1,4-Difluorobenzene	0.128		"	0.120		107	75-125			

Calibration Check (P2H1015-CCV2)

Prepared & Analyzed: 08/10/22

Benzene	0.0914	0.00100	mg/kg	0.102		89.6	80-120			
Toluene	0.0805	0.00100	"	0.102		78.9	80-120			Z7
Ethylbenzene	0.0824	0.00100	"	0.102		80.8	80-120			
Xylene (p/m)	0.189	0.00200	"	0.204		92.9	80-120			
Xylene (o)	0.0862	0.00100	"	0.102		84.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.0490		"	0.120		40.9	75-125			S-GC1
Surrogate: 1,4-Difluorobenzene	0.199		"	0.120		166	75-125			S-GC1

Calibration Check (P2H1015-CCV3)

Prepared: 08/10/22 Analyzed: 08/11/22

Benzene	0.0851	0.00100	mg/kg	0.102		83.4	80-120			
Toluene	0.0869	0.00100	"	0.102		85.2	80-120			
Ethylbenzene	0.0804	0.00100	"	0.102		78.8	80-120			Z7
Xylene (p/m)	0.170	0.00200	"	0.204		83.3	80-120			
Xylene (o)	0.0851	0.00100	"	0.102		83.5	80-120			
Surrogate: 1,4-Difluorobenzene	0.156		"	0.120		130	75-125			S-GC1
Surrogate: 4-Bromofluorobenzene	0.0264		"	0.120		22.0	75-125			S-GC1

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1015 - * DEFAULT PREP *****

Matrix Spike (P2H1015-MS1)		Source: 2H09013-01		Prepared: 08/10/22		Analyzed: 08/11/22				
Benzene	0.0844	0.00103	mg/kg dry	0.103	2.91	NR	80-120			QM-05
Toluene	0.176	0.00103	"	0.103	44.6	NR	80-120			QM-05
Ethylbenzene	0.312	0.00103	"	0.103	98.5	NR	80-120			QM-05
Xylene (p/m)	0.286	0.00206	"	0.206	58.3	NR	80-120			QM-05
Xylene (o)	0.126	0.00103	"	0.103	24.3	NR	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.0276		"	0.124		22.3	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.148		"	0.124		119	80-120			

Matrix Spike Dup (P2H1015-MSD1)		Source: 2H09013-01		Prepared: 08/10/22		Analyzed: 08/11/22				
Benzene	0.0816	0.00103	mg/kg dry	0.103	2.91	NR	80-120	NR	20	QM-05
Toluene	0.159	0.00103	"	0.103	44.6	NR	80-120	NR	20	QM-05
Ethylbenzene	0.276	0.00103	"	0.103	98.5	NR	80-120	NR	20	QM-05
Xylene (p/m)	0.260	0.00206	"	0.206	58.3	NR	80-120	NR	20	QM-05
Xylene (o)	0.116	0.00103	"	0.103	24.3	NR	80-120	NR	20	QM-05
Surrogate: 1,4-Difluorobenzene	0.148		"	0.124		120	80-120			
Surrogate: 4-Bromofluorobenzene	0.0275		"	0.124		22.2	80-120			S-GC

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H0912 - *** DEFAULT PREP ***										
Blank (P2H0912-BLK1)				Prepared & Analyzed: 08/09/22						
% Moisture	ND	0.1	%							
Duplicate (P2H0912-DUP1)				Source: 2H09003-01 Prepared & Analyzed: 08/09/22						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Batch P2H0914 - *** DEFAULT PREP ***										
Blank (P2H0914-BLK1)				Prepared & Analyzed: 08/09/22						
Chloride	ND	1.00	mg/kg							
LCS (P2H0914-BS1)				Prepared & Analyzed: 08/09/22						
Chloride	40.1		mg/kg	40.0		100	90-110			
LCS Dup (P2H0914-BSD1)				Prepared & Analyzed: 08/09/22						
Chloride	41.9		mg/kg	40.0		105	90-110	4.41	10	
Calibration Blank (P2H0914-CCB1)				Prepared & Analyzed: 08/09/22						
Chloride	-0.0960		mg/kg							
Calibration Blank (P2H0914-CCB2)				Prepared & Analyzed: 08/09/22						
Chloride	-0.0540		mg/kg							
Calibration Check (P2H0914-CCV1)				Prepared & Analyzed: 08/09/22						
Chloride	20.3		mg/kg	20.0		102	90-110			
Calibration Check (P2H0914-CCV2)				Prepared & Analyzed: 08/09/22						
Chloride	20.3		mg/kg	20.0		102	90-110			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H0914 - * DEFAULT PREP *****

Calibration Check (P2H0914-CCV3)

Prepared: 08/09/22 Analyzed: 08/10/22

Chloride	20.0		mg/kg	20.0		100	90-110			
----------	------	--	-------	------	--	-----	--------	--	--	--

Matrix Spike (P2H0914-MS1)

Source: 2H09001-04

Prepared & Analyzed: 08/09/22

Chloride	555	11.4	mg/kg dry	568	10.9	95.8	80-120			
----------	-----	------	-----------	-----	------	------	--------	--	--	--

Matrix Spike (P2H0914-MS2)

Source: 2H09022-01

Prepared & Analyzed: 08/09/22

Chloride	1180	5.10	mg/kg dry	255	911	107	80-120			
----------	------	------	-----------	-----	-----	-----	--------	--	--	--

Matrix Spike Dup (P2H0914-MSD1)

Source: 2H09001-04

Prepared & Analyzed: 08/09/22

Chloride	528	11.4	mg/kg dry	568	10.9	91.0	80-120	5.03	20	
----------	-----	------	-----------	-----	------	------	--------	------	----	--

Matrix Spike Dup (P2H0914-MSD2)

Source: 2H09022-01

Prepared & Analyzed: 08/09/22

Chloride	1200	5.10	mg/kg dry	255	911	113	80-120	1.20	20	
----------	------	------	-----------	-----	-----	-----	--------	------	----	--

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H0904 - TX 1005

Blank (P2H0904-BLK1)

Prepared & Analyzed: 08/09/22

C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	59.8		"	50.0		120	70-130			

LCS (P2H0904-BS1)

Prepared & Analyzed: 08/09/22

C6-C12	995	25.0	mg/kg	1000		99.5	75-125			
>C12-C28	950	25.0	"	1000		95.0	75-125			
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	57.2		"	50.0		114	70-130			

LCS Dup (P2H0904-BSD1)

Prepared & Analyzed: 08/09/22

C6-C12	981	25.0	mg/kg	1000		98.1	75-125	1.40	20	
>C12-C28	977	25.0	"	1000		97.7	75-125	2.80	20	
Surrogate: 1-Chlorooctane	113		"	100		113	70-130			
Surrogate: o-Terphenyl	63.8		"	50.0		128	70-130			

Calibration Check (P2H0904-CCV1)

Prepared & Analyzed: 08/09/22

C6-C12	478	25.0	mg/kg	500		95.6	85-115			
>C12-C28	510	25.0	"	500		102	85-115			
Surrogate: 1-Chlorooctane	128		"	100		128	70-130			
Surrogate: o-Terphenyl	61.6		"	50.0		123	70-130			

Calibration Check (P2H0904-CCV2)

Prepared & Analyzed: 08/09/22

C6-C12	486	25.0	mg/kg	500		97.2	85-115			
>C12-C28	506	25.0	"	500		101	85-115			
Surrogate: 1-Chlorooctane	127		"	100		127	70-130			
Surrogate: o-Terphenyl	59.8		"	50.0		120	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H0904 - TX 1005

Matrix Spike (P2H0904-MS1)

Source: 2H09002-01

Prepared & Analyzed: 08/09/22

C6-C12	948	25.0	mg/kg dry	1000	10.2	93.8	75-125			
>C12-C28	919	25.0	"	1000	10.1	90.9	75-125			
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	50.2		"	50.0		100	70-130			

Matrix Spike Dup (P2H0904-MSD1)

Source: 2H09002-01

Prepared & Analyzed: 08/09/22

C6-C12	947	25.0	mg/kg dry	1000	10.2	93.7	75-125	0.110	20	
>C12-C28	917	25.0	"	1000	10.1	90.7	75-125	0.232	20	
Surrogate: 1-Chlorooctane	102		"	100		102	70-130			
Surrogate: o-Terphenyl	49.9		"	50.0		99.8	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Notes and Definitions

Z7 CCV recovery was outside the recommended acceptance limits due to spiking error. QC batch accepted based on LCS/LCSD recoveries and RPD.

S-GC1 Surrogate recovery outside of control limits. A second analysis confirmed the original results..

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

NPBEL C Chain of Custody was not generated at PBELAB

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By: 

Date: 8/11/2022

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.

Project: SD 13 Corridor Line

P.O. Box 50685

Project Number: 21-0100-03

Midland TX, 79710

Project Manager: Mark Larson

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

507 N. Mariefeld, Ste. 202
Midland, TX 79701
432-687-0901

DATE: 8/9/2018 PAGE 1
PO#: _____ LAB WORK ORDER#: 2H09003
PROJECT LOCATION OR NAME: SD 13 corner line
LAI PROJECT #: 21-0100-03 COLLECTOR: JH

CHAIN-OF-CUSTODY

No. 2638

Page 14 of 14

TRRP report? ☐ Yes ☒ No		S=SOIL W=WATER A=AIR		P=PAINT SL=SLUDGE OT=OTHER	
TIME ZONE: Time zone/State: <i>MS/IL</i>					
Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers
<i>C-341</i>	<i>1</i>	<i>8/12/22</i>	<i>1145</i>	<i>S</i>	<i>1</i>
<i>C-941</i>	<i>2</i>	<i>1</i>	<i>1200</i>	<i>L</i>	<i>1</i>
				HCl	
				HNO ₃	
				H ₂ SO ₄ ☐ NaOH ☐	
				ICE	
				UNPRESERVED	
ANALYSES					
BTX ☒ MTBE ☐					
TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐					
GASOLINE MOD 8015 ☐					
DIESEL - MOD 8015 ☐					
OIL - MOD 8015 ☐					
VOC 8260 ☐					
SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐					
8081 PESTICIDES ☐ 8151 HERBICIDES ☐					
8082 PESTICIDES ☐					
TCLP - METALS (RCRA) ☐ TCLP VOC ☐					
TCLP - PEST ☐ HERB ☐ Semi-VOC ☐					
TOTAL METALS (RCRA) ☐ OTHER LIST ☐					
LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐					
RCI ☐ TOX ☐ FLASHPOINT ☐					
TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐					
pH ☐ HEXAVALENT CHROMIUM ☐					
EXPLOSIVES ☐ PECHLORATE ☐					
CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐					
FIELD NOTES					

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: SD 13 Corridor Line

Project Number: 21-0100-03

Location: New Mexico

Lab Order Number: 2H11001



Current Certification

Report Date: 08/12/22

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-11 0-4.1	2H11001-01	Soil	08/08/22 10:45	08-11-2022 08:22
S-10 0-3'	2H11001-02	Soil	08/09/22 15:00	08-11-2022 08:22
S-12 0-4.1	2H11001-03	Soil	08/08/22 10:30	08-11-2022 08:22

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-11 0-4.1
2H11001-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00102	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Toluene	ND	0.00102	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Ethylbenzene	ND	0.00102	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Xylene (p/m)	ND	0.00204	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Xylene (o)	ND	0.00102	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	105 %		80-120		P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	102 %		80-120		P2H1113	08/11/22 14:58	08/11/22 17:58	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	494	1.02	mg/kg dry	1	P2H1115	08/11/22 16:24	08/11/22 19:55	EPA 300.0	
% Moisture	2.0	0.1	%	1	P2H1202	08/12/22 09:16	08/12/22 09:28	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.5	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 17:48	TPH 8015M	
>C12-C28	ND	25.5	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 17:48	TPH 8015M	
>C28-C35	ND	25.5	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 17:48	TPH 8015M	
Surrogate: 1-Chlorooctane	97.5 %		70-130		P2H1110	08/11/22 13:00	08/11/22 17:48	TPH 8015M	
Surrogate: o-Terphenyl	104 %		70-130		P2H1110	08/11/22 13:00	08/11/22 17:48	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.5	mg/kg dry	1	[CALC]	08/11/22 13:00	08/11/22 17:48	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-10 0-3'
2H11001-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00118	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Toluene	ND	0.00118	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Ethylbenzene	ND	0.00118	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Xylene (p/m)	ND	0.00235	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Xylene (o)	ND	0.00118	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	104 %		80-120		P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	112 %		80-120		P2H1113	08/11/22 14:58	08/11/22 18:20	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	591	1.18	mg/kg dry	1	P2H1115	08/11/22 16:24	08/11/22 20:39	EPA 300.0	
% Moisture	15.0	0.1	%	1	P2H1202	08/12/22 09:16	08/12/22 09:28	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.4	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:10	TPH 8015M	
>C12-C28	ND	29.4	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:10	TPH 8015M	
>C28-C35	ND	29.4	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:10	TPH 8015M	
Surrogate: 1-Chlorooctane	96.6 %		70-130		P2H1110	08/11/22 13:00	08/11/22 18:10	TPH 8015M	
Surrogate: o-Terphenyl	104 %		70-130		P2H1110	08/11/22 13:00	08/11/22 18:10	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.4	mg/kg dry	1	[CALC]	08/11/22 13:00	08/11/22 18:10	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-12 0-4.1
2H11001-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00103	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	112 %		80-120		P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	106 %		80-120		P2H1113	08/11/22 14:58	08/11/22 18:42	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	279	1.03	mg/kg dry	1	P2H1115	08/11/22 16:24	08/11/22 20:54	EPA 300.0	
% Moisture	3.0	0.1	%	1	P2H1202	08/12/22 09:16	08/12/22 09:28	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.8	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:32	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:32	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P2H1110	08/11/22 13:00	08/11/22 18:32	TPH 8015M	
Surrogate: 1-Chlorooctane	97.6 %		70-130		P2H1110	08/11/22 13:00	08/11/22 18:32	TPH 8015M	
Surrogate: o-Terphenyl	105 %		70-130		P2H1110	08/11/22 13:00	08/11/22 18:32	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	08/11/22 13:00	08/11/22 18:32	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H1113 - * DEFAULT PREP *****

Blank (P2H1113-BLK1)

Prepared & Analyzed: 08/11/22

Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		100	80-120			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	80-120			

LCS (P2H1113-BS1)

Prepared & Analyzed: 08/11/22

Benzene	0.103	0.00100	mg/kg	0.100		103	80-120			
Toluene	0.103	0.00100	"	0.100		103	80-120			
Ethylbenzene	0.108	0.00100	"	0.100		108	80-120			
Xylene (p/m)	0.201	0.00200	"	0.200		101	80-120			
Xylene (o)	0.106	0.00100	"	0.100		106	80-120			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.0	80-120			

LCS Dup (P2H1113-BS1)

Prepared & Analyzed: 08/11/22

Benzene	0.0996	0.00100	mg/kg	0.100		99.6	80-120	3.07	20	
Toluene	0.0996	0.00100	"	0.100		99.6	80-120	3.37	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120	4.18	20	
Xylene (p/m)	0.196	0.00200	"	0.200		97.8	80-120	2.79	20	
Xylene (o)	0.103	0.00100	"	0.100		103	80-120	2.21	20	
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		103	80-120			

Calibration Blank (P2H1113-CCB1)

Prepared & Analyzed: 08/11/22

Benzene	0.140		ug/kg							
Toluene	0.410		"							
Ethylbenzene	0.470		"							
Xylene (p/m)	0.400		"							
Xylene (o)	0.370		"							
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.7	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1113 - * DEFAULT PREP *****

Calibration Blank (P2H1113-CCB2)

Prepared & Analyzed: 08/11/22

Benzene	0.00		ug/kg							
Toluene	0.360		"							
Ethylbenzene	0.370		"							
Xylene (p/m)	0.400		"							
Xylene (o)	0.290		"							
Surrogate: 4-Bromofluorobenzene	0.118		"	0.120		98.3	80-120			
Surrogate: 1,4-Difluorobenzene	0.118		"	0.120		98.7	80-120			

Calibration Check (P2H1113-CCV1)

Prepared & Analyzed: 08/11/22

Benzene	0.0986	0.00100	mg/kg	0.102		96.6	80-120			
Toluene	0.0939	0.00100	"	0.102		92.0	80-120			
Ethylbenzene	0.0955	0.00100	"	0.102		93.6	80-120			
Xylene (p/m)	0.184	0.00200	"	0.204		90.1	80-120			
Xylene (o)	0.0941	0.00100	"	0.102		92.3	80-120			
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		100	75-125			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		98.8	75-125			

Calibration Check (P2H1113-CCV2)

Prepared & Analyzed: 08/11/22

Benzene	0.103	0.00100	mg/kg	0.102		101	80-120			
Toluene	0.0976	0.00100	"	0.102		95.7	80-120			
Ethylbenzene	0.0967	0.00100	"	0.102		94.8	80-120			
Xylene (p/m)	0.186	0.00200	"	0.204		91.3	80-120			
Xylene (o)	0.100	0.00100	"	0.102		98.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.123		"	0.120		102	75-125			
Surrogate: 1,4-Difluorobenzene	0.119		"	0.120		99.4	75-125			

Calibration Check (P2H1113-CCV3)

Prepared: 08/11/22 Analyzed: 08/12/22

Benzene	0.111	0.00100	mg/kg	0.102		109	80-120			
Toluene	0.105	0.00100	"	0.102		103	80-120			
Ethylbenzene	0.104	0.00100	"	0.102		102	80-120			
Xylene (p/m)	0.196	0.00200	"	0.204		96.3	80-120			
Xylene (o)	0.105	0.00100	"	0.102		103	80-120			
Surrogate: 1,4-Difluorobenzene	0.120		"	0.120		99.9	75-125			
Surrogate: 4-Bromofluorobenzene	0.124		"	0.120		103	75-125			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1113 - * DEFAULT PREP *****

Matrix Spike (P2H1113-MS1)		Source: 2H11001-01		Prepared: 08/11/22		Analyzed: 08/12/22				
Benzene	0.0757	0.00102	mg/kg dry	0.102	ND	74.2	80-120			QM-05
Toluene	0.0701	0.00102	"	0.102	ND	68.7	80-120			QM-05
Ethylbenzene	0.0747	0.00102	"	0.102	ND	73.2	80-120			QM-05
Xylene (p/m)	0.128	0.00204	"	0.204	ND	62.7	80-120			QM-05
Xylene (o)	0.0650	0.00102	"	0.102	ND	63.7	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.135		"	0.122		110	80-120			
Surrogate: 1,4-Difluorobenzene	0.127		"	0.122		104	80-120			

Matrix Spike Dup (P2H1113-MSD1)		Source: 2H11001-01		Prepared: 08/11/22		Analyzed: 08/12/22				
Benzene	0.0837	0.00102	mg/kg dry	0.102	ND	82.0	80-120	10.0	20	
Toluene	0.0791	0.00102	"	0.102	ND	77.5	80-120	12.1	20	QM-05
Ethylbenzene	0.0869	0.00102	"	0.102	ND	85.1	80-120	15.0	20	
Xylene (p/m)	0.148	0.00204	"	0.204	ND	72.3	80-120	14.2	20	QM-05
Xylene (o)	0.0758	0.00102	"	0.102	ND	74.3	80-120	15.4	20	QM-05
Surrogate: 1,4-Difluorobenzene	0.126		"	0.122		103	80-120			
Surrogate: 4-Bromofluorobenzene	0.133		"	0.122		108	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1115 - *** DEFAULT PREP ***										
Blank (P2H1115-BLK1)				Prepared & Analyzed: 08/11/22						
Chloride	ND	1.00	mg/kg							
LCS (P2H1115-BS1)				Prepared & Analyzed: 08/11/22						
Chloride	37.3		mg/kg	40.0		93.3	90-110			
LCS Dup (P2H1115-BSD1)				Prepared & Analyzed: 08/11/22						
Chloride	37.6		mg/kg	40.0		94.0	90-110	0.750	10	
Calibration Blank (P2H1115-CCB1)				Prepared & Analyzed: 08/11/22						
Chloride	0.0890		mg/kg							
Calibration Blank (P2H1115-CCB2)				Prepared: 08/11/22 Analyzed: 08/12/22						
Chloride	0.106		mg/kg							
Calibration Check (P2H1115-CCV1)				Prepared & Analyzed: 08/11/22						
Chloride	18.5		mg/kg	20.0		92.4	90-110			
Calibration Check (P2H1115-CCV2)				Prepared: 08/11/22 Analyzed: 08/12/22						
Chloride	20.9		mg/kg	20.0		105	90-110			
Calibration Check (P2H1115-CCV3)				Prepared: 08/11/22 Analyzed: 08/12/22						
Chloride	20.6		mg/kg	20.0		103	90-110			
Matrix Spike (P2H1115-MS1)				Prepared & Analyzed: 08/11/22						
Chloride	755	1.02	mg/kg dry	255	494	102	80-120			
Matrix Spike (P2H1115-MS2)				Prepared: 08/11/22 Analyzed: 08/12/22						
Chloride	21000	51.0	mg/kg dry	2550	18400	99.5	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1115 - *** DEFAULT PREP ***										
Matrix Spike Dup (P2H1115-MSD1)	Source: 2H11001-01			Prepared & Analyzed: 08/11/22						
Chloride	761	1.02	mg/kg dry	255	494	105	80-120	0.724	20	
Matrix Spike Dup (P2H1115-MSD2)	Source: 2H11004-08			Prepared: 08/11/22 Analyzed: 08/12/22						
Chloride	21000	51.0	mg/kg dry	2550	18400	100	80-120	0.0705	20	
Batch P2H1202 - *** DEFAULT PREP ***										
Blank (P2H1202-BLK1)				Prepared & Analyzed: 08/12/22						
% Moisture	ND	0.1	%							
Blank (P2H1202-BLK2)				Prepared & Analyzed: 08/12/22						
% Moisture	ND	0.1	%							
Blank (P2H1202-BLK3)				Prepared & Analyzed: 08/12/22						
% Moisture	ND	0.1	%							
Duplicate (P2H1202-DUP1)	Source: 2H09020-10			Prepared & Analyzed: 08/12/22						
% Moisture	10.0	0.1	%					9.52	20	
Duplicate (P2H1202-DUP2)	Source: 2H09028-01			Prepared & Analyzed: 08/12/22						
% Moisture	ND	0.1	%					ND	20	
Duplicate (P2H1202-DUP3)	Source: 2H11004-06			Prepared & Analyzed: 08/12/22						
% Moisture	5.0	0.1	%					4.0	22.2	20 R3
Duplicate (P2H1202-DUP4)	Source: 2H11005-01			Prepared & Analyzed: 08/12/22						
% Moisture	5.0	0.1	%					5.0	0.00	20

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.	Project: SD 13 Corridor Line
P.O. Box 50685	Project Number: 21-0100-03
Midland TX, 79710	Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1202 - *** DEFAULT PREP ***

Duplicate (P2H1202-DUP5)	Source: 2H11006-07			Prepared & Analyzed: 08/12/22						
% Moisture	11.0	0.1	%		15.0			30.8	20	R3
Duplicate (P2H1202-DUP6)	Source: 2H11007-01			Prepared & Analyzed: 08/12/22						
% Moisture	13.0	0.1	%		13.0			0.00	20	

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1110 - TX 1005

Blank (P2H1110-BLK1)

Prepared & Analyzed: 08/11/22

C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	93.4		"	100		93.4	70-130			
Surrogate: o-Terphenyl	47.9		"	50.0		95.8	70-130			

LCS (P2H1110-BS1)

Prepared & Analyzed: 08/11/22

C6-C12	942	25.0	mg/kg	1000		94.2	75-125			
>C12-C28	940	25.0	"	1000		94.0	75-125			
Surrogate: 1-Chlorooctane	130		"	100		130	70-130			
Surrogate: o-Terphenyl	51.0		"	50.0		102	70-130			

LCS Dup (P2H1110-BSD1)

Prepared & Analyzed: 08/11/22

C6-C12	981	25.0	mg/kg	1000		98.1	75-125	4.06	20	
>C12-C28	935	25.0	"	1000		93.5	75-125	0.493	20	
Surrogate: 1-Chlorooctane	100		"	100		100	70-130			
Surrogate: o-Terphenyl	55.3		"	50.0		111	70-130			

Calibration Check (P2H1110-CCV1)

Prepared & Analyzed: 08/11/22

C6-C12	495	25.0	mg/kg	500		99.0	85-115			
>C12-C28	505	25.0	"	500		101	85-115			
Surrogate: 1-Chlorooctane	116		"	100		116	70-130			
Surrogate: o-Terphenyl	52.9		"	50.0		106	70-130			

Calibration Check (P2H1110-CCV2)

Prepared & Analyzed: 08/11/22

C6-C12	499	25.0	mg/kg	500		99.7	85-115			
>C12-C28	519	25.0	"	500		104	85-115			
Surrogate: 1-Chlorooctane	122		"	100		122	70-130			
Surrogate: o-Terphenyl	54.4		"	50.0		109	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1110 - TX 1005

Duplicate (P2H1110-DUP1)

Source: 2H11004-02

Prepared: 08/11/22 Analyzed: 08/12/22

C6-C12	26.2	25.8	mg/kg dry		10.5			85.6	20	R3
>C12-C28	2280	25.8	"		2360			3.13	20	
Surrogate: 1-Chlorooctane	97.6		"	103		94.6	70-130			
Surrogate: o-Terphenyl	53.0		"	51.5		103	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Notes and Definitions

R3 The RPD exceeded the acceptance limit due to sample matrix effects.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

8/12/2022

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

507 N. Marientfeld, Ste. 202
Midland, TX 79701
432-687-0901

1820
N₁₀

CHAIN-OF-CUSTODY

PAGE 1 OF 1
LAB WORK ORDER#: 2H11001

Page 15 of 15

S=SOIL
W=WATER
A=AIR
P=PAINT
SL=SLUDGE
OT=OTHER

HCl
HNO ₃
H ₂ S
ICE
UNF

ANALYSES
BTEX ☒ MTBE
TRPH ☒

	FIELD NO.
	CHLORIDE
	ANIONS
	ALKALINITY
	EXPLOSIVES
	PECHLORATE
	HEXAVALENT CHROMIUM
	pH
	TDS
	TSS
	% MOISTURE
	FLASHPOINT
	TOX
	RCl
	LEAD - TOTAL
	D.W. 200.8
	OTHER LIST
	TCLP - METALS (RCRA)
	Semi-VOC
	VOC
	HERB
	Pest
	TCLP - PEST
	METALS (RORA)
	PCBS
	8082 PESTICIDES
	8151 HERBICIDES
	PAH 8270
	HOLDPAH
	SVOC 8270
	VOC 8260
	OIL - MOD 8015
	MOD 8015
	DIESEL - MOD 8015
	GASOLINE MOD 8015
	TPH 1005
	TPH 1006
	418.1

FIELD NOTES

LABORATORY USE ONLY:
RECEIVING TEMP: 21/31
THERM#: 71

—

☐ CARRIER BILL # _____

HAND DELIVERED

Released to Imaging: 9/14/2022 2:07:14 PM

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: SD 13 Corridor Line

Project Number: 21-0100-03

Location: New Mexico

Lab Order Number: 2H15001



Current Certification

Report Date: 08/16/22

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-13 @ 4.1'	2H15001-01	Soil	08/12/22 00:00	08-15-2022 09:40
S-14 @ 1.5'	2H15001-02	Soil	08/12/22 00:00	08-15-2022 09:40
S-15 @ 4.1'	2H15001-03	Soil	08/12/22 00:00	08-15-2022 09:40
S-16 @ 1.5'	2H15001-04	Soil	08/12/22 00:00	08-15-2022 09:40
S-17 @ 0- 1.5'	2H15001-05	Soil	08/12/22 00:00	08-15-2022 09:40

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-13 @ 4.1'
2H15001-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Toluene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Ethylbenzene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Xylene (p/m)	ND	0.00238	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Xylene (o)	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	107 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	92.9 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:13	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	606	1.19	mg/kg dry	1	P2H1506	08/15/22 12:18	08/15/22 17:07	EPA 300.0	
% Moisture	16.0	0.1	%	1	P2H1602	08/16/22 08:52	08/16/22 08:59	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 11:38	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 11:38	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 11:38	TPH 8015M	
Surrogate: 1-Chlorooctane	103 %		70-130		P2H1507	08/15/22 11:00	08/16/22 11:38	TPH 8015M	
Surrogate: o-Terphenyl	114 %		70-130		P2H1507	08/15/22 11:00	08/16/22 11:38	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	08/15/22 11:00	08/16/22 11:38	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-14 @ 1.5'
2H15001-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00111	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Toluene	ND	0.00111	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Ethylbenzene	ND	0.00111	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Xylene (p/m)	ND	0.00222	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Xylene (o)	ND	0.00111	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	107 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	95.9 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:34	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	513	1.11	mg/kg dry	1	P2H1506	08/15/22 12:18	08/15/22 17:47	EPA 300.0	
% Moisture	10.0	0.1	%	1	P2H1602	08/16/22 08:52	08/16/22 08:59	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:00	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:00	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:00	TPH 8015M	
Surrogate: 1-Chlorooctane	102 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:00	TPH 8015M	
Surrogate: o-Terphenyl	110 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:00	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	08/15/22 11:00	08/16/22 12:00	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-15 @ 4.1'
2H15001-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Toluene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Ethylbenzene	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Xylene (p/m)	ND	0.00238	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Xylene (o)	ND	0.00119	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	94.1 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	107 %		80-120		P2H1509	08/15/22 14:28	08/16/22 00:56	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	213	1.19	mg/kg dry	1	P2H1506	08/15/22 12:18	08/15/22 18:00	EPA 300.0	
% Moisture	16.0	0.1	%	1	P2H1602	08/16/22 08:52	08/16/22 08:59	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:22	TPH 8015M	
>C12-C28	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:22	TPH 8015M	
>C28-C35	ND	29.8	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:22	TPH 8015M	
Surrogate: 1-Chlorooctane	96.9 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:22	TPH 8015M	
Surrogate: o-Terphenyl	107 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:22	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.8	mg/kg dry	1	[CALC]	08/15/22 11:00	08/16/22 12:22	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-16 @ 1.5'
2H15001-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00110	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	92.5 %		80-120		P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	107 %		80-120		P2H1509	08/15/22 14:28	08/16/22 01:17	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	38.0	1.10	mg/kg dry	1	P2H1506	08/15/22 12:18	08/15/22 18:14	EPA 300.0	
% Moisture	9.0	0.1	%	1	P2H1602	08/16/22 08:52	08/16/22 08:59	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.5	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:44	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:44	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 12:44	TPH 8015M	
Surrogate: 1-Chlorooctane	100 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:44	TPH 8015M	
Surrogate: o-Terphenyl	109 %		70-130		P2H1507	08/15/22 11:00	08/16/22 12:44	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	08/15/22 11:00	08/16/22 12:44	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

S-17 @ 0- 1.5'
2H15001-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00105	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	108 %		80-120		P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	93.8 %		80-120		P2H1509	08/15/22 14:28	08/16/22 01:38	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	99.5	1.05	mg/kg dry	1	P2H1506	08/15/22 12:18	08/15/22 18:27	EPA 300.0	
% Moisture	5.0	0.1	%	1	P2H1602	08/16/22 08:52	08/16/22 08:59	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.3	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 13:06	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 13:06	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P2H1507	08/15/22 11:00	08/16/22 13:06	TPH 8015M	
Surrogate: 1-Chlorooctane	96.5 %		70-130		P2H1507	08/15/22 11:00	08/16/22 13:06	TPH 8015M	
Surrogate: o-Terphenyl	105 %		70-130		P2H1507	08/15/22 11:00	08/16/22 13:06	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	08/15/22 11:00	08/16/22 13:06	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H1509 - * DEFAULT PREP *****

Blank (P2H1509-BLK1)

Prepared & Analyzed: 08/15/22

Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 4-Bromofluorobenzene	0.116		"	0.120		96.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.106		"	0.120		88.6	80-120			

LCS (P2H1509-BS1)

Prepared & Analyzed: 08/15/22

Benzene	0.105	0.00100	mg/kg	0.100		105	80-120			
Toluene	0.0969	0.00100	"	0.100		96.9	80-120			
Ethylbenzene	0.110	0.00100	"	0.100		110	80-120			
Xylene (p/m)	0.189	0.00200	"	0.200		94.6	80-120			
Xylene (o)	0.0952	0.00100	"	0.100		95.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.122		"	0.120		102	80-120			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.0	80-120			

LCS Dup (P2H1509-BSD1)

Prepared & Analyzed: 08/15/22

Benzene	0.0986	0.00100	mg/kg	0.100		98.6	80-120	6.23	20	
Toluene	0.0912	0.00100	"	0.100		91.2	80-120	6.08	20	
Ethylbenzene	0.104	0.00100	"	0.100		104	80-120	5.93	20	
Xylene (p/m)	0.184	0.00200	"	0.200		92.0	80-120	2.79	20	
Xylene (o)	0.0886	0.00100	"	0.100		88.6	80-120	7.17	20	
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		100	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.3	80-120			

Calibration Blank (P2H1509-CCB1)

Prepared & Analyzed: 08/15/22

Benzene	0.220		ug/kg							
Toluene	0.330		"							
Ethylbenzene	0.320		"							
Xylene (p/m)	0.470		"							
Xylene (o)	0.290		"							
Surrogate: 4-Bromofluorobenzene	0.117		"	0.120		97.1	80-120			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.8	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1509 - * DEFAULT PREP *****

Calibration Blank (P2H1509-CCB2)

Prepared: 08/15/22 Analyzed: 08/16/22

Benzene	0.180		ug/kg							
Toluene	0.530		"							
Ethylbenzene	0.280		"							
Xylene (p/m)	0.410		"							
Xylene (o)	0.200		"							
Surrogate: 1,4-Difluorobenzene	0.112		"	0.120		93.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.125		"	0.120		104	80-120			

Calibration Check (P2H1509-CCV1)

Prepared & Analyzed: 08/15/22

Benzene	0.103	0.00100	mg/kg	0.102		101	80-120			
Toluene	0.0952	0.00100	"	0.102		93.3	80-120			
Ethylbenzene	0.0959	0.00100	"	0.102		94.0	80-120			
Xylene (p/m)	0.182	0.00200	"	0.204		89.0	80-120			
Xylene (o)	0.0936	0.00100	"	0.102		91.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.109		"	0.120		91.2	75-125			
Surrogate: 4-Bromofluorobenzene	0.120		"	0.120		99.9	75-125			

Calibration Check (P2H1509-CCV2)

Prepared: 08/15/22 Analyzed: 08/16/22

Benzene	0.111	0.00100	mg/kg	0.102		109	80-120			
Toluene	0.102	0.00100	"	0.102		99.9	80-120			
Ethylbenzene	0.102	0.00100	"	0.102		100	80-120			
Xylene (p/m)	0.205	0.00200	"	0.204		100	80-120			
Xylene (o)	0.101	0.00100	"	0.102		99.5	80-120			
Surrogate: 4-Bromofluorobenzene	0.128		"	0.120		107	75-125			
Surrogate: 1,4-Difluorobenzene	0.110		"	0.120		91.3	75-125			

Calibration Check (P2H1509-CCV3)

Prepared: 08/15/22 Analyzed: 08/16/22

Benzene	0.111	0.00100	mg/kg	0.102		109	80-120			
Toluene	0.102	0.00100	"	0.102		99.9	80-120			
Ethylbenzene	0.101	0.00100	"	0.102		99.0	80-120			
Xylene (p/m)	0.201	0.00200	"	0.204		98.3	80-120			
Xylene (o)	0.101	0.00100	"	0.102		98.9	80-120			
Surrogate: 1,4-Difluorobenzene	0.107		"	0.120		89.4	75-125			
Surrogate: 4-Bromofluorobenzene	0.133		"	0.120		111	75-125			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1509 - * DEFAULT PREP *****

Matrix Spike (P2H1509-MS1)

Source: 2H15001-01

Prepared: 08/15/22 Analyzed: 08/16/22

Benzene	0.115	0.00119	mg/kg dry	0.119	ND	96.3	80-120			
Toluene	0.104	0.00119	"	0.119	ND	87.4	80-120			
Ethylbenzene	0.114	0.00119	"	0.119	ND	95.9	80-120			
Xylene (p/m)	0.192	0.00238	"	0.238	ND	80.8	80-120			
Xylene (o)	0.102	0.00119	"	0.119	ND	85.8	80-120			
Surrogate: 1,4-Difluorobenzene	0.135		"	0.143		94.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.166		"	0.143		116	80-120			

Matrix Spike Dup (P2H1509-MSD1)

Source: 2H15001-01

Prepared: 08/15/22 Analyzed: 08/16/22

Benzene	0.112	0.00119	mg/kg dry	0.119	ND	94.2	80-120	2.21	20	
Toluene	0.104	0.00119	"	0.119	ND	87.3	80-120	0.0916	20	
Ethylbenzene	0.112	0.00119	"	0.119	ND	94.5	80-120	1.52	20	
Xylene (p/m)	0.201	0.00238	"	0.238	ND	84.6	80-120	4.52	20	
Xylene (o)	0.100	0.00119	"	0.119	ND	84.3	80-120	1.75	20	
Surrogate: 1,4-Difluorobenzene	0.135		"	0.143		94.2	80-120			
Surrogate: 4-Bromofluorobenzene	0.165		"	0.143		116	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1506 - *** DEFAULT PREP ***										
Blank (P2H1506-BLK1)				Prepared & Analyzed: 08/15/22						
Chloride	ND	1.00	mg/kg							
LCS (P2H1506-BS1)				Prepared & Analyzed: 08/15/22						
Chloride	40.3		mg/kg	40.0		101	90-110			
LCS Dup (P2H1506-BSD1)				Prepared & Analyzed: 08/15/22						
Chloride	40.4		mg/kg	40.0		101	90-110	0.238	10	
Calibration Blank (P2H1506-CCB1)				Prepared & Analyzed: 08/15/22						
Chloride	0.00		mg/kg							
Calibration Blank (P2H1506-CCB2)				Prepared & Analyzed: 08/15/22						
Chloride	-0.108		mg/kg							
Calibration Check (P2H1506-CCV1)				Prepared & Analyzed: 08/15/22						
Chloride	20.1		mg/kg	20.0		100	90-110			
Calibration Check (P2H1506-CCV2)				Prepared & Analyzed: 08/15/22						
Chloride	20.0		mg/kg	20.0		100	90-110			
Calibration Check (P2H1506-CCV3)				Prepared & Analyzed: 08/15/22						
Chloride	20.1		mg/kg	20.0		101	90-110			
Matrix Spike (P2H1506-MS1)				Prepared & Analyzed: 08/15/22						
Chloride	906	1.19	mg/kg dry	298	606	101	80-120			
Matrix Spike (P2H1506-MS2)				Prepared & Analyzed: 08/15/22						
Chloride	10400	29.1	mg/kg dry	1450	8870	107	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1506 - * DEFAULT PREP *****

Matrix Spike Dup (P2H1506-MSD1)	Source: 2H15001-01		Prepared & Analyzed: 08/15/22							
Chloride	983	1.19	mg/kg dry	298	606	127	80-120	8.20	20	QM-05
Matrix Spike Dup (P2H1506-MSD2)	Source: 2H12012-04		Prepared & Analyzed: 08/15/22							
Chloride	10400	29.1	mg/kg dry	1450	8870	107	80-120	0.0363	20	

Batch P2H1602 - * DEFAULT PREP *****

Blank (P2H1602-BLK1)	Prepared & Analyzed: 08/16/22									
% Moisture	ND	0.1	%							
Blank (P2H1602-BLK2)	Prepared & Analyzed: 08/16/22									
% Moisture	ND	0.1	%							
Blank (P2H1602-BLK3)	Prepared & Analyzed: 08/16/22									
% Moisture	ND	0.1	%							
Blank (P2H1602-BLK4)	Prepared & Analyzed: 08/16/22									
% Moisture	ND	0.1	%							
Duplicate (P2H1602-DUP1)	Source: 2H12019-03		Prepared & Analyzed: 08/16/22							
% Moisture	12.0	0.1	%		12.0			0.00	20	
Duplicate (P2H1602-DUP2)	Source: 2H12020-03		Prepared & Analyzed: 08/16/22							
% Moisture	4.0	0.1	%		5.0			22.2	20	
Duplicate (P2H1602-DUP3)	Source: 2H12025-06		Prepared & Analyzed: 08/16/22							
% Moisture	24.0	0.1	%		24.0			0.00	20	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1602 - * DEFAULT PREP *****

Duplicate (P2H1602-DUP4)	Source: 2H12025-16			Prepared & Analyzed: 08/16/22						
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P2H1602-DUP5)	Source: 2H12025-31			Prepared & Analyzed: 08/16/22						
% Moisture	21.0	0.1	%		21.0			0.00	20	
Duplicate (P2H1602-DUP6)	Source: 2H15001-03			Prepared & Analyzed: 08/16/22						
% Moisture	16.0	0.1	%		16.0			0.00	20	
Duplicate (P2H1602-DUP7)	Source: 2H15005-02			Prepared & Analyzed: 08/16/22						
% Moisture	10.0	0.1	%		10.0			0.00	20	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1507 - TX 1005										
Blank (P2H1507-BLK1)				Prepared: 08/15/22 Analyzed: 08/16/22						
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	110		"	100		110	70-130			
Surrogate: o-Terphenyl	59.6		"	50.0		119	70-130			
LCS (P2H1507-BS1)				Prepared: 08/15/22 Analyzed: 08/16/22						
C6-C12	1040	25.0	mg/kg	1000		104	75-125			
>C12-C28	995	25.0	"	1000		99.5	75-125			
Surrogate: 1-Chlorooctane	113		"	100		113	70-130			
Surrogate: o-Terphenyl	63.7		"	50.0		127	70-130			
LCS Dup (P2H1507-BSD1)				Prepared: 08/15/22 Analyzed: 08/16/22						
C6-C12	1040	25.0	mg/kg	1000		104	75-125	0.248	20	
>C12-C28	993	25.0	"	1000		99.3	75-125	0.232	20	
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	62.5		"	50.0		125	70-130			
Calibration Check (P2H1507-CCV1)				Prepared: 08/15/22 Analyzed: 08/16/22						
C6-C12	543	25.0	mg/kg	500		109	85-115			
>C12-C28	539	25.0	"	500		108	85-115			
Surrogate: 1-Chlorooctane	126		"	100		126	70-130			
Surrogate: o-Terphenyl	57.7		"	50.0		115	70-130			
Duplicate (P2H1507-DUP1)				Source: 2H15002-02 Prepared: 08/15/22 Analyzed: 08/16/22						
C6-C12	212	126	mg/kg dry		ND			132	20	R3
>C12-C28	7730	126	"		1580			132	20	R3
Surrogate: 1-Chlorooctane	95.4		"	101		94.4	70-130			
Surrogate: o-Terphenyl	53.8		"	50.5		106	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Notes and Definitions

ROI Received on Ice

R3 The RPD exceeded the acceptance limit due to sample matrix effects.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

NPBEL C Chain of Custody was not generated at PBELAB

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

8/16/2022

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.

Project: SD 13 Corridor Line

P.O. Box 50685

Project Number: 21-0100-03

Midland TX, 79710

Project Manager: Mark Larson

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

1829

$L^2 WCH$

CHAIN-OF-CUSTODY

[illegible]

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: SD 13 Corridor Line

Project Number: 21-0100-03

Location: New Mexico

Lab Order Number: 2H16024



Current Certification

Report Date: 08/17/22

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C-18 @ 1.5	2H16024-01	Soil	08/15/22 11:00	08-16-2022 16:05
C-19 @ 1.5	2H16024-02	Soil	08/15/22 11:01	08-16-2022 16:05
C-20 @ 1.5	2H16024-03	Soil	08/15/22 11:15	08-16-2022 16:05
C-21 @ 0-1.5	2H16024-04	Soil	08/15/22 11:16	08-16-2022 16:05
C-22 @ 0-1.5	2H16024-05	Soil	08/15/22 11:30	08-16-2022 16:05
C-23 @ 4.1	2H16024-06	Soil	08/15/22 14:00	08-16-2022 16:05
C-24 @ 0-4.1	2H16024-07	Soil	08/15/22 14:15	08-16-2022 16:05
D-1 @ 0-4.1	2H16024-08	Soil	08/15/22 14:30	08-16-2022 16:05

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-18 @ 1.5
2H16024-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00112	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	
Toluene	ND	0.00112	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	122 %		80-120		P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	93.4 %		80-120		P2H1620	08/16/22 16:19	08/16/22 18:56	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	33.5	1.12	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 07:49	EPA 300.0	
% Moisture	11.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.1	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:34	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:34	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:34	TPH 8015M	
Surrogate: 1-Chlorooctane	93.8 %		70-130		P2H1603	08/16/22 16:20	08/16/22 16:34	TPH 8015M	
Surrogate: o-Terphenyl	103 %		70-130		P2H1603	08/16/22 16:20	08/16/22 16:34	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	08/16/22 16:20	08/16/22 16:34	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-19 @ 1.5
2H16024-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00110	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Toluene	ND	0.00110	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Ethylbenzene	ND	0.00110	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Xylene (p/m)	ND	0.00220	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Xylene (o)	ND	0.00110	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	90.2 %		80-120		P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	119 %		80-120		P2H1620	08/16/22 16:19	08/16/22 19:18	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	180	1.10	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 08:30	EPA 300.0	
% Moisture	9.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.5	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:57	TPH 8015M	
>C12-C28	ND	27.5	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:57	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P2H1603	08/16/22 16:20	08/16/22 16:57	TPH 8015M	
Surrogate: 1-Chlorooctane	91.3 %		70-130		P2H1603	08/16/22 16:20	08/16/22 16:57	TPH 8015M	
Surrogate: o-Terphenyl	103 %		70-130		P2H1603	08/16/22 16:20	08/16/22 16:57	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	08/16/22 16:20	08/16/22 16:57	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-20 @ 1.5
2H16024-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00114	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	
Toluene	ND	0.00114	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	
Ethylbenzene	ND	0.00114	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	
Xylene (p/m)	ND	0.00227	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	
Xylene (o)	ND	0.00114	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	121 %		80-120		P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	90.7 %		80-120		P2H1620	08/16/22 16:19	08/16/22 19:39	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	268	1.14	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 08:43	EPA 300.0	
% Moisture	12.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	28.4	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 05:41	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 05:41	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 05:41	TPH 8015M	
Surrogate: 1-Chlorooctane	90.4 %		70-130		P2H1621	08/16/22 16:20	08/17/22 05:41	TPH 8015M	
Surrogate: o-Terphenyl	100 %		70-130		P2H1621	08/16/22 16:20	08/17/22 05:41	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 05:41	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-21 @ 0-1.5
2H16024-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00109	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Toluene	ND	0.00109	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Ethylbenzene	ND	0.00109	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Xylene (p/m)	ND	0.00217	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Xylene (o)	ND	0.00109	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	91.4 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	123 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:00	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	190	1.09	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 08:57	EPA 300.0	
% Moisture	8.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	27.2	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:03	TPH 8015M	
>C12-C28	ND	27.2	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:03	TPH 8015M	
>C28-C35	ND	27.2	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:03	TPH 8015M	
Surrogate: 1-Chlorooctane	91.0 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:03	TPH 8015M	
Surrogate: o-Terphenyl	98.7 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:03	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.2	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 06:03	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-22 @ 0-1.5
2H16024-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00104	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	
Toluene	ND	0.00104	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	
Ethylbenzene	ND	0.00104	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	
Xylene (p/m)	ND	0.00208	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	
Xylene (o)	ND	0.00104	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	124 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	92.0 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:21	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	129	1.04	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 09:10	EPA 300.0	
% Moisture	4.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.0	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:25	TPH 8015M	
>C12-C28	ND	26.0	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:25	TPH 8015M	
>C28-C35	ND	26.0	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:25	TPH 8015M	
Surrogate: 1-Chlorooctane	102 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:25	TPH 8015M	
Surrogate: o-Terphenyl	111 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:25	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.0	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 06:25	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-23 @ 4.1
2H16024-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00122	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Toluene	ND	0.00122	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Ethylbenzene	ND	0.00122	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Xylene (p/m)	ND	0.00244	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Xylene (o)	ND	0.00122	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	89.4 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	123 %		80-120		P2H1620	08/16/22 16:19	08/16/22 20:42	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	2200	6.10	mg/kg dry	5	P2H1623	08/16/22 16:39	08/17/22 11:01	EPA 300.0	
% Moisture	18.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	30.5	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:48	TPH 8015M	
>C12-C28	ND	30.5	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:48	TPH 8015M	
>C28-C35	ND	30.5	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 06:48	TPH 8015M	
Surrogate: 1-Chlorooctane	91.7 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:48	TPH 8015M	
Surrogate: o-Terphenyl	104 %		70-130		P2H1621	08/16/22 16:20	08/17/22 06:48	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	30.5	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 06:48	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

C-24 @ 0-4.1
2H16024-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00105	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Toluene	ND	0.00105	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Ethylbenzene	ND	0.00105	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Xylene (p/m)	ND	0.00211	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Xylene (o)	ND	0.00105	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	91.3 %		80-120		P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	126 %		80-120		P2H1620	08/16/22 16:19	08/16/22 21:03	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	470	1.05	mg/kg dry	1	P2H1623	08/16/22 16:39	08/17/22 09:37	EPA 300.0	
% Moisture	5.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.3	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:10	TPH 8015M	
>C12-C28	ND	26.3	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:10	TPH 8015M	
>C28-C35	ND	26.3	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:10	TPH 8015M	
Surrogate: 1-Chlorooctane	90.8 %		70-130		P2H1621	08/16/22 16:20	08/17/22 07:10	TPH 8015M	
Surrogate: o-Terphenyl	98.3 %		70-130		P2H1621	08/16/22 16:20	08/17/22 07:10	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.3	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 07:10	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

D-1 @ 0-4.1
2H16024-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00106	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Toluene	ND	0.00106	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Ethylbenzene	ND	0.00106	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Xylene (p/m)	ND	0.00213	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Xylene (o)	ND	0.00106	mg/kg dry	1	P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Surrogate: 1,4-Difluorobenzene	88.7 %		80-120		P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	123 %		80-120		P2H1620	08/16/22 16:19	08/16/22 21:24	EPA 8021B	S-GC

General Chemistry Parameters by EPA / Standard Methods

Chloride	2730	5.32	mg/kg dry	5	P2H1623	08/16/22 16:39	08/17/22 11:15	EPA 300.0	
% Moisture	6.0	0.1	%	1	P2H1705	08/17/22 11:53	08/17/22 12:00	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	26.6	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:31	TPH 8015M	
>C12-C28	ND	26.6	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:31	TPH 8015M	
>C28-C35	ND	26.6	mg/kg dry	1	P2H1621	08/16/22 16:20	08/17/22 07:31	TPH 8015M	
Surrogate: 1-Chlorooctane	100 %		70-130		P2H1621	08/16/22 16:20	08/17/22 07:31	TPH 8015M	
Surrogate: o-Terphenyl	110 %		70-130		P2H1621	08/16/22 16:20	08/17/22 07:31	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	26.6	mg/kg dry	1	[CALC]	08/16/22 16:20	08/17/22 07:31	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H1620 - * DEFAULT PREP *****

Blank (P2H1620-BLK1)

Prepared & Analyzed: 08/16/22

Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.103		"	0.120		85.8	80-120			
Surrogate: 4-Bromofluorobenzene	0.129		"	0.120		107	80-120			

LCS (P2H1620-BS1)

Prepared & Analyzed: 08/16/22

Benzene	0.109	0.00100	mg/kg	0.100		109	80-120			
Toluene	0.102	0.00100	"	0.100		102	80-120			
Ethylbenzene	0.113	0.00100	"	0.100		113	80-120			
Xylene (p/m)	0.200	0.00200	"	0.200		100	80-120			
Xylene (o)	0.101	0.00100	"	0.100		101	80-120			
Surrogate: 4-Bromofluorobenzene	0.136		"	0.120		113	80-120			
Surrogate: 1,4-Difluorobenzene	0.106		"	0.120		88.6	80-120			

LCS Dup (P2H1620-BSD1)

Prepared & Analyzed: 08/16/22

Benzene	0.102	0.00100	mg/kg	0.100		102	80-120	6.59	20	
Toluene	0.0945	0.00100	"	0.100		94.5	80-120	7.84	20	
Ethylbenzene	0.106	0.00100	"	0.100		106	80-120	6.35	20	
Xylene (p/m)	0.188	0.00200	"	0.200		93.8	80-120	6.44	20	
Xylene (o)	0.0941	0.00100	"	0.100		94.1	80-120	6.61	20	
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		89.9	80-120			
Surrogate: 4-Bromofluorobenzene	0.138		"	0.120		115	80-120			

Calibration Blank (P2H1620-CCB1)

Prepared & Analyzed: 08/16/22

Benzene	0.160		ug/kg							
Toluene	0.210		"							
Ethylbenzene	0.370		"							
Xylene (p/m)	0.390		"							
Xylene (o)	0.280		"							
Surrogate: 4-Bromofluorobenzene	0.133		"	0.120		110	80-120			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.4	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1620 - * DEFAULT PREP *****

Calibration Check (P2H1620-CCV1)				Prepared & Analyzed: 08/16/22						
Benzene	0.106	0.00100	mg/kg	0.102		103	80-120			
Toluene	0.0978	0.00100	"	0.102		95.9	80-120			
Ethylbenzene	0.100	0.00100	"	0.102		98.1	80-120			
Xylene (p/m)	0.189	0.00200	"	0.204		92.8	80-120			
Xylene (o)	0.0975	0.00100	"	0.102		95.6	80-120			
Surrogate: 4-Bromofluorobenzene	0.139		"	0.120		116	75-125			
Surrogate: 1,4-Difluorobenzene	0.108		"	0.120		90.0	75-125			

Calibration Check (P2H1620-CCV2)				Prepared & Analyzed: 08/16/22						
Benzene	0.115	0.00100	mg/kg	0.102		112	80-120			
Toluene	0.106	0.00100	"	0.102		104	80-120			
Ethylbenzene	0.107	0.00100	"	0.102		105	80-120			
Xylene (p/m)	0.204	0.00200	"	0.204		99.9	80-120			
Xylene (o)	0.107	0.00100	"	0.102		105	80-120			
Surrogate: 4-Bromofluorobenzene	0.145		"	0.120		121	75-125			
Surrogate: 1,4-Difluorobenzene	0.105		"	0.120		87.2	75-125			

Matrix Spike (P2H1620-MS1)				Source: 2H16024-01		Prepared & Analyzed: 08/16/22				
Benzene	0.0988	0.00112	mg/kg dry	0.112	ND	88.0	80-120			
Toluene	0.0901	0.00112	"	0.112	ND	80.2	80-120			
Ethylbenzene	0.0988	0.00112	"	0.112	ND	88.0	80-120			
Xylene (p/m)	0.169	0.00225	"	0.225	ND	75.3	80-120			QM-05
Xylene (o)	0.0864	0.00112	"	0.112	ND	76.9	80-120			QM-05
Surrogate: 4-Bromofluorobenzene	0.174		"	0.135		129	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.123		"	0.135		91.4	80-120			

Matrix Spike Dup (P2H1620-MSD1)				Source: 2H16024-01		Prepared & Analyzed: 08/16/22				
Benzene	0.0962	0.00112	mg/kg dry	0.112	ND	85.6	80-120	2.68	20	
Toluene	0.0886	0.00112	"	0.112	ND	78.9	80-120	1.61	20	QM-05
Ethylbenzene	0.0972	0.00112	"	0.112	ND	86.5	80-120	1.71	20	
Xylene (p/m)	0.165	0.00225	"	0.225	ND	73.3	80-120	2.81	20	QM-05
Xylene (o)	0.0844	0.00112	"	0.112	ND	75.1	80-120	2.30	20	QM-05
Surrogate: 4-Bromofluorobenzene	0.169		"	0.135		125	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.120		"	0.135		89.0	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1623 - * DEFAULT PREP *****

Blank (P2H1623-BLK1)

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	ND	1.00	mg/kg							
----------	----	------	-------	--	--	--	--	--	--	--

LCS (P2H1623-BS1)

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	37.2		mg/kg	40.0		92.9	90-110			
----------	------	--	-------	------	--	------	--------	--	--	--

LCS Dup (P2H1623-BSD1)

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	37.4		mg/kg	40.0		93.5	90-110	0.588	10	
----------	------	--	-------	------	--	------	--------	-------	----	--

Calibration Blank (P2H1623-CCB1)

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	0.00		mg/kg							
----------	------	--	-------	--	--	--	--	--	--	--

Calibration Check (P2H1623-CCV1)

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	18.7		mg/kg	20.0		93.6	90-110			
----------	------	--	-------	------	--	------	--------	--	--	--

Matrix Spike (P2H1623-MS1)

Source: 2H16024-01

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	304	1.12	mg/kg dry	281	33.5	96.2	80-120			
----------	-----	------	-----------	-----	------	------	--------	--	--	--

Matrix Spike Dup (P2H1623-MSD1)

Source: 2H16024-01

Prepared: 08/16/22 Analyzed: 08/17/22

Chloride	342	1.12	mg/kg dry	281	33.5	110	80-120	12.0	20	
----------	-----	------	-----------	-----	------	-----	--------	------	----	--

Batch P2H1705 - * DEFAULT PREP *****

Blank (P2H1705-BLK1)

Prepared & Analyzed: 08/17/22

% Moisture	ND	0.1	%							
------------	----	-----	---	--	--	--	--	--	--	--

Blank (P2H1705-BLK2)

Prepared & Analyzed: 08/17/22

% Moisture	ND	0.1	%							
------------	----	-----	---	--	--	--	--	--	--	--

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H1705 - * DEFAULT PREP *****

Blank (P2H1705-BLK3)	Prepared & Analyzed: 08/17/22									
% Moisture	ND	0.1	%							
Blank (P2H1705-BLK4)	Prepared & Analyzed: 08/17/22									
% Moisture	ND	0.1	%							
Blank (P2H1705-BLK5)	Prepared & Analyzed: 08/17/22									
% Moisture	ND	0.1	%							
Blank (P2H1705-BLK6)	Prepared & Analyzed: 08/17/22									
% Moisture	ND	0.1	%							
Duplicate (P2H1705-DUP1)	Source: 2H13001-05		Prepared & Analyzed: 08/17/22							
% Moisture	9.0	0.1	%		8.0			11.8	20	
Duplicate (P2H1705-DUP2)	Source: 2H13001-15		Prepared & Analyzed: 08/17/22							
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P2H1705-DUP3)	Source: 2H13003-01		Prepared & Analyzed: 08/17/22							
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P2H1705-DUP4)	Source: 2H13003-11		Prepared & Analyzed: 08/17/22							
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P2H1705-DUP5)	Source: 2H15003-12		Prepared & Analyzed: 08/17/22							
% Moisture	13.0	0.1	%		13.0			0.00	20	
Duplicate (P2H1705-DUP6)	Source: 2H15003-22		Prepared & Analyzed: 08/17/22							
% Moisture	5.0	0.1	%		5.0			0.00	20	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1705 - *** DEFAULT PREP ***										
Duplicate (P2H1705-DUP7)	Source: 2H16003-01			Prepared & Analyzed: 08/17/22						
% Moisture	2.0	0.1	%		2.0			0.00	20	
Duplicate (P2H1705-DUP8)	Source: 2H16008-01			Prepared & Analyzed: 08/17/22						
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P2H1705-DUP9)	Source: 2H16009-01			Prepared & Analyzed: 08/17/22						
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P2H1705-DUPA)	Source: 2H16009-11			Prepared & Analyzed: 08/17/22						
% Moisture	8.0	0.1	%		8.0			0.00	20	
Duplicate (P2H1705-DUPB)	Source: 2H16011-06			Prepared & Analyzed: 08/17/22						
% Moisture	3.0	0.1	%		3.0			0.00	20	
Duplicate (P2H1705-DUPC)	Source: 2H16024-07			Prepared & Analyzed: 08/17/22						
% Moisture	4.0	0.1	%		5.0			22.2	20	R2

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P2H1621 - TX 1005										
Blank (P2H1621-BLK1)	Prepared: 08/16/22 Analyzed: 08/17/22									
C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	61.3		"	50.0		123	70-130			
LCS (P2H1621-BS1)	Prepared: 08/16/22 Analyzed: 08/17/22									
C6-C12	1070	25.0	mg/kg	1000		107	75-125			
>C12-C28	1040	25.0	"	1000		104	75-125			
Surrogate: 1-Chlorooctane	125		"	100		125	70-130			
Surrogate: o-Terphenyl	67.1		"	50.0		134	70-130			S-GC
LCS Dup (P2H1621-BSD1)	Prepared: 08/16/22 Analyzed: 08/17/22									
C6-C12	1060	25.0	mg/kg	1000		106	75-125	1.82	20	
>C12-C28	1030	25.0	"	1000		103	75-125	1.70	20	
Surrogate: 1-Chlorooctane	122		"	100		122	70-130			
Surrogate: o-Terphenyl	65.1		"	50.0		130	70-130			
Calibration Check (P2H1621-CCV1)	Prepared: 08/16/22 Analyzed: 08/17/22									
C6-C12	520	25.0	mg/kg	500		104	85-115			
>C12-C28	528	25.0	"	500		106	85-115			
Surrogate: 1-Chlorooctane	127		"	100		127	70-130			
Surrogate: o-Terphenyl	58.5		"	50.0		117	70-130			
Duplicate (P2H1621-DUP1)	Source: 2H16024-08 Prepared: 08/16/22 Analyzed: 08/17/22									
C6-C12	12.9	26.6	mg/kg dry		ND				20	
>C12-C28	ND	26.6	"		10.3				20	
Surrogate: 1-Chlorooctane	103		"	106		96.9	70-130			
Surrogate: o-Terphenyl	56.4		"	53.2		106	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

R2 The RPD exceeded the acceptance limit.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

NPBEL C Chain of Custody was not generated at PBELAB

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date:

8/17/2022

Brent Barron, Laboratory Director/Technical Director

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.

Project: SD 13 Corridor Line

P.O. Box 50685

Project Number: 21-0100-03

Midland TX, 79710

Project Manager: Mark Larson

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

**PERMIAN BASIN
ENVIRONMENTAL LAB, LP
1400 Rankin Hwy
Midland, TX 79701**



Analytical Report

Prepared for:

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: SD 13 Corridor Line

Project Number: 21-0100-03

Location:

Lab Order Number: 2H22003



Current Certification

Report Date: 08/23/22

Larson & Associates, Inc.	Project: SD 13 Corridor Line
P.O. Box 50685	Project Number: 21-0100-03
Midland TX, 79710	Project Manager: Mark Larson

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BF-1	2H22003-01	Soil	08/12/22 13:30	08-22-2022 09:15
BF-2	2H22003-02	Soil	08/12/22 13:31	08-22-2022 09:15

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BF-1
2H22003-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	158 %		80-120		P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	80.9 %		80-120		P2H2205	08/22/22 14:15	08/22/22 17:04	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	15.9	1.03	mg/kg dry	1	P2H2304	08/23/22 10:15	08/23/22 12:15	EPA 300.0	
% Moisture	3.0	0.1	%	1	P2H2302	08/23/22 08:56	08/23/22 08:57	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 20:55	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 20:55	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 20:55	TPH 8015M	
Surrogate: 1-Chlorooctane	103 %		70-130		P2H2204	08/22/22 11:00	08/22/22 20:55	TPH 8015M	
Surrogate: o-Terphenyl	109 %		70-130		P2H2204	08/22/22 11:00	08/22/22 20:55	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	08/22/22 11:00	08/22/22 20:55	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BF-2
2H22003-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	--------	-------

Permian Basin Environmental Lab, L.P.

BTEX by 8021B

Benzene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	
Toluene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	
Ethylbenzene	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	
Xylene (p/m)	ND	0.00206	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	
Xylene (o)	ND	0.00103	mg/kg dry	1	P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	
Surrogate: 4-Bromofluorobenzene	164 %		80-120		P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene	81.2 %		80-120		P2H2205	08/22/22 14:15	08/22/22 17:25	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	5.45	1.03	mg/kg dry	1	P2H2304	08/23/22 10:15	08/23/22 12:33	EPA 300.0	
% Moisture	3.0	0.1	%	1	P2H2302	08/23/22 08:56	08/23/22 08:57	ASTM D2216	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 21:17	TPH 8015M	
>C12-C28	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 21:17	TPH 8015M	
>C28-C35	ND	25.8	mg/kg dry	1	P2H2204	08/22/22 11:00	08/22/22 21:17	TPH 8015M	
Surrogate: 1-Chlorooctane	101 %		70-130		P2H2204	08/22/22 11:00	08/22/22 21:17	TPH 8015M	
Surrogate: o-Terphenyl	109 %		70-130		P2H2204	08/22/22 11:00	08/22/22 21:17	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	25.8	mg/kg dry	1	[CALC]	08/22/22 11:00	08/22/22 21:17	calc	

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H2205 - * DEFAULT PREP *****

Blank (P2H2205-BLK1)		Prepared & Analyzed: 08/22/22								
Benzene	ND	0.00100	mg/kg							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00200	"							
Xylene (o)	ND	0.00100	"							
Surrogate: 1,4-Difluorobenzene	0.0969		"	0.120		80.8	80-120			
Surrogate: 4-Bromofluorobenzene	0.184		"	0.120		154	80-120			S-GC

LCS (P2H2205-BS1)		Prepared & Analyzed: 08/22/22								
Benzene	0.108	0.00100	mg/kg	0.100		108	80-120			
Toluene	0.101	0.00100	"	0.100		101	80-120			
Ethylbenzene	0.110	0.00100	"	0.100		110	80-120			
Xylene (p/m)	0.207	0.00200	"	0.200		103	80-120			
Xylene (o)	0.0987	0.00100	"	0.100		98.7	80-120			
Surrogate: 1,4-Difluorobenzene	0.0962		"	0.120		80.1	80-120			
Surrogate: 4-Bromofluorobenzene	0.176		"	0.120		146	80-120			S-GC

LCS Dup (P2H2205-BSD1)		Prepared & Analyzed: 08/22/22								
Benzene	0.102	0.00100	mg/kg	0.100		102	80-120	5.29	20	
Toluene	0.0934	0.00100	"	0.100		93.4	80-120	7.44	20	
Ethylbenzene	0.103	0.00100	"	0.100		103	80-120	6.21	20	
Xylene (p/m)	0.194	0.00200	"	0.200		97.1	80-120	6.25	20	
Xylene (o)	0.0924	0.00100	"	0.100		92.4	80-120	6.63	20	
Surrogate: 4-Bromofluorobenzene	0.184		"	0.120		154	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.0977		"	0.120		81.4	80-120			

Calibration Blank (P2H2205-CCB1)		Prepared & Analyzed: 08/22/22								
Benzene	0.160		ug/kg							
Toluene	0.420		"							
Ethylbenzene	0.190		"							
Xylene (p/m)	0.340		"							
Xylene (o)	0.210		"							
Surrogate: 4-Bromofluorobenzene	0.183		"	0.120		152	80-120			S-GC
Surrogate: 1,4-Difluorobenzene	0.0963		"	0.120		80.2	80-120			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

BTEX by 8021B - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H2205 - * DEFAULT PREP *****

Calibration Blank (P2H2205-CCB2)				Prepared: 08/22/22 Analyzed: 08/23/22						
Benzene	0.290		ug/kg							
Toluene	0.410		"							
Ethylbenzene	0.250		"							
Xylene (p/m)	0.390		"							
Xylene (o)	0.320		"							
Surrogate: 1,4-Difluorobenzene	0.0965		"	0.120		80.4	80-120			
Surrogate: 4-Bromofluorobenzene	0.189		"	0.120		157	80-120			S-GC

Calibration Check (P2H2205-CCV1)				Prepared & Analyzed: 08/22/22						
Benzene	0.119	0.00100	mg/kg	0.102		116	80-120			
Toluene	0.111	0.00100	"	0.102		109	80-120			
Ethylbenzene	0.113	0.00100	"	0.102		111	80-120			
Xylene (p/m)	0.224	0.00200	"	0.204		110	80-120			
Xylene (o)	0.110	0.00100	"	0.102		107	80-120			
Surrogate: 1,4-Difluorobenzene	0.0990		"	0.120		82.5	75-125			
Surrogate: 4-Bromofluorobenzene	0.182		"	0.120		151	75-125			S-GC

Calibration Check (P2H2205-CCV2)				Prepared: 08/22/22 Analyzed: 08/23/22						
Benzene	0.117	0.00100	mg/kg	0.102		114	80-120			
Toluene	0.104	0.00100	"	0.102		102	80-120			
Ethylbenzene	0.103	0.00100	"	0.102		101	80-120			
Xylene (p/m)	0.206	0.00200	"	0.204		101	80-120			
Xylene (o)	0.103	0.00100	"	0.102		101	80-120			
Surrogate: 1,4-Difluorobenzene	0.0960		"	0.120		80.0	75-125			
Surrogate: 4-Bromofluorobenzene	0.187		"	0.120		156	75-125			S-GC

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H2302 - * DEFAULT PREP *****

Blank (P2H2302-BLK1)

Prepared & Analyzed: 08/23/22

% Moisture	ND	0.1	%
------------	----	-----	---

Duplicate (P2H2302-DUP1)

Source: 2H22007-07

Prepared & Analyzed: 08/23/22

% Moisture	5.0	0.1	%	5.0	0.00	20
------------	-----	-----	---	-----	------	----

Batch P2H2304 - * DEFAULT PREP *****

Blank (P2H2304-BLK1)

Prepared & Analyzed: 08/23/22

Chloride	ND	1.00	mg/kg
----------	----	------	-------

LCS (P2H2304-BS1)

Prepared & Analyzed: 08/23/22

Chloride	21.6	1.00	mg/kg	20.0	108	90-110
----------	------	------	-------	------	-----	--------

LCS Dup (P2H2304-BSD1)

Prepared & Analyzed: 08/23/22

Chloride	21.2	1.00	mg/kg	20.0	106	90-110	1.56	10
----------	------	------	-------	------	-----	--------	------	----

Calibration Check (P2H2304-CCV1)

Prepared & Analyzed: 08/23/22

Chloride	19.6		mg/kg	20.0	98.2	90-110
----------	------	--	-------	------	------	--------

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch P2H2204 - TX 1005

Blank (P2H2204-BLK1)

Prepared & Analyzed: 08/22/22

C6-C12	ND	25.0	mg/kg							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	56.7		"	50.0		113	70-130			

LCS (P2H2204-BS1)

Prepared & Analyzed: 08/22/22

C6-C12	983	25.0	mg/kg	1000		98.3	75-125			
>C12-C28	929	25.0	"	1000		92.9	75-125			
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	55.8		"	50.0		112	70-130			

LCS Dup (P2H2204-BSD1)

Prepared & Analyzed: 08/22/22

C6-C12	1010	25.0	mg/kg	1000		101	75-125	3.13	20	
>C12-C28	963	25.0	"	1000		96.3	75-125	3.64	20	
Surrogate: 1-Chlorooctane	112		"	100		112	70-130			
Surrogate: o-Terphenyl	58.9		"	50.0		118	70-130			

Calibration Check (P2H2204-CCV1)

Prepared & Analyzed: 08/22/22

C6-C12	505	25.0	mg/kg	500		101	85-115			
>C12-C28	510	25.0	"	500		102	85-115			
Surrogate: 1-Chlorooctane	121		"	100		121	70-130			
Surrogate: o-Terphenyl	57.2		"	50.0		114	70-130			

Calibration Check (P2H2204-CCV2)

Prepared: 08/22/22 Analyzed: 08/23/22

C6-C12	497	25.0	mg/kg	500		99.3	85-115			
>C12-C28	508	25.0	"	500		102	85-115			
Surrogate: 1-Chlorooctane	120		"	100		120	70-130			
Surrogate: o-Terphenyl	56.3		"	50.0		113	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.	Project: SD 13 Corridor Line
P.O. Box 50685	Project Number: 21-0100-03
Midland TX, 79710	Project Manager: Mark Larson

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control
Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch P2H2204 - TX 1005

Duplicate (P2H2204-DUP1)	Source: 2H19008-01			Prepared: 08/22/22 Analyzed: 08/23/22						
C6-C12	1560	490	mg/kg dry		1540			1.20	20	
>C12-C28	17000	490	"		16500			3.17	20	
Surrogate: 1-Chlorooctane	198		"	196		101	70-130			
Surrogate: o-Terphenyl	116		"	98.0		118	70-130			

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235

Larson & Associates, Inc.
P.O. Box 50685
Midland TX, 79710

Project: SD 13 Corridor Line
Project Number: 21-0100-03
Project Manager: Mark Larson

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

ROI Received on Ice

BULK Samples received in Bulk soil containers may be biased low in the nC6-C12 TPH Range

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:



Date: 8/23/2022

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Permian Basin Environmental Lab, L.P.

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Permian Basin Environmental Lab.

1400 Rankin HWY Midland, TX 79701 432-686-7235



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-17525-1

Laboratory Sample Delivery Group: 21-0100-03

Client Project/Site: SD 13 Corridor Line

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:

8/1/2022 5:42:39 PM

Holly Taylor, Project Manager
(806)794-1296

Holly.Taylor@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Laboratory Job ID: 880-17525-1
SDG: 21-0100-03

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Qualifiers

GC VOA

Qualifier	Qualifier Description
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, low biased.
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: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Job ID: 880-17525-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-17525-1

Comments

No additional comments.

Receipt

The samples were received on 7/29/2022 3:47 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.5° C.

GC VOA

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

GC Semi VOA

Method 8015B NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-30990 and analytical batch 880-31051 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: C2 0-4.1 (880-17525-2) and (890-2660-A-1-B MS). 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.

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Client Sample ID: C1 4.1

Lab Sample ID: 880-17525-1

Date Collected: 07/29/22 08:30

Matrix: Solid

Date Received: 07/29/22 15:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		08/01/22 09:07	08/01/22 11:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/01/22 09:07	08/01/22 11:36	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/01/22 09:07	08/01/22 11:36	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		08/01/22 09:07	08/01/22 11:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/01/22 09:07	08/01/22 11:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/01/22 09:07	08/01/22 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	08/01/22 09:07	08/01/22 11:36	1
1,4-Difluorobenzene (Surr)	94		70 - 130	08/01/22 09:07	08/01/22 11:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			08/01/22 15:36	1

Method: 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			07/31/22 10:27	1

Method: 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		07/29/22 16:09	07/31/22 04:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		07/29/22 16:09	07/31/22 04:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		07/29/22 16:09	07/31/22 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130	07/29/22 16:09	07/31/22 04:25	1
o-Terphenyl (Surr)	121		70 - 130	07/29/22 16:09	07/31/22 04:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	425		4.98	mg/Kg			07/30/22 16:35	1

Client Sample ID: C2 0-4.1

Lab Sample ID: 880-17525-2

Date Collected: 07/29/22 08:35

Matrix: Solid

Date Received: 07/29/22 15:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/01/22 09:07	08/01/22 11:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/01/22 09:07	08/01/22 11:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/01/22 09:07	08/01/22 11:57	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		08/01/22 09:07	08/01/22 11:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/01/22 09:07	08/01/22 11:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/01/22 09:07	08/01/22 11:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	08/01/22 09:07	08/01/22 11:57	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/22 09:07	08/01/22 11:57	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Client Sample ID: C2 0-4.1

Lab Sample ID: 880-17525-2

Date Collected: 07/29/22 08:35

Matrix: Solid

Date Received: 07/29/22 15:53

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg	-		08/01/22 15:36	1

Method: 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	-		07/31/22 10:27	1

Method: 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	-	07/29/22 16:09	07/31/22 04:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	-	07/29/22 16:09	07/31/22 04:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	-	07/29/22 16:09	07/31/22 04:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	112		70 - 130			07/29/22 16:09	07/31/22 04:46	1
o-Terphenyl (Surr)	138	S1+	70 - 130			07/29/22 16:09	07/31/22 04:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	222		4.96	mg/Kg	-		07/30/22 16:44	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

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)
880-17525-1	C1 4.1	108	94
880-17525-1 MS	C1 4.1	104	99
880-17525-1 MSD	C1 4.1	105	98
880-17525-2	C2 0-4.1	110	89
LCS 880-31155/1-A	Lab Control Sample	100	99
LCSD 880-31155/2-A	Lab Control Sample Dup	98	96
MB 880-31155/5-A	Method Blank	98	89
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)
880-17525-1	C1 4.1	92	121
880-17525-2	C2 0-4.1	112	138 S1+
890-2660-A-1-B MS	Matrix Spike	56 S1-	64 S1-
890-2660-A-1-C MSD	Matrix Spike Duplicate	73	81
LCS 880-30990/2-A	Lab Control Sample	86	86
LCSD 880-30990/3-A	Lab Control Sample Dup	84	84
MB 880-30990/1-A	Method Blank	108	128
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31155/5-A

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31155

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/01/22 09:07	08/01/22 11:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/01/22 09:07	08/01/22 11:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/01/22 09:07	08/01/22 11:15	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		08/01/22 09:07	08/01/22 11:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/01/22 09:07	08/01/22 11:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/01/22 09:07	08/01/22 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	08/01/22 09:07	08/01/22 11:15	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/01/22 09:07	08/01/22 11:15	1

Lab Sample ID: LCS 880-31155/1-A

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31155

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09936		mg/Kg		99	70 - 130
Toluene	0.100	0.09630		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09817		mg/Kg		98	70 - 130
m,p-Xylenes	0.200	0.1988		mg/Kg		99	70 - 130
o-Xylene	0.100	0.1075		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-31155/2-A

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31155

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09608		mg/Kg		96	70 - 130	3	35
Toluene	0.100	0.09311		mg/Kg		93	70 - 130	3	35
Ethylbenzene	0.100	0.09442		mg/Kg		94	70 - 130	4	35
m,p-Xylenes	0.200	0.1886		mg/Kg		94	70 - 130	5	35
o-Xylene	0.100	0.1018		mg/Kg		102	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-17525-1 MS

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: C1 4.1

Prep Type: Total/NA

Prep Batch: 31155

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.101	0.09026		mg/Kg		89	70 - 130
Toluene	<0.00201	U	0.101	0.08643		mg/Kg		86	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

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

Lab Sample ID: 880-17525-1 MS

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: C1 4.1

Prep Type: Total/NA

Prep Batch: 31155

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08833		mg/Kg		87	70 - 130
m,p-Xylenes	<0.00402	U	0.202	0.1774		mg/Kg		88	70 - 130
o-Xylene	<0.00201	U	0.101	0.09473		mg/Kg		94	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-17525-1 MSD

Matrix: Solid

Analysis Batch: 31148

Client Sample ID: C1 4.1

Prep Type: Total/NA

Prep Batch: 31155

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09271		mg/Kg		93	70 - 130	3	35
Toluene	<0.00201	U	0.100	0.09050		mg/Kg		90	70 - 130	5	35
Ethylbenzene	<0.00201	U	0.100	0.09124		mg/Kg		91	70 - 130	3	35
m,p-Xylenes	<0.00402	U	0.200	0.1844		mg/Kg		92	70 - 130	4	35
o-Xylene	<0.00201	U	0.100	0.09887		mg/Kg		99	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-30990/1-A

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30990

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		07/29/22 10:59	07/30/22 19:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/29/22 10:59	07/30/22 19:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/29/22 10:59	07/30/22 19:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	07/29/22 10:59	07/30/22 19:52	1
o-Terphenyl (Surr)	128		70 - 130	07/29/22 10:59	07/30/22 19:52	1

Lab Sample ID: LCS 880-30990/2-A

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1103		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1110		mg/Kg		111	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

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

Lab Sample ID: LCS 880-30990/2-A

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30990

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	86		70 - 130
o-Terphenyl (Surr)	86		70 - 130

Lab Sample ID: LCSD 880-30990/3-A

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 30990

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1059		mg/Kg		106	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1089		mg/Kg		109	70 - 130	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	84		70 - 130
o-Terphenyl (Surr)	84		70 - 130

Lab Sample ID: 890-2660-A-1-B MS

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 30990

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	725.8		mg/Kg		71	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	999	556.4	F1	mg/Kg		52	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	56	S1-	70 - 130
o-Terphenyl (Surr)	64	S1-	70 - 130

Lab Sample ID: 890-2660-A-1-C MSD

Matrix: Solid

Analysis Batch: 31051

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 30990

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	811.6		mg/Kg		79	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	999	710.0	F1 F2	mg/Kg		67	70 - 130	24	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	73		70 - 130
o-Terphenyl (Surr)	81		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-30996/1-A

Matrix: Solid

Analysis Batch: 31069

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			07/30/22 14:26	1

Lab Sample ID: LCS 880-30996/2-A

Matrix: Solid

Analysis Batch: 31069

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.6		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-30996/3-A

Matrix: Solid

Analysis Batch: 31069

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	254.0		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2674-A-4-B MS

Matrix: Solid

Analysis Batch: 31069

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<4.96	U	248	240.8		mg/Kg		96	90 - 110

Lab Sample ID: 890-2674-A-4-C MSD

Matrix: Solid

Analysis Batch: 31069

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<4.96	U	248	237.2		mg/Kg		95	90 - 110	2	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

GC VOA

Analysis Batch: 31148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	8021B	31155
880-17525-2	C2 0-4.1	Total/NA	Solid	8021B	31155
MB 880-31155/5-A	Method Blank	Total/NA	Solid	8021B	31155
LCS 880-31155/1-A	Lab Control Sample	Total/NA	Solid	8021B	31155
LCSD 880-31155/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31155
880-17525-1 MS	C1 4.1	Total/NA	Solid	8021B	31155
880-17525-1 MSD	C1 4.1	Total/NA	Solid	8021B	31155

Prep Batch: 31155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	5035	
880-17525-2	C2 0-4.1	Total/NA	Solid	5035	
MB 880-31155/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31155/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31155/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17525-1 MS	C1 4.1	Total/NA	Solid	5035	
880-17525-1 MSD	C1 4.1	Total/NA	Solid	5035	

Analysis Batch: 31210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	Total BTEX	
880-17525-2	C2 0-4.1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 30990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	8015NM Prep	
880-17525-2	C2 0-4.1	Total/NA	Solid	8015NM Prep	
MB 880-30990/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-30990/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-30990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2660-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2660-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	8015B NM	30990
880-17525-2	C2 0-4.1	Total/NA	Solid	8015B NM	30990
MB 880-30990/1-A	Method Blank	Total/NA	Solid	8015B NM	30990
LCS 880-30990/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	30990
LCSD 880-30990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	30990
890-2660-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	30990
890-2660-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	30990

Analysis Batch: 31110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Total/NA	Solid	8015 NM	
880-17525-2	C2 0-4.1	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

HPLC/IC

Leach Batch: 30996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Soluble	Solid	DI Leach	
880-17525-2	C2 0-4.1	Soluble	Solid	DI Leach	
MB 880-30996/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-30996/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-30996/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2674-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2674-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 31069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17525-1	C1 4.1	Soluble	Solid	300.0	30996
880-17525-2	C2 0-4.1	Soluble	Solid	300.0	30996
MB 880-30996/1-A	Method Blank	Soluble	Solid	300.0	30996
LCS 880-30996/2-A	Lab Control Sample	Soluble	Solid	300.0	30996
LCSD 880-30996/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	30996
890-2674-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	30996
890-2674-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	30996

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Client Sample ID: C1 4.1

Lab Sample ID: 880-17525-1

Date Collected: 07/29/22 08:30

Matrix: Solid

Date Received: 07/29/22 15:53

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	31155	08/01/22 09:07	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31148	08/01/22 11:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			31210	08/01/22 15:36	SM	XEN MID
Total/NA	Analysis	8015 NM		1			31110	07/31/22 10:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	30990	07/29/22 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			31051	07/31/22 04:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	30996	07/29/22 16:00	SMC	XEN MID
Soluble	Analysis	300.0		1			31069	07/30/22 16:35	SMC	XEN MID

Client Sample ID: C2 0-4.1

Lab Sample ID: 880-17525-2

Date Collected: 07/29/22 08:35

Matrix: Solid

Date Received: 07/29/22 15:53

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	31155	08/01/22 09:07	EL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31148	08/01/22 11:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			31210	08/01/22 15:36	SM	XEN MID
Total/NA	Analysis	8015 NM		1			31110	07/31/22 10:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	30990	07/29/22 16:09	DM	XEN MID
Total/NA	Analysis	8015B NM		1			31051	07/31/22 04:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	30996	07/29/22 16:00	SMC	XEN MID
Soluble	Analysis	300.0		1			31069	07/30/22 16:44	SMC	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

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	T104704400-22-24	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: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17525-1
SDG: 21-0100-03

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17525-1	C1 4.1	Solid	07/29/22 08:30	07/29/22 15:53
880-17525-2	C2 0-4.1	Solid	07/29/22 08:35	07/29/22 15:53

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Arson & Associates, Inc.

Environmental Consultants

507 N Marengfeld, Ste 202
Midland, TX 79701
432-687-0901

DATE 7-29-22

PO#

LAB WORK ORDER#

PAGE 1 OF 1

TRRP report?
☐ Yes ☒ No

TIME ZONE
MNT / MMT

Field
Sample ID
C1 4.1
C2 0-4.1

S=SOIL
W=WATER
A=AIR

P=PAINT
SL=SLUDGE
OT=OTHER

Lab #

Date
7/29/22

Time
0830

Matrix
S

of Containers
1

PRESERVATION
HCl
HNO₃
H₂SO₄ ☐ NaOH ☐
ICE
UNPRESSERVED

ANALYSES
BTEX ☒
TRPH 418 1 ☐ TPH 1005 ☐ TPH 1006 ☐
GASOLINE MOD 8015 ☐
DIESEL - MOD 8015 ☐
OIL - MOD 8015 ☐
VOC 8260 ☐
SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐
8081 PESTICIDES ☐ 8151 HERBICIDES ☐
8082 PCBS ☐
TCPP - METALS (RCRA) ☐ TCLP VOC ☐
TCPP - PEST ☐ HERB ☐ Semi-VOC ☐
TOTAL METALS (RCRA) ☐ OTHER LIST ☐
LEAD - TOTAL ☐ DW 200 8 ☐ TCLP ☐
RCI ☐ TOX ☐ FLASHPOINT ☐
TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐
PH ☐ HEXAVALENT CHROMIUM ☐
EXPLOSIVES ☐ PECTHOLATE ☐
CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

FIELD NOTES

RELINQUISHED BY (Signature)
Daniel S. [Signature]

DATE/TIME
7/29/22 1547

RECEIVED BY (Signature)
[Signature]

TURN AROUND TIME
NORMAL ☐
1 DAY ☒ RUSH
2 DAY ☐
OTHER ☐

RELINQUISHED BY (Signature)

DATE/TIME

RECEIVED BY (Signature)

LABORATORY USE ONLY:
RECEIVING TEMP 31.5 THERM# 1102
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

LABORATORY XENCO

880-17525 Chain of Custody



Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-17525-1

SDG Number: 21-0100-03

Login Number: 17525**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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-17577-1

Laboratory Sample Delivery Group: 21-0100-03

Client Project/Site: SD 13 Corridor Line

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:

8/2/2022 5:11:53 PM

Holly Taylor, Project Manager
(806)794-1296

Holly.Taylor@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Laboratory Job ID: 880-17577-1
SDG: 21-0100-03

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Job ID: 880-17577-1

Laboratory: Eurofins Midland

Narrative**Job Narrative
880-17577-1****Comments**

No additional comments.

Receipt

The samples were received on 8/1/2022 4:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.5° C.

GC VOA

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

GC Semi VOA

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: (880-17548-A-21-E) and (880-17548-A-21-F MS). 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.

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-31208 and analytical batch 880-31234 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.

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Client Sample ID: C-3 4.1

Lab Sample ID: 880-17577-1

Date Collected: 08/01/22 10:20

Matrix: Solid

Date Received: 08/01/22 16:12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/01/22 16:30	08/02/22 14:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/01/22 16:30	08/02/22 14:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/01/22 16:30	08/02/22 14:16	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		08/01/22 16:30	08/02/22 14:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/01/22 16:30	08/02/22 14:16	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		08/01/22 16:30	08/02/22 14:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/01/22 16:30	08/02/22 14:16	1
1,4-Difluorobenzene (Surr)	109		70 - 130	08/01/22 16:30	08/02/22 14:16	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			08/02/22 16:36	1

Method: 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			08/02/22 10:26	1

Method: 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		08/01/22 16:20	08/02/22 04:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/22 16:20	08/02/22 04:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/22 16:20	08/02/22 04:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130	08/01/22 16:20	08/02/22 04:48	1
o-Terphenyl (Surr)	124		70 - 130	08/01/22 16:20	08/02/22 04:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1600		24.9	mg/Kg			08/02/22 05:50	5

Client Sample ID: C-4 D-4.1

Lab Sample ID: 880-17577-2

Date Collected: 08/01/22 10:25

Matrix: Solid

Date Received: 08/01/22 16:12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/01/22 16:30	08/02/22 14:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/01/22 16:30	08/02/22 14:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/01/22 16:30	08/02/22 14:37	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		08/01/22 16:30	08/02/22 14:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/01/22 16:30	08/02/22 14:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/01/22 16:30	08/02/22 14:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	08/01/22 16:30	08/02/22 14:37	1
1,4-Difluorobenzene (Surr)	122		70 - 130	08/01/22 16:30	08/02/22 14:37	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Client Sample ID: C-4 D-4.1

Lab Sample ID: 880-17577-2

Date Collected: 08/01/22 10:25

Matrix: Solid

Date Received: 08/01/22 16:12

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			08/02/22 16:36	1

Method: 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			08/02/22 10:26	1

Method: 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		08/01/22 16:20	08/02/22 05:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/22 16:20	08/02/22 05:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/22 16:20	08/02/22 05:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	91		70 - 130			08/01/22 16:20	08/02/22 05:09	1
o-Terphenyl (Surr)	107		70 - 130			08/01/22 16:20	08/02/22 05:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	249		4.97	mg/Kg			08/02/22 06:00	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

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)
880-17577-1	C-3 4.1	93	109
880-17577-2	C-4 D-4.1	94	122
LCS 880-31189/1-A	Lab Control Sample	80	113
LCSD 880-31189/2-A	Lab Control Sample Dup	79	98
MB 880-31189/5-A	Method Blank	86	107

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)
880-17577-1	C-3 4.1	105	124
880-17577-2	C-4 D-4.1	91	107
LCS 880-31218/2-A	Lab Control Sample	86	90
LCSD 880-31218/3-A	Lab Control Sample Dup	83	87
MB 880-31218/1-A	Method Blank	94	114

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31189/5-A

Matrix: Solid

Analysis Batch: 31250

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31189

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/01/22 12:09	08/02/22 11:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/01/22 12:09	08/02/22 11:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/01/22 12:09	08/02/22 11:29	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		08/01/22 12:09	08/02/22 11:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/01/22 12:09	08/02/22 11:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/01/22 12:09	08/02/22 11:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	08/01/22 12:09	08/02/22 11:29	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/01/22 12:09	08/02/22 11:29	1

Lab Sample ID: LCS 880-31189/1-A

Matrix: Solid

Analysis Batch: 31250

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1086		mg/Kg		109	70 - 130
Toluene	0.100	0.09438		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09297		mg/Kg		93	70 - 130
m,p-Xylenes	0.200	0.1803		mg/Kg		90	70 - 130
o-Xylene	0.100	0.08812		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-31189/2-A

Matrix: Solid

Analysis Batch: 31250

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31189

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08650		mg/Kg		86	70 - 130	23	35
Toluene	0.100	0.08543		mg/Kg		85	70 - 130	10	35
Ethylbenzene	0.100	0.08634		mg/Kg		86	70 - 130	7	35
m,p-Xylenes	0.200	0.1653		mg/Kg		83	70 - 130	9	35
o-Xylene	0.100	0.07858		mg/Kg		79	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	79		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

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

Lab Sample ID: MB 880-31218/1-A

Matrix: Solid

Analysis Batch: 31146

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31218

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		08/01/22 16:06	08/01/22 20:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/22 16:06	08/01/22 20:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/22 16:06	08/01/22 20:16	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	94		70 - 130			08/01/22 16:06	08/01/22 20:16	1
o-Terphenyl (Surr)	114		70 - 130			08/01/22 16:06	08/01/22 20:16	1

Lab Sample ID: LCS 880-31218/2-A

Matrix: Solid

Analysis Batch: 31146

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	919.2		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	949.5		mg/Kg		95	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane (Surr)	86		70 - 130				
o-Terphenyl (Surr)	90		70 - 130				

Lab Sample ID: LCSD 880-31218/3-A

Matrix: Solid

Analysis Batch: 31146

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31218

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	989.3		mg/Kg		99	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	950.7		mg/Kg		95	70 - 130	0	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	83		70 - 130						
o-Terphenyl (Surr)	87		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31208/1-A

Matrix: Solid

Analysis Batch: 31234

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			08/02/22 01:42	1

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-31208/2-A

Matrix: Solid

Analysis Batch: 31234

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.3		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-31208/3-A

Matrix: Solid

Analysis Batch: 31234

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	252.2		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

GC VOA

Prep Batch: 31189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	5035	
880-17577-2	C-4 D-4.1	Total/NA	Solid	5035	
MB 880-31189/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31189/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31189/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 31250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	8021B	31189
880-17577-2	C-4 D-4.1	Total/NA	Solid	8021B	31189
MB 880-31189/5-A	Method Blank	Total/NA	Solid	8021B	31189
LCS 880-31189/1-A	Lab Control Sample	Total/NA	Solid	8021B	31189
LCSD 880-31189/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31189

Analysis Batch: 31352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	Total BTEX	
880-17577-2	C-4 D-4.1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 31146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	8015B NM	31218
880-17577-2	C-4 D-4.1	Total/NA	Solid	8015B NM	31218
MB 880-31218/1-A	Method Blank	Total/NA	Solid	8015B NM	31218
LCS 880-31218/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31218
LCSD 880-31218/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31218

Prep Batch: 31218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	8015NM Prep	
880-17577-2	C-4 D-4.1	Total/NA	Solid	8015NM Prep	
MB 880-31218/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31218/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31218/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Total/NA	Solid	8015 NM	
880-17577-2	C-4 D-4.1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Soluble	Solid	DI Leach	
880-17577-2	C-4 D-4.1	Soluble	Solid	DI Leach	
MB 880-31208/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31208/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31208/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

HPLC/IC

Analysis Batch: 31234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17577-1	C-3 4.1	Soluble	Solid	300.0	31208
880-17577-2	C-4 D-4.1	Soluble	Solid	300.0	31208
MB 880-31208/1-A	Method Blank	Soluble	Solid	300.0	31208
LCS 880-31208/2-A	Lab Control Sample	Soluble	Solid	300.0	31208
LCSD 880-31208/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31208

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Client Sample ID: C-3 4.1

Lab Sample ID: 880-17577-1

Date Collected: 08/01/22 10:20

Matrix: Solid

Date Received: 08/01/22 16:12

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	31189	08/01/22 16:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31250	08/02/22 14:16	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31352	08/02/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			31300	08/02/22 10:26	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31218	08/01/22 16:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1			31146	08/02/22 04:48	SM	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	31208	08/01/22 17:00	SMC	XEN MID
Soluble	Analysis	300.0		5			31234	08/02/22 05:50	CH	XEN MID

Client Sample ID: C-4 D-4.1

Lab Sample ID: 880-17577-2

Date Collected: 08/01/22 10:25

Matrix: Solid

Date Received: 08/01/22 16:12

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	31189	08/01/22 16:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31250	08/02/22 14:37	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31352	08/02/22 16:36	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			31300	08/02/22 10:26	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31218	08/01/22 16:20	DM	XEN MID
Total/NA	Analysis	8015B NM		1			31146	08/02/22 05:09	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	31208	08/01/22 17:00	SMC	XEN MID
Soluble	Analysis	300.0		1			31234	08/02/22 06:00	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

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	T104704400-22-24	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: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 13 Corridor Line

Job ID: 880-17577-1
SDG: 21-0100-03

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17577-1	C-3 4.1	Solid	08/01/22 10:20	08/01/22 16:12
880-17577-2	C-4 D-4.1	Solid	08/01/22 10:25	08/01/22 16:12

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

No. 2555
CHAIN-OF-CUSTODY
1757

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-17577-1

SDG Number: 21-0100-03

Login Number: 17577**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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-17802-1

Laboratory Sample Delivery Group: 21-0100-03

Client Project/Site: Salado Draw 13 Corridor Line

For:

Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Attn: Mr. Mark J Larson

A handwritten signature in cursive script that reads "Holly Taylor".

Authorized for release by:

8/8/2022 5:25:09 PM

Holly Taylor, Project Manager
(806)794-1296

Holly.Taylor@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Laboratory Job ID: 880-17802-1
SDG: 21-0100-03

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	20

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
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.
⚡	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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Job ID: 880-17802-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-17802-1

Receipt

The samples were received on 8/5/2022 3:33 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 0.5°C

GC VOA

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 duplicate (MSD) recoveries for preparation batch 880-31618 and analytical batch 880-31627 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Client Sample ID: C-5 4.1'

Lab Sample ID: 880-17802-1

Date Collected: 08/04/22 12:00

Matrix: Solid

Date Received: 08/05/22 15:33

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/05/22 15:43	08/06/22 04:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/05/22 15:43	08/06/22 04:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/05/22 15:43	08/06/22 04:50	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		08/05/22 15:43	08/06/22 04:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/05/22 15:43	08/06/22 04:50	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		08/05/22 15:43	08/06/22 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	08/05/22 15:43	08/06/22 04:50	1
1,4-Difluorobenzene (Surr)	92		70 - 130	08/05/22 15:43	08/06/22 04:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			08/08/22 14:27	1

Method: 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			08/08/22 10:24	1

Method: 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		08/05/22 16:17	08/06/22 12:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9	mg/Kg		08/05/22 16:17	08/06/22 12:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/05/22 16:17	08/06/22 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	08/05/22 16:17	08/06/22 12:40	1
o-Terphenyl (Surr)	106		70 - 130	08/05/22 16:17	08/06/22 12:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	569		5.00	mg/Kg			08/06/22 17:56	1

Client Sample ID: C-6 4.1'

Lab Sample ID: 880-17802-2

Date Collected: 08/04/22 12:15

Matrix: Solid

Date Received: 08/05/22 15:33

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:10	1
Ethylbenzene	0.00236		0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:10	1
m,p-Xylenes	0.00440		0.00398	mg/Kg		08/05/22 15:43	08/06/22 05:10	1
o-Xylene	0.00692		0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:10	1
Xylenes, Total	0.0113		0.00398	mg/Kg		08/05/22 15:43	08/06/22 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	08/05/22 15:43	08/06/22 05:10	1
1,4-Difluorobenzene (Surr)	109		70 - 130	08/05/22 15:43	08/06/22 05:10	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Client Sample ID: C-6 4.1'

Lab Sample ID: 880-17802-2

Date Collected: 08/04/22 12:15

Matrix: Solid

Date Received: 08/05/22 15:33

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0137		0.00398	mg/Kg			08/08/22 14:27	1

Method: 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			08/08/22 10:24	1

Method: 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		08/05/22 16:17	08/06/22 13:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		08/05/22 16:17	08/06/22 13:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		08/05/22 16:17	08/06/22 13:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	87		70 - 130			08/05/22 16:17	08/06/22 13:43	1
o-Terphenyl (Surr)	102		70 - 130			08/05/22 16:17	08/06/22 13:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	393		4.95	mg/Kg			08/06/22 18:05	1

Client Sample ID: C-7 4.1'

Lab Sample ID: 880-17802-3

Date Collected: 08/04/22 12:30

Matrix: Solid

Date Received: 08/05/22 15:33

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/05/22 15:43	08/06/22 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			08/05/22 15:43	08/06/22 05:31	1
1,4-Difluorobenzene (Surr)	81		70 - 130			08/05/22 15:43	08/06/22 05:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			08/08/22 14:27	1

Method: 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			08/08/22 10:24	1

Method: 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		08/05/22 16:17	08/06/22 14:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/05/22 16:17	08/06/22 14:04	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Client Sample ID: C-7 4.1'

Lab Sample ID: 880-17802-3

Date Collected: 08/04/22 12:30

Matrix: Solid

Date Received: 08/05/22 15:33

Method: 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		08/05/22 16:17	08/06/22 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	84		70 - 130	08/05/22 16:17	08/06/22 14:04	1
o-Terphenyl (Surr)	94		70 - 130	08/05/22 16:17	08/06/22 14:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	624		4.98	mg/Kg			08/06/22 18:15	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

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)
880-17802-1	C-5 4.1'	111	92
880-17802-2	C-6 4.1'	107	109
880-17802-3	C-7 4.1'	89	81
LCS 880-31573/1-A	Lab Control Sample	106	90
LCSD 880-31573/2-A	Lab Control Sample Dup	112	94
MB 880-31335/5-A	Method Blank	99	89
MB 880-31573/5-A	Method Blank	101	91
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)
880-17802-1	C-5 4.1'	95	106
880-17802-1 MS	C-5 4.1'	94	96
880-17802-1 MSD	C-5 4.1'	80	78
880-17802-2	C-6 4.1'	87	102
880-17802-3	C-7 4.1'	84	94
LCS 880-31618/2-A	Lab Control Sample	88	89
LCSD 880-31618/3-A	Lab Control Sample Dup	97	102
MB 880-31618/1-A	Method Blank	79	92
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31335/5-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31335

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/02/22 14:31	08/05/22 11:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/02/22 14:31	08/05/22 11:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/02/22 14:31	08/05/22 11:25	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		08/02/22 14:31	08/05/22 11:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/02/22 14:31	08/05/22 11:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/02/22 14:31	08/05/22 11:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	08/02/22 14:31	08/05/22 11:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	08/02/22 14:31	08/05/22 11:25	1

Lab Sample ID: MB 880-31573/5-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31573

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/05/22 11:19	08/06/22 00:00	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		08/05/22 11:19	08/06/22 00:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/05/22 11:19	08/06/22 00:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/05/22 11:19	08/06/22 00:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	08/05/22 11:19	08/06/22 00:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	08/05/22 11:19	08/06/22 00:00	1

Lab Sample ID: LCS 880-31573/1-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09897		mg/Kg		99	70 - 130
Toluene	0.100	0.1022		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1050		mg/Kg		105	70 - 130
m,p-Xylenes	0.200	0.2137		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1208		mg/Kg		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-31573/2-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09262		mg/Kg		93	70 - 130	7	35

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

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

Lab Sample ID: LCSD 880-31573/2-A

Matrix: Solid

Analysis Batch: 31540

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31573

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09534		mg/Kg		95	70 - 130	7	35
Ethylbenzene	0.100	0.1047		mg/Kg		105	70 - 130	0	35
m,p-Xylenes	0.200	0.2146		mg/Kg		107	70 - 130	0	35
o-Xylene	0.100	0.1189		mg/Kg		119	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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

Lab Sample ID: MB 880-31618/1-A

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31618

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		08/05/22 16:17	08/06/22 11:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/05/22 16:17	08/06/22 11:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/05/22 16:17	08/06/22 11:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	79		70 - 130	08/05/22 16:17	08/06/22 11:37	1
o-Terphenyl (Surr)	92		70 - 130	08/05/22 16:17	08/06/22 11:37	1

Lab Sample ID: LCS 880-31618/2-A

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	813.7		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	790.8		mg/Kg		79	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	88		70 - 130
o-Terphenyl (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-31618/3-A

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31618

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	960.1		mg/Kg		96	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	1000	879.6		mg/Kg		88	70 - 130	11	20

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

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

Lab Sample ID: LCSD 880-31618/3-A

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31618

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	97		70 - 130
o-Terphenyl (Surr)	102		70 - 130

Lab Sample ID: 880-17802-1 MS

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: C-5 4.1'

Prep Type: Total/NA

Prep Batch: 31618

	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	999	886.7		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	806.6		mg/Kg		81	70 - 130	
Surrogate	%Recovery	Qualifier	Limits	MS	MS					
1-Chlorooctane (Surr)	94		70 - 130							
o-Terphenyl (Surr)	96		70 - 130							

Lab Sample ID: 880-17802-1 MSD

Matrix: Solid

Analysis Batch: 31627

Client Sample ID: C-5 4.1'

Prep Type: Total/NA

Prep Batch: 31618

	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	999	824.8		mg/Kg		81	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	688.1	F1	mg/Kg		69	70 - 130	16	20	
Surrogate	%Recovery	Qualifier	Limits	MSD	MSD							
1-Chlorooctane (Surr)	80		70 - 130									
o-Terphenyl (Surr)	78		70 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31487/1-A

Matrix: Solid

Analysis Batch: 31650

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			08/06/22 15:38	1		

Lab Sample ID: LCS 880-31487/2-A

Matrix: Solid

Analysis Batch: 31650

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	242.5		mg/Kg		97	90 - 110			

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-31487/3-A

Matrix: Solid

Analysis Batch: 31650

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	238.8		mg/Kg		96	90 - 110	2	20

Lab Sample ID: 880-17802-3 MS

Matrix: Solid

Analysis Batch: 31650

Client Sample ID: C-7 4.1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	624		249	862.3		mg/Kg		96	90 - 110		

Lab Sample ID: 880-17802-3 MSD

Matrix: Solid

Analysis Batch: 31650

Client Sample ID: C-7 4.1'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	624		249	860.9		mg/Kg		95	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

GC VOA

Prep Batch: 31335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31335/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	8021B	31573
880-17802-2	C-6 4.1'	Total/NA	Solid	8021B	31573
880-17802-3	C-7 4.1'	Total/NA	Solid	8021B	31573
MB 880-31335/5-A	Method Blank	Total/NA	Solid	8021B	31335
MB 880-31573/5-A	Method Blank	Total/NA	Solid	8021B	31573
LCS 880-31573/1-A	Lab Control Sample	Total/NA	Solid	8021B	31573
LCSD 880-31573/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31573

Prep Batch: 31573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	5035	
880-17802-2	C-6 4.1'	Total/NA	Solid	5035	
880-17802-3	C-7 4.1'	Total/NA	Solid	5035	
MB 880-31573/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31573/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31573/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 31780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	Total BTEX	
880-17802-2	C-6 4.1'	Total/NA	Solid	Total BTEX	
880-17802-3	C-7 4.1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	8015NM Prep	
880-17802-2	C-6 4.1'	Total/NA	Solid	8015NM Prep	
880-17802-3	C-7 4.1'	Total/NA	Solid	8015NM Prep	
MB 880-31618/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31618/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-17802-1 MS	C-5 4.1'	Total/NA	Solid	8015NM Prep	
880-17802-1 MSD	C-5 4.1'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 31627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	8015B NM	31618
880-17802-2	C-6 4.1'	Total/NA	Solid	8015B NM	31618
880-17802-3	C-7 4.1'	Total/NA	Solid	8015B NM	31618
MB 880-31618/1-A	Method Blank	Total/NA	Solid	8015B NM	31618
LCS 880-31618/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31618
LCSD 880-31618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31618
880-17802-1 MS	C-5 4.1'	Total/NA	Solid	8015B NM	31618
880-17802-1 MSD	C-5 4.1'	Total/NA	Solid	8015B NM	31618

Eurofins Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

GC Semi VOA

Analysis Batch: 31718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Total/NA	Solid	8015 NM	
880-17802-2	C-6 4.1'	Total/NA	Solid	8015 NM	
880-17802-3	C-7 4.1'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Soluble	Solid	DI Leach	
880-17802-2	C-6 4.1'	Soluble	Solid	DI Leach	
880-17802-3	C-7 4.1'	Soluble	Solid	DI Leach	
MB 880-31487/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31487/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31487/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17802-3 MS	C-7 4.1'	Soluble	Solid	DI Leach	
880-17802-3 MSD	C-7 4.1'	Soluble	Solid	DI Leach	

Analysis Batch: 31650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17802-1	C-5 4.1'	Soluble	Solid	300.0	31487
880-17802-2	C-6 4.1'	Soluble	Solid	300.0	31487
880-17802-3	C-7 4.1'	Soluble	Solid	300.0	31487
MB 880-31487/1-A	Method Blank	Soluble	Solid	300.0	31487
LCS 880-31487/2-A	Lab Control Sample	Soluble	Solid	300.0	31487
LCSD 880-31487/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31487
880-17802-3 MS	C-7 4.1'	Soluble	Solid	300.0	31487
880-17802-3 MSD	C-7 4.1'	Soluble	Solid	300.0	31487

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Client Sample ID: C-5 4.1'

Lab Sample ID: 880-17802-1

Date Collected: 08/04/22 12:00

Matrix: Solid

Date Received: 08/05/22 15:33

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	31573	08/05/22 15:43	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 04:50	MR	EETSC MII
Total/NA	Analysis	Total BTEX		1			31780	08/08/22 14:27	SM	EETSC MII
Total/NA	Analysis	8015 NM		1			31718	08/08/22 10:24	SM	EETSC MII
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31618	08/05/22 16:17	DM	EETSC MII
Total/NA	Analysis	8015B NM		1			31627	08/06/22 12:40	SM	EETSC MII
Soluble	Leach	DI Leach			5 g	50 mL	31487	08/05/22 15:45	KS	EETSC MII
Soluble	Analysis	300.0		1			31650	08/06/22 17:56	AJ	EETSC MII

Client Sample ID: C-6 4.1'

Lab Sample ID: 880-17802-2

Date Collected: 08/04/22 12:15

Matrix: Solid

Date Received: 08/05/22 15:33

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	31573	08/05/22 15:43	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 05:10	MR	EETSC MII
Total/NA	Analysis	Total BTEX		1			31780	08/08/22 14:27	SM	EETSC MII
Total/NA	Analysis	8015 NM		1			31718	08/08/22 10:24	SM	EETSC MII
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31618	08/05/22 16:17	DM	EETSC MII
Total/NA	Analysis	8015B NM		1			31627	08/06/22 13:43	SM	EETSC MII
Soluble	Leach	DI Leach			5.05 g	50 mL	31487	08/05/22 15:45	KS	EETSC MII
Soluble	Analysis	300.0		1			31650	08/06/22 18:05	AJ	EETSC MII

Client Sample ID: C-7 4.1'

Lab Sample ID: 880-17802-3

Date Collected: 08/04/22 12:30

Matrix: Solid

Date Received: 08/05/22 15:33

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	31573	08/05/22 15:43	MR	EETSC MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	31540	08/06/22 05:31	MR	EETSC MII
Total/NA	Analysis	Total BTEX		1			31780	08/08/22 14:27	SM	EETSC MII
Total/NA	Analysis	8015 NM		1			31718	08/08/22 10:24	SM	EETSC MII
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31618	08/05/22 16:17	DM	EETSC MII
Total/NA	Analysis	8015B NM		1			31627	08/06/22 14:04	SM	EETSC MII
Soluble	Leach	DI Leach			5.02 g	50 mL	31487	08/05/22 15:45	KS	EETSC MII
Soluble	Analysis	300.0		1			31650	08/06/22 18:15	AJ	EETSC MII

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

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	T104704400-22-24	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: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

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

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

Eurofins Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 Corridor Line

Job ID: 880-17802-1
SDG: 21-0100-03

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17802-1	C-5 4.1'	Solid	08/04/22 12:00	08/05/22 15:33
880-17802-2	C-6 4.1'	Solid	08/04/22 12:15	08/05/22 15:33
880-17802-3	C-7 4.1'	Solid	08/04/22 12:30	08/05/22 15:33

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Varson & Associates, Inc.

Environmental Consultants

507 N. Marenfeld, Ste 202
Midland, TX 79701
432-687-0901

Data Reported to

DATE: 8-5-22 PAGE 1 OF 1
PO#: _____ LAB WORK ORDER#: _____
PROJECT LOCATION OR NAME: Salado Area IS Corridor LMA
LAI PROJECT # 21-0100-03 COLLECTOR JH

17802 CHAIN-OF-CUSTODY

No. 2664

8/8/2022

TIME ZONE Time zone/State	Field Sample ID	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION				ANALYSES	FIELD NOTES	
							S=SOIL W=WATER A=AIR	P=PAINT SL=SLUDGE OT=OTHER	HCl	HNO ₃			H ₂ SO ₄
MNT/MM													
C-5 41'			8-4-22	1200	S	1	X	X	X	X	X	X	X
C-6 41'			8-4-22	1215	S	1	X	X	X	X	X	X	X
C-7 41'			8-4-22	1230	S	1	X	X	X	X	X	X	X
TOTAL 3													
RELINQUISHED BY (Signature)	RECEIVED BY (Signature)						TURN AROUND TIME						
RELINQUISHED BY (Signature)	DATE/TIME						NORMAL ☐ 1 DAY ☒ 2 DAY ☐ OTHER ☐						
RELINQUISHED BY (Signature)	DATE/TIME						LABORATORY USE ONLY: RECEIVING TEMP <u>81.5</u> THERM# <u>IPB-20</u>						
RELINQUISHED BY (Signature)	DATE/TIME						CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED						
LABORATORY <u>Varco</u>	DATE/TIME						CARRIER BILL # _____						
☒ HAND DELIVERED													



880-17802 Chain of Custody

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-17802-1

SDG Number: 21-0100-03

Login Number: 17802

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	

Appendix E
Photographs

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Impacted area (nAPP2036347592) viewing West, February 3, 2021



Impacted area (nAPP2036347592) viewing Northwest, February 3, 2021

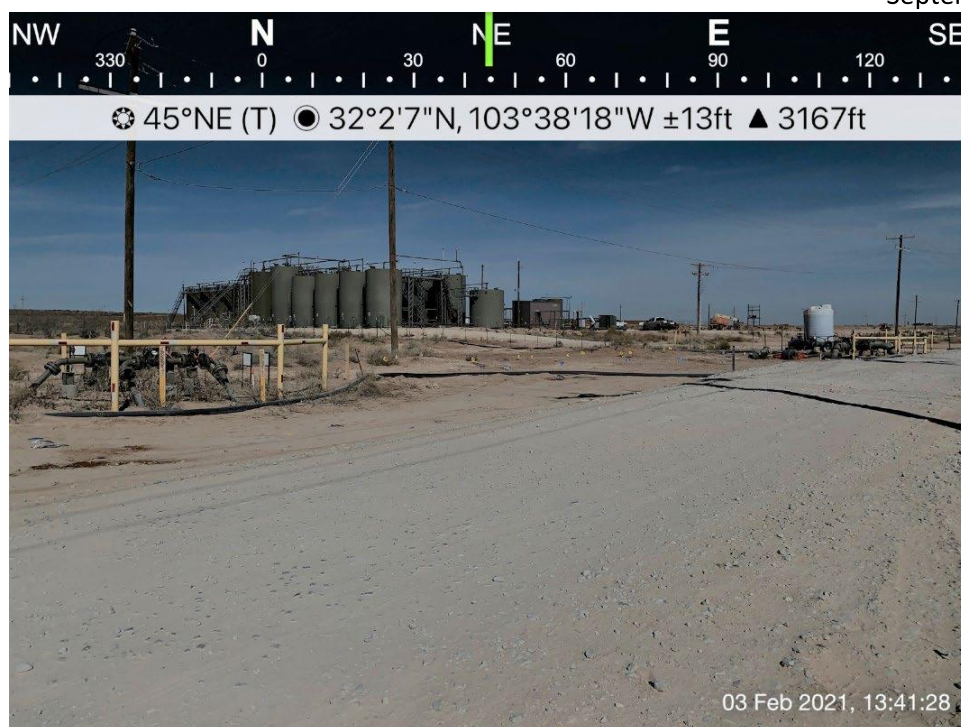
Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Impacted area (nAPP2036347592) viewing Northwest, February 3, 2021



Impacted area (nAPP2036347592) viewing East, February 3, 2021

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Impacted area (nAPP2211732512) viewing northwest, April 18, 2022



Impacted area (nAPP2211732512) viewing southeast, April 18, 2022

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Impacted area (nAPP2211732512) viewing southeast, April 18, 2022



Release source (nAPP2211732512) viewing east, April 18, 2022

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Excavated area viewing east, August 24, 2022



Excavated area viewing south, August 24, 2022

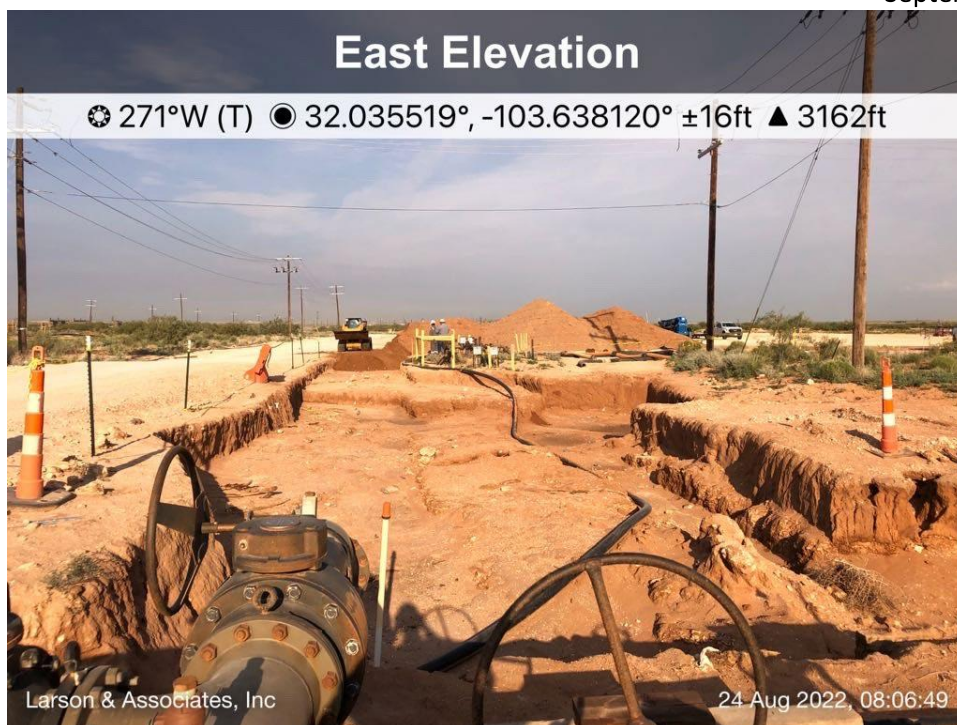
Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

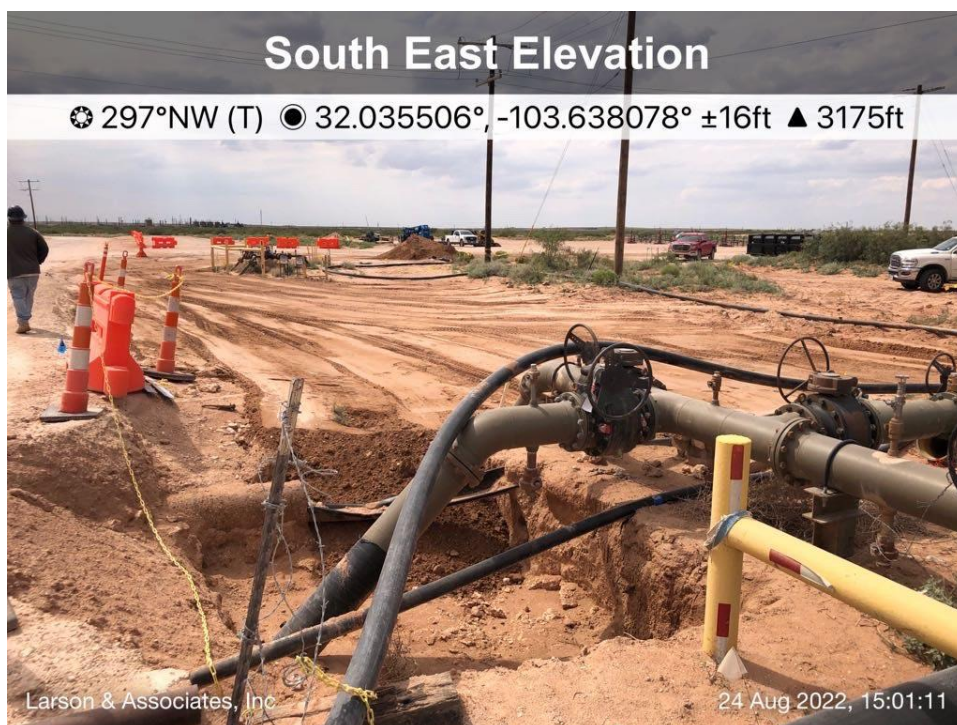
Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Excavated area viewing west, August 24, 2022



Backfilled excavation viewing northwest, August 24, 2022

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Excavation backfilled viewing east, August 24, 2022



Excavation backfilled viewing southeast, August 24, 2022

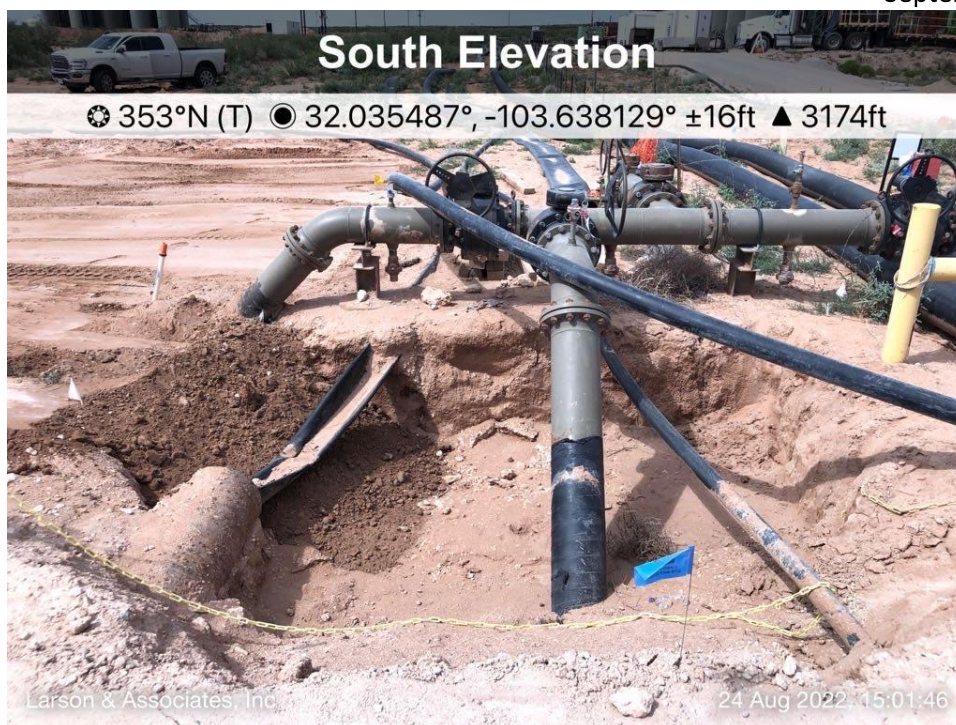
Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Area requiring backfilling once repairs on the riser have been completed, August 24, 2022



Seeded backfilled area viewing northeast, August 29, 2022

Tracking Number: nAPP2036347592 & nAPP2211732512

Closure Report

Chevron USA, Inc., Salado Draw 13 SWD Corridor Line

Produced Water Releases

September 2, 2022



Seeded backfilled area viewing east, August 29, 2022



Seeded backfilled area viewing southwest, August 29, 2022

Appendix F
NMOCD Communications

From: [Robert Nelson](#)
To: [Hamlet, Robert, EMNRD](#); [Nobui, Jennifer, EMNRD](#)
Cc: [Barnhill, Amy D.](#); [Mark Larson](#)
Subject: Salado Draw 13 Corridor Line (nAPP2036347592 & nAPP2209746512) Backfill Notice
Date: Tuesday, August 16, 2022 7:59:00 AM
Attachments: [image001.png](#)
[Figure 3 - Aerial Map Showing First Spill Area and Proposed Excavations.pdf](#)

Hello Mr. Hamlet and Ms. Nobui,

Larson & Associates, Inc. (LAI) on behalf of Chevron USA, is providing two (2) business day notification to the New Mexico Oil Conservation Division (NMOCD) District I prior to collection of final confirmation soil samples on Tuesday August 16th and subsequent backfill on August 18th pending laboratory analysis at the Salado Draw 13 Corridor Line (nAPP2036347592 & nAPP2209746512). LAI submits the attached proposed excavation map for your reference. Please feel free to contact Amy Barnhill with Chevron at (432) 687-7108 or ABarnhill@chevron.com, Mark Larson (432) 556-8656 or mark@laenvironmental.com, or me with any questions or concerns.

Thank you,

Robert Nelson
Sr. Geologist
Office – 432-687-0901
Cell – 432-664-4804
rnelson@laenvironmental.com



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 142445

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 142445
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Deferral Request Approved. Pertains also to nAPP2036347592.	9/14/2022