Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2123134861 & nAPP2201046595
District RP	
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?	70.12 (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2123134861 & nAPP2201046595
District RP	
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: Waste and Water Specialist

Signature: Amy Barnhill Date: 6-9-22

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Jocelyn Harimon Date: 08/08/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2123134861 & nAPP2201046595
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] 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: Waste and Water Specialist

Signature: Amy Barnhill Date: 6-9-22

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Jocelyn Harimon Date: 08/08/2022

- [x] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: Jennifer Nobui Date: 08/11/2022

Tracking Number: nAPP2123134861 and nAPP2201046595
Delineation Report and Remediation Plan
Salado Draw 19 CTB Waterline & Manifold
Produced Water Releases
Lea County, New Mexico

Latitude: N 32.034993°
Longitude: W -103.616822°

LAI Project No. 22-0105-01 & 22-0105-04

June 9, 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

This Page Intentionally Left Blank

Table of Contents

Tables

Figures

Appendices

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 a two (2) produced water releases (Waterline and Manifold) at the Salado Draw 19 CTB (Site) located in Unit D (Lot 1), Section 19, Township 26 South, Range 33 East in Lea County, New Mexico. The geodetic position is North 32.034993° and West -103.616822°. Figure 1 presents a topographic map. Figure 2 presents an aerial map of the waterline and manifold spill locations.

1.1 Background

The release on the waterline was initially discovered on August 11, 2021, due to a hole in water line on backbone of train 2. Chevron reported that 0.54 barrels (bbls) of crude oil and 5.03 bbls of produced water was released, with 0.54 bbls of crude oil and 2 bbls of produced water recovered. The affected area measures approximately 1,154 square feet. The initial C-141 was submitted to NMOCD District I on August 23, 2021. The water releases were assigned incident number nAPP2123134861.

The release on the manifold was discovered on December 28, 2021, due a hole in an 8-inch balon ball valve. Chevron reported that 14.03 bbls of produced water was released, with 7 bbls of recovered. The affected area measures approximately 1,246 square feet. The initial C-141 was submitted to NMOCD District 1 on January 10, 2022. The manifold release was assigned incident number nAAPP2201046595. Appendix A presents the initial C-141 and Chevron spill calculation for the two (2) releases.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,174 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 soils and Dune land, consisting of 0 to 30 inches fine sand, underlain by 30 to 60 inches of fine sandy loam.
- Surface geology is Quaternary deposits (Holocene) sand and silt, locally includes cover sand.
- Groundwater occurs at 70.12 feet below ground surface (bgs) based on depth to groundwater measurements taken 72 hours after installing a boring (SB-1) on April 28, 2020, approximately 0.31 mile or 1,809 feet southeast from the Site. Figure 5 presents the soil boring location.

Appendix B presents USGS data depicting karst risk potential. Appendix C presents the soil boring log.

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:

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

On February 1, 2022, LAI personnel used a stainless-steel hand auger to collect soil samples from four (4) locations (S-1 through S-4) inside the spill area and four (4) locations (S-5 through S-8) outside the spill area at the. The samples were collected at approximately 0.5 and 1-fot bgs, depending on subsurface conditions.

Also on February 1, 2022, LAI personnel used a stainless-steel hand auger to collect soil sample from each release at four (4) locations (S-1 through S-4) inside the spill area and four (4) locations (S-5 through S-8) outside the spill area. The samples were collected at approximately 0.5 and 1-foot bgs, depending on subsurface conditions.

Soil samples from both releases 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), 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.

Benzene, and BTEX were below the NMOCD remediation standards in Table 1 (19.15.29 NMAC) of 10 milligrams per kilogram (mg/Kg) and 50 mg/Kg, respectively, from both releases.

TPH and/or chloride exceeded the NMOCD delineation limit of 100 mg/Kg and 600 mg/Kg, respectively in the following samples:

Sample ID	Depth (Feet)	TPH Concentration (mg/Kg)	Chloride Concentration (mg/Kg)
Waterline Release (nAPP2123134861)			
S-3	0.5	2,160	--
S-3	1	681	--
Manifold Release (nAPP2201046595)			
S-2	0.5	--	4,190
S-2	1	--	953
S-3	0.5	--	7,210
S-3	1	--	4,270
S-4	0.5	--	2,270
S-5	0.5	--	3,240
S-5	1	--	2,210
S-8	0.5	--	942
S-8	1	--	855

On March 8 and 9, 2022, LAI personnel utilized the Geoprobe 7822DT direct push rig to further delineate sample location S-3 at the waterline release and sample locations S-2, S-3, S-4, S-5, and S-8 at the manifold release. Soil samples were collected at depths of approximately one (1), three (3), five (5), and ten (10) feet bgs. The Geoprobe at sample location S-3 at the manifold release was advanced to a depth of fourteen (14) feet bgs due to field analysis that indicated further delineation was necessary. Two (2) additional horizontal delineation soil samples (S-9 and S-10) were collected at the Manifold release west of sample location S-8 and north of sample location S-5, respectively. The laboratory results demonstrate the waterline release was delineated according to the NMOCD remediation and closure requirements in Table 1 of 19.15.29.12 NMAC. The chloride concentration in sample S-3, 14 feet bgs (881 mg/Kg) at the manifold release exceeded the NMOCD delineation requirements of 600 mg/Kg.

On May 10, 2022, Scarborough Drilling, Inc. (SDI) under supervision from LAI personnel used an air rotary rig to further delineate chloride at sample locations S-3. Soil samples were collected at approximately fifteen (15), twenty (20), and twenty-five (25) feet bgs. The laboratory results demonstrate the release was delineated according to the OCD remediation and closure requirements in Table 1 of 19.15.29.12 NMAC. Figure 3a presents an aerial map showing the sample locations at the waterline release. Figure 3b presents an aerial map showing the sample locations at the manifold release. Appendix D presents the laboratory reports. Appendix E presents photographic documentation.

3.0 REMEDIATION PLAN

Chevron proposes the following remedial actions:

- Waterline Release: Excavate soil from an area measuring approximately 429 square feet encompassing S-3 to a depth of 1-foot bgs.
- Manifold Release: Excavate soil from an area measuring approximately 216 square feet encompassing S-4 to a depth of 1-foot bgs.
- Manifold Release: Excavate soil from an area measuring approximately 302 square feet encompassing S-5 and S-8 to a depth of 1.5 feet bgs.
- Manifold Release: Excavate soil from an area measuring approximately 951 square feet encompassing S-2, S-3, and S-5 to a depth of 4.1 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 caliche on the pad at the waterline release and topsoil in the right of way at the manifold release assuming achievement of OCD remediation levels.
- Prepare report with photographs for submittal to OCD District I.

Figure 4a presents an aerial map showing the proposed excavation area for the waterline release (nAPP2123134861). Figure 4b presents an aerial map showing the proposed excavation area for the manifold release (nAAPP2201046595).

Tables

Table 1a
Soil Sample Analytical Data Summary
SD 19 CTB - WaterlineRelease (nAPP2123134861)
Lea County, New Mexico
32° 02' 04.86805" North, 103° 37' 01.11924" West

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/10,000**
S-1	0.5	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	30.4
	1	2/1/2022	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	19.0
S-2	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	149
	1	2/1/2022	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	186
S-3	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	2,160	<50.0	**2,160**	42.2
	1	2/1/2022	In-Situ	<0.00199	0.0370	<49.9	681	<49.9	**681**	44.6
	1	3/9/2022	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	11.9
	3	3/9/2022	In-Situ	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<4.98
	5	3/9/2022	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<5.00
	10	3/9/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	5.51
S-4	0.5	2/1/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	17.5
	1	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	23.7
S-5	0.5	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	23.7
S-6	0.5	2/1/2022	In-Situ	<0.00202	<0.00403	<50.0	54.3	<50.0	54.3	133
S-7	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	231
S-8	0.5	2/1/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	278

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

Table 1a

Soil Sample Analytical Data Summary

SD 19 CTB - WaterlineRelease (nAPP2123134861)

Lea County, New Mexico

32° 02' 04.86805" North, 103° 37' 01.11924" West

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/10,000**

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 1b
Soil Sample Analytical Data Summary
SD 19 CTB - Manifold Release (nAPP2201046595)
Lea County, New Mexico
32° 02' 04.33" North, 103° 37' 02.69" West

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/10,000**
S-1	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	53.6
	1	2/1/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	78.1
S-2	0.5	2/1/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	**4,190**
	1	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**953**
	1	3/8/2022	In-Situ	<0.0200	<0.00400	<49.8	<49.8	<49.8	<49.8	**5,960**
	2	3/8/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	**4,350**
	5	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**3,420**
	10	3/8/2022	In-Situ	<0.00200	<0.00398	<49.8	<49.8	<49.8	<49.8	13.7
S-3	0.5	2/1/2022	In-Situ	<0.00200	<0.00401	<50.0	55.8	<50.0	55.8	**7,210**
	1	2/1/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	**4,270**
	1	3/8/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	**7,370**
	3	3/8/2022	In-Situ	<0.00200	<0.00399	<50.0	185	<50.0	**185**	**20,700**
	5	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**4,850**
	10	3/8/2022	In-Situ	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	**3,560**
	14	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**881**
	15	5/10/2022	In-Situ	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	233
	20	5/10/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	72.0
	25	5/10/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	78.0
S-4	0.5	2/1/2022	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	**2,270**
	1	2/1/2022	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	123
S-5	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**3,240**

Table 1b
Soil Sample Analytical Data Summary
SD 19 CTB - Manifold Release (nAPP2201046595)
Lea County, New Mexico
32° 02' 04.33" North, 103° 37' 02.69" West

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/10,000**
	1	2/1/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	**2,210**
	1	3/8/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	111
	3	3/8/2022	In-Situ	<0.00202	<0.0404	<50.0	<50.0	<50.0	<50.0	158
	5	3/8/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<4.97
	10	3/8/2022	In-Situ	<0.00200	<0.0399	<49.9	<49.9	<49.9	<49.9	11.2
S-6	0.5	2/1/2022	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	126
	1	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	127
S-7	0.5	2/1/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	116
	1	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	83.3
S-8	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	**942**
	1	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	**855**
	1	3/8/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	**822**
	3	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	37.6
	5	3/8/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	16.5
	10	3/8/2022	In-Situ	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	5.26
S-9	0.5	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	327
	1	3/8/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	224
S-10	0.5	3/8/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	349
	1	3/8/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	89.1	89.1	130

Table 1b

Soil Sample Analytical Data Summary

SD 19 CTB - Manifold Release (nAPP2201046595)

Lea County, New Mexico

32° 02' 04.33" North, 103° 37' 02.69" West

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C10 (mg/Kg)	C10 - C28 (mg/Kg)	C28 - C36 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100/2,500**	**600/10,000**

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

Figures

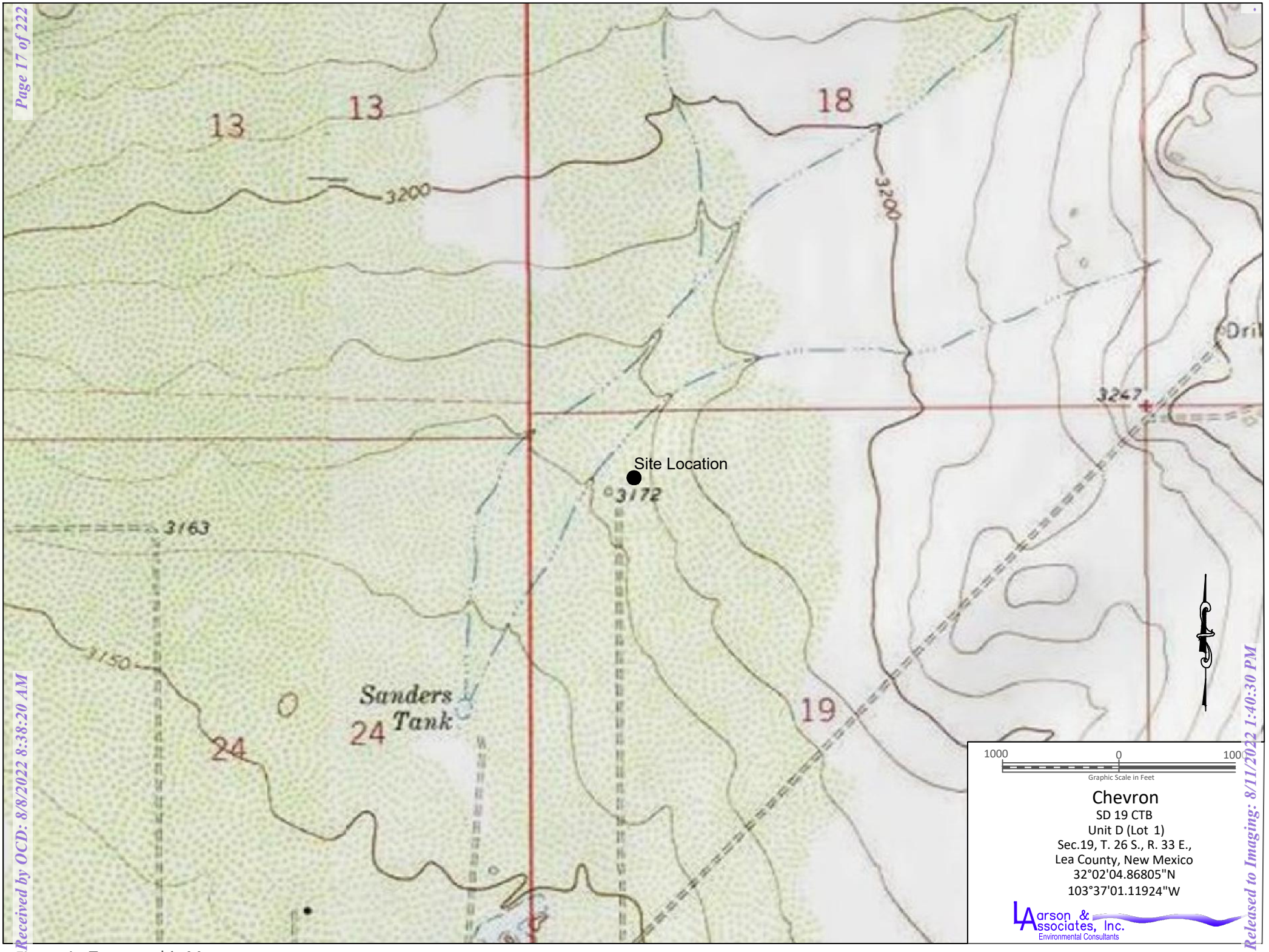


Figure 1 - Topographic Map

Figure 2 - Aerial Map

Figure 3a - Aerial Map

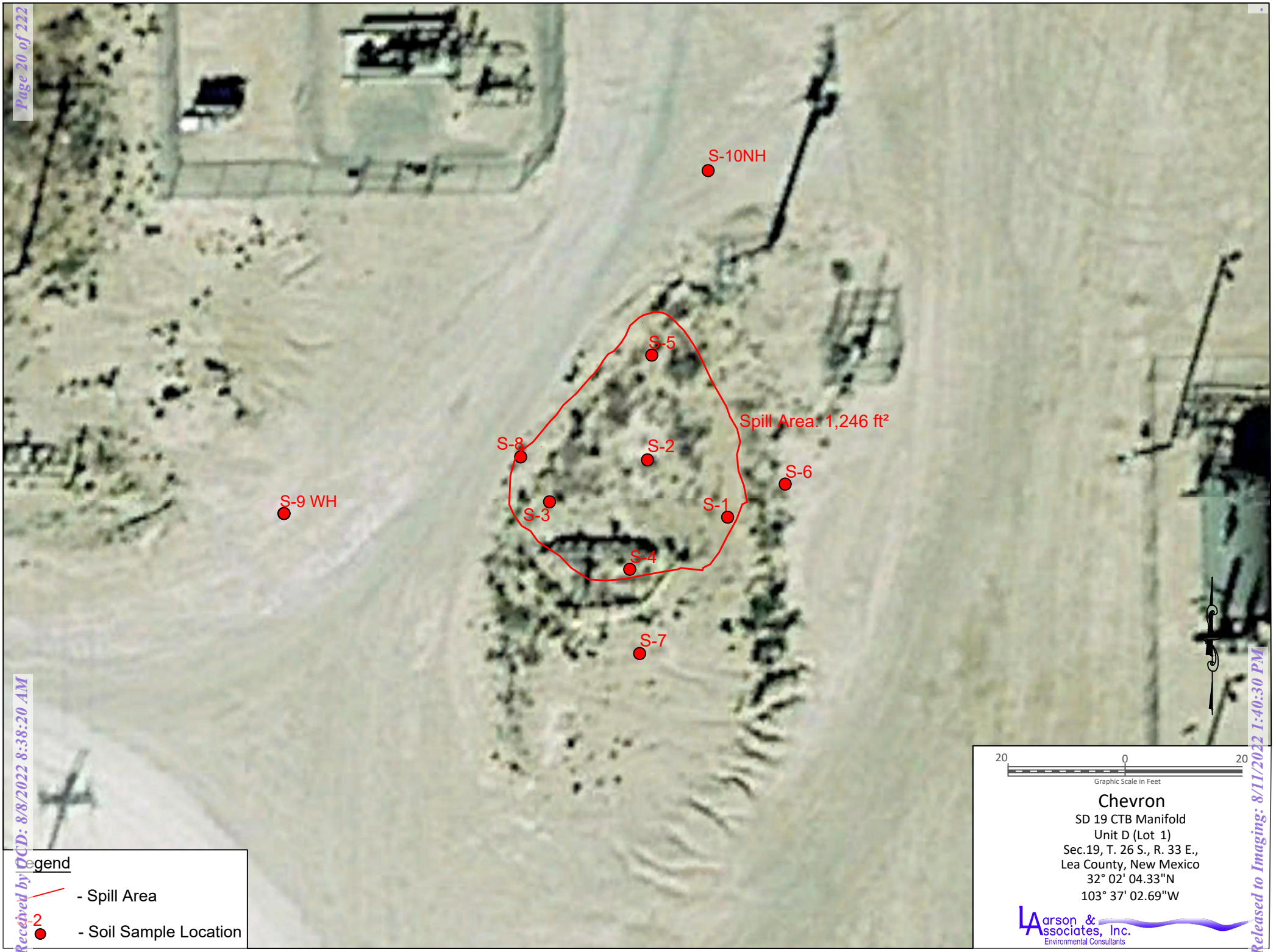


Figure 3b - Aerial Map

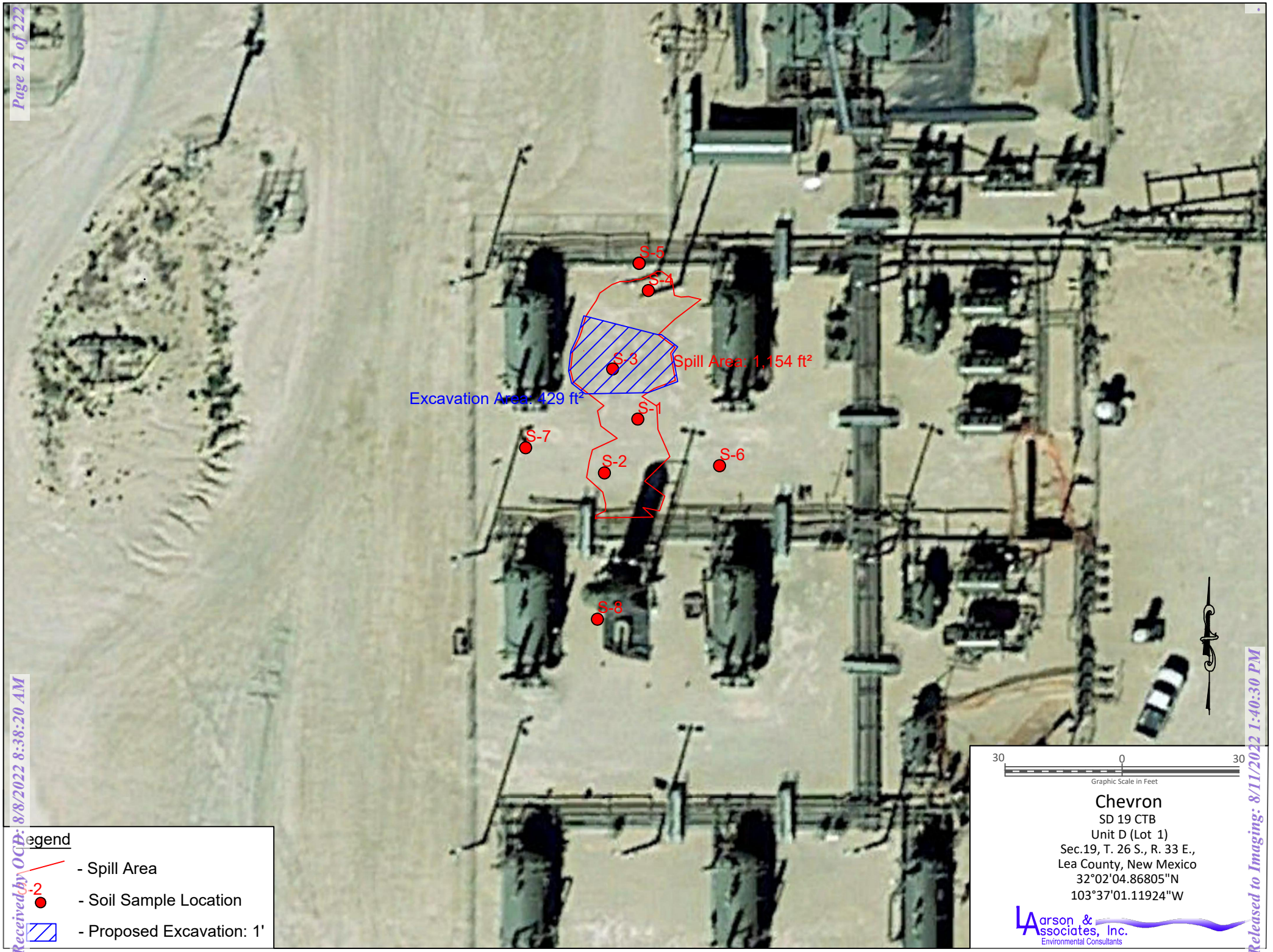


Figure 4a - Aerial Map Showing Proposed Excavation Location

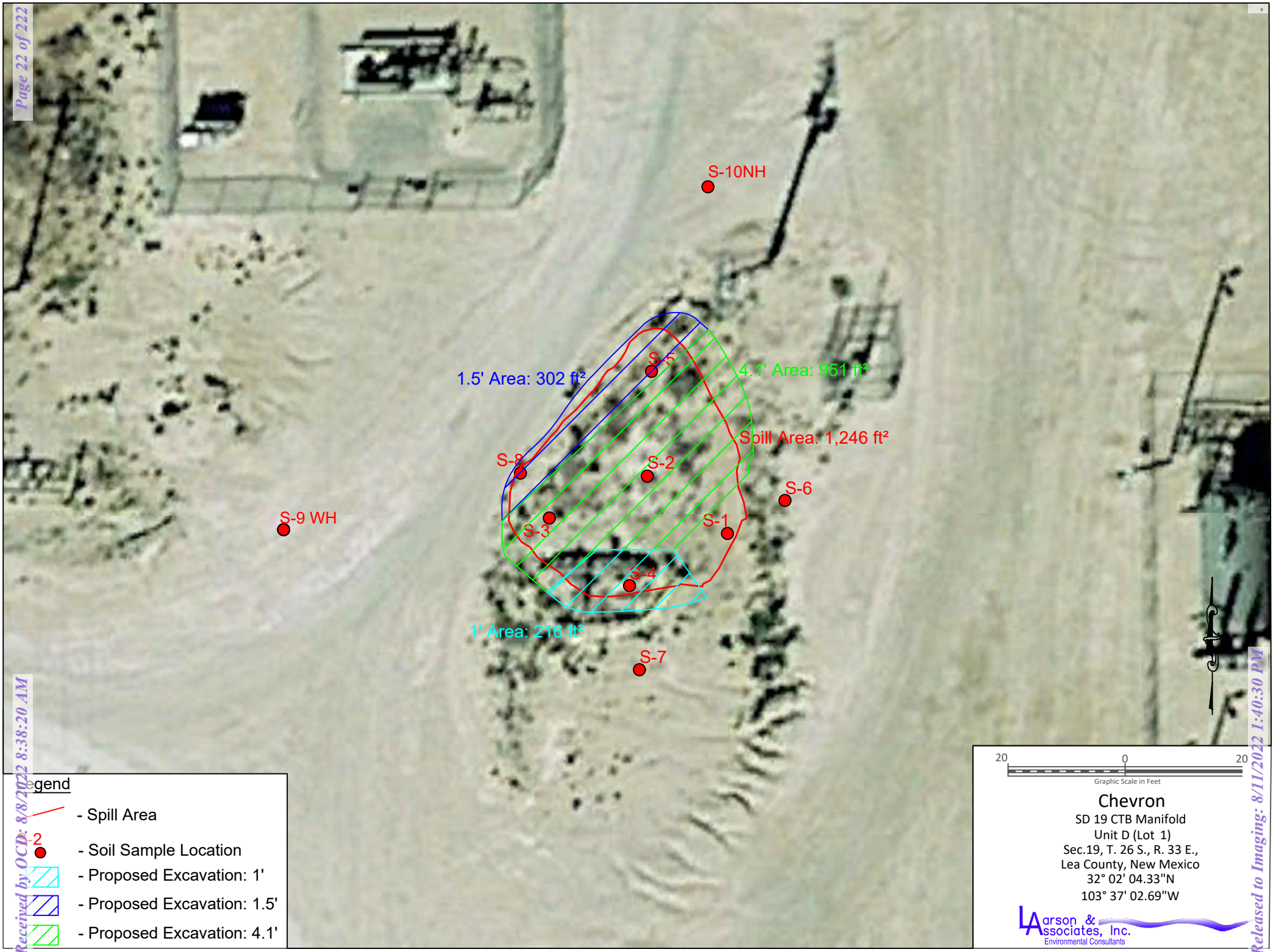


Figure 4b - Aerial Map Showing Proposed Excavation Areas

Figure 5 - Aerial Map Showing Monitoring Well

Appendix A

Chevron Spill Calculations

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	nAPP2123134861
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 32.03476288 Longitude -103.6169817
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Salado Draw 19 CTB	Site Type: Oil
Date Release Discovered: 8-11-21	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	19	26S	33E	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) .54 bbls	Volume Recovered (bbls) .54bbls
☒ Produced Water	Volume Released (bbls) 5.03 bbls	Volume Recovered (bbls) 2 bbls
	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: Hole in water line on backbone of train 2		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2123134861
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 not 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: Amy Barnhill Date: 8-23-21

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Date:

Incident ID	nAPP2123134861
District RP	
Facility ID	
Application ID	

Spill Calculations:

Rectangle
33 ft x 20 ft x .500 in
5.082 bbl
.184 bbl
4.758 bbl
90%
.015 bbl
.500 in

Triangle
8 ft x 8 ft x .250 in
.154 bbl
.036 bbl
0.175 bbl
95%
.017 bbl
.500 in

Rectangle
20 ft x 15 ft x 0 in
.334 bbl
.334 bbl
0.651 bbl

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	nAPP2201046595
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Chevron USA	OGRID: 4323
Contact Name: Amy Barnhill	Contact Telephone432-687-7108
Contact email: ABarnhill@chevron.com	Incident # *(assigned by OCD)*
Contact mailing address: 6301 Deauville Blvd Midland, Tx 79706	

Location of Release Source

Latitude: **32.03472523** Longitude: **-103.61733653**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Salado Draw 19 CTB	Site Type: Oil
Date Release Discovered: 12-28-21	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	19	26S	33E	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): 14.03	Volume Recovered (bbls): 7
	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: **Field Specialist found a leak at Salado Draw water corridor riser by CTB 19. Leak was coming from a 1/2 inch hole in an 8 inch Balon ball valve.**

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2201046595
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 not 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: Amy Barnhill Date: 1-10-22

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Date:

Incident ID	nAPP2201046595
District RP	
Facility ID	
Application ID	

Spill Calculations:

Area 1
Shape: Rectangle
Secondary Containment?: No
Standing Liquid Dimensions: 15 ft x 20 ft x 3 in
Standing Liquid Volume: 14.026 bbl

Appendix B

Karst Risk Potential

New Mexico Kart or No Karst - QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh Processing Help

Browser

- Favorites
- Spatial Bookmarks
- Project Home
- Home
- C:\
- D:\
- L:\
- Z:\
- GeoPackage
- SpatiaLite
- PostGIS
- MSSQL
- Oracle
- DB2
- WMS/WMTS
- XYZ Tiles
- WCS
- WFS / OGC API - Features
- OWS
- ArcGisMapServer
- ArcGisFeatureServer
- GeoNode

Layers

- Karst or No Karst
  - High
  - Low
  - Medium
  -
- Bing Satellite

Medium

Type to locate (Ctrl+K)

Coordinate 630048,3545536 Scale 1:4706 Magnifier 100% Rotation 0.0 ° Render EPSG:26913

Appendix C

Soil Boring Log

BORING RECORD

Start: 12:20 MDT
Finish: 15:40

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Sand, 5YR 5/4, Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Dry	ML	
	6	2.5YR 5/4, Light Reddish Brown, Below 4 ft	Caliche	
	10	Caliche, 7.5YR 8/2, Pinkish White, Coarse Grained, Poorly Sorted, Dry		
	20			
	25	Silty Sand, 2.5YR 6/4, Light Reddish Brown, Fine Grained, Well Sorted, Dry	ML	
	30			
	40			
	50	Began Injecting Water		
	55	Caliche, 7.5YR 8/2, Pinkish White, Fine Grained, Dry	Caliche	
	60			
	66	Silty Sand, 7.5YR 4/2, Fine Grained Quartz Sand, Well Sorted, Dry	ML	
70.12' Depth of Water	70			
	80			
	90			
	100			
	110	TD: 110.75'		

PID READING: PPM X 1 (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS
1			6	BACKGROUND PID READING SOIL : PPM SOIL : PPM
2			25	
3			55	
4			66	
5			110.75	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
LABORATORY TEST LOCATION
PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 04-09-2020
BORING NUMBER : SB-01

JOB NUMBER : Chevron/19-0180-05
HOLE DIAMETER : 2"
LOCATION : Salado Draw Frac Pond 19
LAI GEOLOGIST : E. Chavez
DRILLING CONTRACTOR : Scarborough
DRILLING METHOD : Air Rotary

Appendix D

Laboratory Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-10893-1
Laboratory Sample Delivery Group: 22-0105-01
Client Project/Site: SD 19 CTB - Waterline

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
2/10/2022 2:47:52 PM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

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 19 CTB - Waterline

Laboratory Job ID: 880-10893-1
SDG: 22-0105-01

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-10893-1
Project/Site: SD 19 CTB - Waterline SDG: 22-0105-01

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low 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: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Job ID: 880-10893-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10893-1

Receipt
The samples were received on 2/2/2022 11:10 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 time was -8.8°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18467 and analytical batch 880-18404 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
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18410 and analytical batch 880-18623 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 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-2 0.5' (880-10893-3). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-3 0.5' (880-10893-5), S-3 1' (880-10893-6), (LCSD 880-18779/3-A), (880-10781-A-22-D), (880-10781-A-22-E MS) and (880-10781-A-22-F MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18572 and 880-18572 and analytical batch 880-18733 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-1 0.5'

Lab Sample ID: 880-10893-1
Matrix: Solid
Date Collected: 02/01/22 13:20
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 08:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 08:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 08:02	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:51	02/04/22 08:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 08:02	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:51	02/04/22 08:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:02*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:02*	*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			02/07/22 15:39	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			02/08/22 16:56	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 F2	50.0		mg/Kg		02/02/22 15:57	02/06/22 00:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U F2	50.0		mg/Kg		02/02/22 15:57	02/06/22 00:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*80*		*70 - 130*	*02/02/22 15:57*	*02/06/22 00:37*	*1*
o-Terphenyl (Surr)	*89*		*70 - 130*	*02/02/22 15:57*	*02/06/22 00:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.4**	**F1**	4.95		mg/Kg			02/09/22 22:08	1

Client Sample ID: S-1 1'

Lab Sample ID: 880-10893-2
Matrix: Solid
Date Collected: 02/01/22 13:21
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:51	02/04/22 08:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:51	02/04/22 08:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:51	02/04/22 08:22	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		02/03/22 09:51	02/04/22 08:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:51	02/04/22 08:22	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/03/22 09:51	02/04/22 08:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:22*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:22*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-1 1'

Lab Sample ID: 880-10893-2
Matrix: Solid
Date Collected: 02/01/22 13:21
Date Received: 02/02/22 11:10

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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 01:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 01:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*02/02/22 15:57*	*02/06/22 01:39*	*1*
o-Terphenyl (Surr)	*78*		*70 - 130*	*02/02/22 15:57*	*02/06/22 01:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.0**		5.01		mg/Kg			02/09/22 22:23	1

Client Sample ID: S-2 0.5'

Lab Sample ID: 880-10893-3
Matrix: Solid
Date Collected: 02/01/22 13:22
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:51	02/04/22 08:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:51	02/04/22 08:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:51	02/04/22 08:43	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:51	02/04/22 08:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:51	02/04/22 08:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:51	02/04/22 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:43*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/03/22 09:51*	*02/04/22 08:43*	*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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 02:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 02:00	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-2 0.5'

Lab Sample ID: 880-10893-3
Matrix: Solid
Date Collected: 02/01/22 13:22
Date Received: 02/02/22 11:10

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		02/02/22 15:57	02/06/22 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*68*	*S1-*	*70 - 130*	*02/02/22 15:57*	*02/06/22 02:00*	*1*
o-Terphenyl (Surr)	*75*		*70 - 130*	*02/02/22 15:57*	*02/06/22 02:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**149**		4.98		mg/Kg			02/09/22 22:27	1

Client Sample ID: S-2 1'

Lab Sample ID: 880-10893-4
Matrix: Solid
Date Collected: 02/01/22 13:23
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 10:06	02/04/22 02:43	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 10:06	02/04/22 02:43	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 10:06	02/04/22 02:43	1
m,p-Xylenes	<0.00397	U F1	0.00397		mg/Kg		02/03/22 10:06	02/04/22 02:43	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/03/22 10:06	02/04/22 02:43	1
Xylenes, Total	<0.00397	U F1	0.00397		mg/Kg		02/03/22 10:06	02/04/22 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*237*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 02:43*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*02/03/22 10:06*	*02/04/22 02:43*	*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			02/04/22 16:59	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 02:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 02:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*78*		*70 - 130*	*02/02/22 15:57*	*02/06/22 02:21*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*02/02/22 15:57*	*02/06/22 02:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**186**		4.99		mg/Kg			02/09/22 22:32	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-3 0.5'

Lab Sample ID: 880-10893-5
Matrix: Solid
Date Collected: 02/01/22 13:24
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:10	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 03:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*223*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 03:10*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/03/22 10:06*	*02/04/22 03:10*	*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			02/07/22 15:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2160**		50.0		mg/Kg			02/08/22 16:56	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		02/07/22 17:05	02/08/22 15:47	1
Diesel Range Organics (Over C10-C28)	**2160**		50.0		mg/Kg		02/07/22 17:05	02/08/22 15:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/07/22 17:05	02/08/22 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*66*	*S1-*	*70 - 130*	*02/07/22 17:05*	*02/08/22 15:47*	*1*
o-Terphenyl (Surr)	*71*		*70 - 130*	*02/07/22 17:05*	*02/08/22 15:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.2**		4.95		mg/Kg			02/09/22 22:37	1

Client Sample ID: S-3 1'

Lab Sample ID: 880-10893-6
Matrix: Solid
Date Collected: 02/01/22 13:25
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:37	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 03:37	1
o-Xylene	**0.0370**		0.00199		mg/Kg		02/03/22 10:06	02/04/22 03:37	1
Xylenes, Total	**0.0370**		0.00398		mg/Kg		02/03/22 10:06	02/04/22 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*173*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 03:37*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/03/22 10:06*	*02/04/22 03:37*	*1*

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-3 1'

Lab Sample ID: 880-10893-6
Matrix: Solid
Date Collected: 02/01/22 13:25
Date Received: 02/02/22 11:10

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0370**		0.00398		mg/Kg			02/07/22 15:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**681**		49.9		mg/Kg			02/08/22 16:56	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		02/07/22 17:05	02/08/22 16:08	1
Diesel Range Organics (Over C10-C28)	**681**		49.9		mg/Kg		02/07/22 17:05	02/08/22 16:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/07/22 17:05	02/08/22 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*65*	*S1-*	*70 - 130*	*02/07/22 17:05*	*02/08/22 16:08*	*1*
o-Terphenyl (Surr)	*69*	*S1-*	*70 - 130*	*02/07/22 17:05*	*02/08/22 16:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.6**		5.04		mg/Kg			02/09/22 22:52	1

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-10893-7
Matrix: Solid
Date Collected: 02/01/22 13:26
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:03	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 04:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*175*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 04:03*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/03/22 10:06*	*02/04/22 04:03*	*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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 03:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 03:22	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-10893-7
Matrix: Solid
Date Collected: 02/01/22 13:26
Date Received: 02/02/22 11:10

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		02/02/22 15:57	02/06/22 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*79*		*70 - 130*	*02/02/22 15:57*	*02/06/22 03:22*	*1*
o-Terphenyl (Surr)	*88*		*70 - 130*	*02/02/22 15:57*	*02/06/22 03:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.5**		5.05		mg/Kg			02/09/22 22:57	1

Client Sample ID: S-5 0.5'

Lab Sample ID: 880-10893-8
Matrix: Solid
Date Collected: 02/01/22 13:28
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:31	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 10:06	02/04/22 04:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 04:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 10:06	02/04/22 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*190*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 04:31*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/03/22 10:06*	*02/04/22 04:31*	*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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 03:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 03:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*73*		*70 - 130*	*02/02/22 15:57*	*02/06/22 03:42*	*1*
o-Terphenyl (Surr)	*81*		*70 - 130*	*02/02/22 15:57*	*02/06/22 03:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23.7**		5.00		mg/Kg			02/09/22 23:01	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-6 0.5'

Lab Sample ID: 880-10893-9
Matrix: Solid
Date Collected: 02/01/22 13:30
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 04:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 04:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 04:58	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		02/03/22 10:06	02/04/22 04:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 04:58	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/03/22 10:06	02/04/22 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 04:58*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/03/22 10:06*	*02/04/22 04:58*	*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			02/07/22 15:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**54.3**		50.0		mg/Kg			02/08/22 16:56	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		02/07/22 17:05	02/08/22 16:30	1
Diesel Range Organics (Over C10-C28)	**54.3**		50.0		mg/Kg		02/07/22 17:05	02/08/22 16:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/07/22 17:05	02/08/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*02/07/22 17:05*	*02/08/22 16:30*	*1*
o-Terphenyl (Surr)	*75*		*70 - 130*	*02/07/22 17:05*	*02/08/22 16:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**133**		4.98		mg/Kg			02/09/22 23:06	1

Client Sample ID: S-7 0.5'

Lab Sample ID: 880-10893-10
Matrix: Solid
Date Collected: 02/01/22 13:32
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 05:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 05:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 05:25	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 05:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 05:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*165*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 05:25*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/03/22 10:06*	*02/04/22 05:25*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-7 0.5'

Date Collected: 02/01/22 13:32
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-10
Matrix: Solid

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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 04:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 04:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 15:57	02/06/22 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*78*		*70 - 130*	*02/02/22 15:57*	*02/06/22 04:23*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*02/02/22 15:57*	*02/06/22 04:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**231**		4.99		mg/Kg			02/09/22 23:11	1

Client Sample ID: S-8 0.5'

Date Collected: 02/01/22 13:34
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 05:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 05:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 05:53	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 05:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 05:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 05:53*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/03/22 10:06*	*02/04/22 05:53*	*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			02/07/22 15:39	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			02/08/22 16:56	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		02/02/22 15:57	02/06/22 05:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/06/22 05:04	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-8 0.5'
Date Collected: 02/01/22 13:34
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-11
Matrix: Solid

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		02/02/22 15:57	02/06/22 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*81*		*70 - 130*	*02/02/22 15:57*	*02/06/22 05:04*	*1*
o-Terphenyl (Surr)	*87*		*70 - 130*	*02/02/22 15:57*	*02/06/22 05:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**278**	**F1**	5.00		mg/Kg			02/09/22 23:16	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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)
880-10891-A-22-D MS	Matrix Spike	114	94
880-10891-A-22-E MSD	Matrix Spike Duplicate	126	101
880-10893-1	S-1 0.5'	115	90
880-10893-2	S-1 1'	105	86
880-10893-3	S-2 0.5'	112	93
880-10893-4	S-2 1'	237 S1+	72
880-10893-4 MS	S-2 1'	168 S1+	98
880-10893-4 MSD	S-2 1'	157 S1+	105
880-10893-5	S-3 0.5'	223 S1+	77
880-10893-6	S-3 1'	173 S1+	77
880-10893-7	S-4 0.5'	175 S1+	96
880-10893-8	S-5 0.5'	190 S1+	86
880-10893-9	S-6 0.5'	152 S1+	88
880-10893-10	S-7 0.5'	165 S1+	108
880-10893-11	S-8 0.5'	152 S1+	96
LCS 880-18464/1-A	Lab Control Sample	117	101
LCS 880-18467/1-A	Lab Control Sample	180 S1+	95
LCSD 880-18464/2-A	Lab Control Sample Dup	114	102
LCSD 880-18467/2-A	Lab Control Sample Dup	154 S1+	87
MB 880-18404/8	Method Blank	120	72
MB 880-18464/5-A	Method Blank	122	101
MB 880-18467/5-A	Method Blank	128	76

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)
880-10781-A-22-E MS	Matrix Spike	71	64 S1-
880-10781-A-22-F MSD	Matrix Spike Duplicate	71	64 S1-
880-10893-1	S-1 0.5'	80	89
880-10893-1 MS	S-1 0.5'	91	93
880-10893-1 MSD	S-1 0.5'	75	74
880-10893-2	S-1 1'	70	78
880-10893-3	S-2 0.5'	68 S1-	75
880-10893-4	S-2 1'	78	86
880-10893-5	S-3 0.5'	66 S1-	71
880-10893-6	S-3 1'	65 S1-	69 S1-
880-10893-7	S-4 0.5'	79	88
880-10893-8	S-5 0.5'	73	81
880-10893-9	S-6 0.5'	70	75
880-10893-10	S-7 0.5'	78	86
880-10893-11	S-8 0.5'	81	87
LCS 880-18410/2-A	Lab Control Sample	106	110
LCS 880-18779/2-A	Lab Control Sample	76	71

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10893-1
Project/Site: SD 19 CTB - Waterline SDG: 22-0105-01

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCSD 880-18410/3-A	Lab Control Sample Dup	96	101								
LCSD 880-18779/3-A	Lab Control Sample Dup	72	68 S1-								
MB 880-18410/1-A	Method Blank	88	100								
MB 880-18779/1-A	Method Blank	76	83								

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18404/8
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Toluene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg			02/03/22 17:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			02/03/22 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*02/03/22 17:23*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*		*02/03/22 17:23*	*1*

Lab Sample ID: MB 880-18464/5-A
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18464

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 00:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 00:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 00:16	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 09:51	02/04/22 00:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:51	02/04/22 00:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 09:51	02/04/22 00:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/03/22 09:51*	*02/04/22 00:16*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*02/03/22 09:51*	*02/04/22 00:16*	*1*

Lab Sample ID: LCS 880-18464/1-A
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18464

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07101		mg/Kg		71	70 - 130		
Toluene			0.100	0.07805		mg/Kg		78	70 - 130		
Ethylbenzene			0.100	0.08818		mg/Kg		88	70 - 130		
m,p-Xylenes			0.200	0.1715		mg/Kg		86	70 - 130		
o-Xylene			0.100	0.08957		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-18464/2-A
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18464

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07297		mg/Kg		73	70 - 130	3	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: LCSD 880-18464/2-A
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18464

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.07640		mg/Kg		76	70 - 130	2	35
Ethylbenzene			0.100	0.08377		mg/Kg		84	70 - 130	5	35
m,p-Xylenes			0.200	0.1657		mg/Kg		83	70 - 130	3	35
o-Xylene			0.100	0.08049		mg/Kg		80	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-10891-A-22-D MS
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18464

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0990	0.07275		mg/Kg		73	70 - 130
Toluene	<0.00200	U	0.0990	0.07524		mg/Kg		76	70 - 130
Ethylbenzene	<0.00200	U	0.0990	0.08490		mg/Kg		86	70 - 130
m,p-Xylenes	<0.00401	U	0.198	0.1616		mg/Kg		82	70 - 130
o-Xylene	<0.00200	U	0.0990	0.08427		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-10891-A-22-E MSD
Matrix: Solid
Analysis Batch: 18466

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18464

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.08263		mg/Kg		82	70 - 130	13	35
Toluene	<0.00200	U	0.100	0.09422		mg/Kg		94	70 - 130	22	35
Ethylbenzene	<0.00200	U	0.100	0.09487		mg/Kg		94	70 - 130	11	35
m,p-Xylenes	<0.00401	U	0.201	0.1886		mg/Kg		94	70 - 130	15	35
o-Xylene	<0.00200	U	0.100	0.09185		mg/Kg		91	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-18467/5-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18467

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 02:17	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: MB 880-18467/5-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18467

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 02:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*02/03/22 10:06*	*02/04/22 02:17*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*02/03/22 10:06*	*02/04/22 02:17*	*1*

Lab Sample ID: LCS 880-18467/1-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08145		mg/Kg		81	70 - 130		
Toluene			0.100	0.08647		mg/Kg		86	70 - 130		
Ethylbenzene			0.100	0.09778		mg/Kg		98	70 - 130		
m,p-Xylenes			0.200	0.1881		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.1011		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*180*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-18467/2-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07464		mg/Kg		75	70 - 130	9	35
Toluene			0.100	0.07488		mg/Kg		75	70 - 130	14	35
Ethylbenzene			0.100	0.08497		mg/Kg		85	70 - 130	14	35
m,p-Xylenes			0.200	0.1632		mg/Kg		82	70 - 130	14	35
o-Xylene			0.100	0.08892		mg/Kg		89	70 - 130	13	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*154*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-10893-4 MS
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: S-2 1'
Prep Type: Total/NA
Prep Batch: 18467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U F1	0.0996	0.05971	F1	mg/Kg		60	70 - 130		
Toluene	<0.00198	U F1	0.0996	0.06053	F1	mg/Kg		61	70 - 130		
Ethylbenzene	<0.00198	U F1	0.0996	0.06883	F1	mg/Kg		69	70 - 130		
m,p-Xylenes	<0.00397	U F1	0.199	0.1299	F1	mg/Kg		65	70 - 130		
o-Xylene	<0.00198	U	0.0996	0.07058		mg/Kg		71	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: 880-10893-4 MS
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: S-2 1'
Prep Type: Total/NA
Prep Batch: 18467

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	168	S1+	70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-10893-4 MSD
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: S-2 1'
Prep Type: Total/NA
Prep Batch: 18467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0996	0.06598	F1	mg/Kg		66	70 - 130	10	35
Toluene	<0.00198	U F1	0.0996	0.06460	F1	mg/Kg		65	70 - 130	7	35
Ethylbenzene	<0.00198	U F1	0.0996	0.07157		mg/Kg		72	70 - 130	4	35
m,p-Xylenes	<0.00397	U F1	0.199	0.1353	F1	mg/Kg		68	70 - 130	4	35
o-Xylene	<0.00198	U	0.0996	0.07369		mg/Kg		74	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-18410/1-A
Matrix: Solid
Analysis Batch: 18623

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18410

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		02/02/22 15:57	02/05/22 23:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/05/22 23:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 15:57	02/05/22 23:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130	02/02/22 15:57	02/05/22 23:37	1
o-Terphenyl (Surr)	100		70 - 130	02/02/22 15:57	02/05/22 23:37	1

Lab Sample ID: LCS 880-18410/2-A
Matrix: Solid
Analysis Batch: 18623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18410

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	890.3		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1301		mg/Kg		130	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	110		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: LCSD 880-18410/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18623 — **Prep Batch: 18410**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	888.9		mg/Kg		89	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1197		mg/Kg		120	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*96*		*70 - 130*
o-Terphenyl (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-10893-1 MS — **Client Sample ID: S-1 0.5'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18623 — **Prep Batch: 18410**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	1000	1117		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F2	1000	1223		mg/Kg		120	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*91*		*70 - 130*
o-Terphenyl (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-10893-1 MSD — **Client Sample ID: S-1 0.5'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18623 — **Prep Batch: 18410**

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 F2	998	876.7	F2	mg/Kg		85	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	<50.0	U F2	998	970.8	F2	mg/Kg		95	70 - 130	23	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*75*		*70 - 130*
o-Terphenyl (Surr)	*74*		*70 - 130*

Lab Sample ID: MB 880-18779/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18806 — **Prep Batch: 18779**

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		02/07/22 17:05	02/08/22 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/07/22 17:05	02/08/22 13:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/07/22 17:05	02/08/22 13:37	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: MB 880-18779/1-A
Matrix: Solid
Analysis Batch: 18806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18779

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	76		70 - 130	02/07/22 17:05	02/08/22 13:37	1
o-Terphenyl (Surr)	83		70 - 130	02/07/22 17:05	02/08/22 13:37	1

Lab Sample ID: LCS 880-18779/2-A
Matrix: Solid
Analysis Batch: 18806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	866.4		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	879.4		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	76		70 - 130
o-Terphenyl (Surr)	71		70 - 130

Lab Sample ID: LCSD 880-18779/3-A
Matrix: Solid
Analysis Batch: 18806

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18779

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	826.6		mg/Kg		83	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	853.7		mg/Kg		85	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	72		70 - 130
o-Terphenyl (Surr)	68	S1-	70 - 130

Lab Sample ID: 880-10781-A-22-E MS
Matrix: Solid
Analysis Batch: 18806

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18779

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	865.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	52.3		1000	817.4		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	71		70 - 130
o-Terphenyl (Surr)	64	S1-	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

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

Lab Sample ID: 880-10781-A-22-F MSD
Matrix: Solid
Analysis Batch: 18806

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18779

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	868.9		mg/Kg		87	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	52.3		998	821.6		mg/Kg		77	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*71*		*70 - 130*
o-Terphenyl (Surr)	*64*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18572/1-A
Matrix: Solid
Analysis Batch: 18733

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			02/09/22 21:53	1

Lab Sample ID: LCS 880-18572/2-A
Matrix: Solid
Analysis Batch: 18733

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	253.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-18572/3-A
Matrix: Solid
Analysis Batch: 18733

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	251.1		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 880-10893-1 MS
Matrix: Solid
Analysis Batch: 18733

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		
Chloride	30.4	F1	248	218.1	F1	mg/Kg		76	90 - 110		

Lab Sample ID: 880-10893-1 MSD
Matrix: Solid
Analysis Batch: 18733

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	30.4	F1	248	257.9		mg/Kg		92	90 - 110	17	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-10893-11 MS
Matrix: Solid
Analysis Batch: 18733

Client Sample ID: S-8 0.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	278	F1	250	501.8	F1	mg/Kg		89	90 - 110		

Lab Sample ID: 880-10893-11 MSD
Matrix: Solid
Analysis Batch: 18733

Client Sample ID: S-8 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	278	F1	250	508.2		mg/Kg		92	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

GC VOA

Analysis Batch: 18404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-4	S-2 1'	Total/NA	Solid	8021B	18467
880-10893-5	S-3 0.5'	Total/NA	Solid	8021B	18467
880-10893-6	S-3 1'	Total/NA	Solid	8021B	18467
880-10893-7	S-4 0.5'	Total/NA	Solid	8021B	18467
880-10893-8	S-5 0.5'	Total/NA	Solid	8021B	18467
880-10893-9	S-6 0.5'	Total/NA	Solid	8021B	18467
880-10893-10	S-7 0.5'	Total/NA	Solid	8021B	18467
880-10893-11	S-8 0.5'	Total/NA	Solid	8021B	18467
MB 880-18404/8	Method Blank	Total/NA	Solid	8021B	
MB 880-18467/5-A	Method Blank	Total/NA	Solid	8021B	18467
LCS 880-18467/1-A	Lab Control Sample	Total/NA	Solid	8021B	18467
LCSD 880-18467/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18467
880-10893-4 MS	S-2 1'	Total/NA	Solid	8021B	18467
880-10893-4 MSD	S-2 1'	Total/NA	Solid	8021B	18467

Prep Batch: 18464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	5035	
880-10893-2	S-1 1'	Total/NA	Solid	5035	
880-10893-3	S-2 0.5'	Total/NA	Solid	5035	
MB 880-18464/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18464/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18464/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10891-A-22-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10891-A-22-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	8021B	18464
880-10893-2	S-1 1'	Total/NA	Solid	8021B	18464
880-10893-3	S-2 0.5'	Total/NA	Solid	8021B	18464
MB 880-18464/5-A	Method Blank	Total/NA	Solid	8021B	18464
LCS 880-18464/1-A	Lab Control Sample	Total/NA	Solid	8021B	18464
LCSD 880-18464/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18464
880-10891-A-22-D MS	Matrix Spike	Total/NA	Solid	8021B	18464
880-10891-A-22-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18464

Prep Batch: 18467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-4	S-2 1'	Total/NA	Solid	5035	
880-10893-5	S-3 0.5'	Total/NA	Solid	5035	
880-10893-6	S-3 1'	Total/NA	Solid	5035	
880-10893-7	S-4 0.5'	Total/NA	Solid	5035	
880-10893-8	S-5 0.5'	Total/NA	Solid	5035	
880-10893-9	S-6 0.5'	Total/NA	Solid	5035	
880-10893-10	S-7 0.5'	Total/NA	Solid	5035	
880-10893-11	S-8 0.5'	Total/NA	Solid	5035	
MB 880-18467/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18467/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18467/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10893-4 MS	S-2 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

GC VOA (Continued)

Prep Batch: 18467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-4 MSD	S-2 1'	Total/NA	Solid	5035	

Analysis Batch: 18618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-4	S-2 1'	Total/NA	Solid	Total BTEX	

Analysis Batch: 18770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	Total BTEX	
880-10893-2	S-1 1'	Total/NA	Solid	Total BTEX	
880-10893-3	S-2 0.5'	Total/NA	Solid	Total BTEX	
880-10893-5	S-3 0.5'	Total/NA	Solid	Total BTEX	
880-10893-6	S-3 1'	Total/NA	Solid	Total BTEX	
880-10893-7	S-4 0.5'	Total/NA	Solid	Total BTEX	
880-10893-8	S-5 0.5'	Total/NA	Solid	Total BTEX	
880-10893-9	S-6 0.5'	Total/NA	Solid	Total BTEX	
880-10893-10	S-7 0.5'	Total/NA	Solid	Total BTEX	
880-10893-11	S-8 0.5'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-2	S-1 1'	Total/NA	Solid	8015NM Prep	
880-10893-3	S-2 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-4	S-2 1'	Total/NA	Solid	8015NM Prep	
880-10893-7	S-4 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-8	S-5 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-10	S-7 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-11	S-8 0.5'	Total/NA	Solid	8015NM Prep	
MB 880-18410/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18410/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18410/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10893-1 MS	S-1 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-1 MSD	S-1 0.5'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	8015B NM	18410
880-10893-2	S-1 1'	Total/NA	Solid	8015B NM	18410
880-10893-3	S-2 0.5'	Total/NA	Solid	8015B NM	18410
880-10893-4	S-2 1'	Total/NA	Solid	8015B NM	18410
880-10893-7	S-4 0.5'	Total/NA	Solid	8015B NM	18410
880-10893-8	S-5 0.5'	Total/NA	Solid	8015B NM	18410
880-10893-10	S-7 0.5'	Total/NA	Solid	8015B NM	18410
880-10893-11	S-8 0.5'	Total/NA	Solid	8015B NM	18410
MB 880-18410/1-A	Method Blank	Total/NA	Solid	8015B NM	18410
LCS 880-18410/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18410
LCSD 880-18410/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18410
880-10893-1 MS	S-1 0.5'	Total/NA	Solid	8015B NM	18410

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

GC Semi VOA (Continued)

Analysis Batch: 18623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1 MSD	S-1 0.5'	Total/NA	Solid	8015B NM	18410

Prep Batch: 18779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-5	S-3 0.5'	Total/NA	Solid	8015NM Prep	
880-10893-6	S-3 1'	Total/NA	Solid	8015NM Prep	
880-10893-9	S-6 0.5'	Total/NA	Solid	8015NM Prep	
MB 880-18779/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18779/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18779/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10781-A-22-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10781-A-22-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-5	S-3 0.5'	Total/NA	Solid	8015B NM	18779
880-10893-6	S-3 1'	Total/NA	Solid	8015B NM	18779
880-10893-9	S-6 0.5'	Total/NA	Solid	8015B NM	18779
MB 880-18779/1-A	Method Blank	Total/NA	Solid	8015B NM	18779
LCS 880-18779/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18779
LCSD 880-18779/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18779
880-10781-A-22-E MS	Matrix Spike	Total/NA	Solid	8015B NM	18779
880-10781-A-22-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18779

Analysis Batch: 18870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Total/NA	Solid	8015 NM	
880-10893-2	S-1 1'	Total/NA	Solid	8015 NM	
880-10893-3	S-2 0.5'	Total/NA	Solid	8015 NM	
880-10893-4	S-2 1'	Total/NA	Solid	8015 NM	
880-10893-5	S-3 0.5'	Total/NA	Solid	8015 NM	
880-10893-6	S-3 1'	Total/NA	Solid	8015 NM	
880-10893-7	S-4 0.5'	Total/NA	Solid	8015 NM	
880-10893-8	S-5 0.5'	Total/NA	Solid	8015 NM	
880-10893-9	S-6 0.5'	Total/NA	Solid	8015 NM	
880-10893-10	S-7 0.5'	Total/NA	Solid	8015 NM	
880-10893-11	S-8 0.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Soluble	Solid	DI Leach	
880-10893-2	S-1 1'	Soluble	Solid	DI Leach	
880-10893-3	S-2 0.5'	Soluble	Solid	DI Leach	
880-10893-4	S-2 1'	Soluble	Solid	DI Leach	
880-10893-5	S-3 0.5'	Soluble	Solid	DI Leach	
880-10893-6	S-3 1'	Soluble	Solid	DI Leach	
880-10893-7	S-4 0.5'	Soluble	Solid	DI Leach	
880-10893-8	S-5 0.5'	Soluble	Solid	DI Leach	
880-10893-9	S-6 0.5'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

HPLC/IC (Continued)

Leach Batch: 18572 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-10	S-7 0.5'	Soluble	Solid	DI Leach	
880-10893-11	S-8 0.5'	Soluble	Solid	DI Leach	
MB 880-18572/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18572/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18572/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10893-1 MS	S-1 0.5'	Soluble	Solid	DI Leach	
880-10893-1 MSD	S-1 0.5'	Soluble	Solid	DI Leach	
880-10893-11 MS	S-8 0.5'	Soluble	Solid	DI Leach	
880-10893-11 MSD	S-8 0.5'	Soluble	Solid	DI Leach	

Analysis Batch: 18733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10893-1	S-1 0.5'	Soluble	Solid	300.0	18572
880-10893-2	S-1 1'	Soluble	Solid	300.0	18572
880-10893-3	S-2 0.5'	Soluble	Solid	300.0	18572
880-10893-4	S-2 1'	Soluble	Solid	300.0	18572
880-10893-5	S-3 0.5'	Soluble	Solid	300.0	18572
880-10893-6	S-3 1'	Soluble	Solid	300.0	18572
880-10893-7	S-4 0.5'	Soluble	Solid	300.0	18572
880-10893-8	S-5 0.5'	Soluble	Solid	300.0	18572
880-10893-9	S-6 0.5'	Soluble	Solid	300.0	18572
880-10893-10	S-7 0.5'	Soluble	Solid	300.0	18572
880-10893-11	S-8 0.5'	Soluble	Solid	300.0	18572
MB 880-18572/1-A	Method Blank	Soluble	Solid	300.0	18572
LCS 880-18572/2-A	Lab Control Sample	Soluble	Solid	300.0	18572
LCSD 880-18572/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18572
880-10893-1 MS	S-1 0.5'	Soluble	Solid	300.0	18572
880-10893-1 MSD	S-1 0.5'	Soluble	Solid	300.0	18572
880-10893-11 MS	S-8 0.5'	Soluble	Solid	300.0	18572
880-10893-11 MSD	S-8 0.5'	Soluble	Solid	300.0	18572

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-1 0.5'

Date Collected: 02/01/22 13:20
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18464	02/03/22 09:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 08:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 00:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:08	CH	XEN MID

Client Sample ID: S-1 1'

Date Collected: 02/01/22 13:21
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18464	02/03/22 09:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 08:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 01:39	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:23	CH	XEN MID

Client Sample ID: S-2 0.5'

Date Collected: 02/01/22 13:22
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18464	02/03/22 09:51	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 08:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 02:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:27	CH	XEN MID

Client Sample ID: S-2 1'

Date Collected: 02/01/22 13:23
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 02:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18618	02/04/22 16:59	MR	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-2 1'

Lab Sample ID: 880-10893-4
Matrix: Solid
Date Collected: 02/01/22 13:23
Date Received: 02/02/22 11:10

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			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 02:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:32	CH	XEN MID

Client Sample ID: S-3 0.5'

Lab Sample ID: 880-10893-5
Matrix: Solid
Date Collected: 02/01/22 13:24
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 03:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18779	02/07/22 17:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18806	02/08/22 15:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:37	CH	XEN MID

Client Sample ID: S-3 1'

Lab Sample ID: 880-10893-6
Matrix: Solid
Date Collected: 02/01/22 13:25
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 03:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18779	02/07/22 17:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18806	02/08/22 16:08	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:52	CH	XEN MID

Client Sample ID: S-4 0.5'

Lab Sample ID: 880-10893-7
Matrix: Solid
Date Collected: 02/01/22 13:26
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 04:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 03:22	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-4 0.5'

Date Collected: 02/01/22 13:26
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 22:57	CH	XEN MID

Client Sample ID: S-5 0.5'

Date Collected: 02/01/22 13:28
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 04:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 03:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:01	CH	XEN MID

Client Sample ID: S-6 0.5'

Date Collected: 02/01/22 13:30
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 04:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18779	02/07/22 17:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18806	02/08/22 16:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:06	CH	XEN MID

Client Sample ID: S-7 0.5'

Date Collected: 02/01/22 13:32
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 05:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 04:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:11	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Client Sample ID: S-8 0.5'
Date Collected: 02/01/22 13:34
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10893-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 05:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18410	02/02/22 15:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18623	02/06/22 05:04	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:16	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. Job ID: 880-10893-1
Project/Site: SD 19 CTB - Waterline SDG: 22-0105-01

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. Job ID: 880-10893-1
Project/Site: SD 19 CTB - Waterline SDG: 22-0105-01

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Waterline

Job ID: 880-10893-1
SDG: 22-0105-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-10893-1	S-1 0.5'	Solid	02/01/22 13:20	02/02/22 11:10
880-10893-2	S-1 1'	Solid	02/01/22 13:21	02/02/22 11:10
880-10893-3	S-2 0.5'	Solid	02/01/22 13:22	02/02/22 11:10
880-10893-4	S-2 1'	Solid	02/01/22 13:23	02/02/22 11:10
880-10893-5	S-3 0.5'	Solid	02/01/22 13:24	02/02/22 11:10
880-10893-6	S-3 1'	Solid	02/01/22 13:25	02/02/22 11:10
880-10893-7	S-4 0.5'	Solid	02/01/22 13:26	02/02/22 11:10
880-10893-8	S-5 0.5'	Solid	02/01/22 13:28	02/02/22 11:10
880-10893-9	S-6 0.5'	Solid	02/01/22 13:30	02/02/22 11:10
880-10893-10	S-7 0.5'	Solid	02/01/22 13:32	02/02/22 11:10
880-10893-11	S-8 0.5'	Solid	02/01/22 13:34	02/02/22 11:10

No. 2448

10893

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202
Midland, TX 79701
432-687-0901

DATE: 2/2/2022 PAGE 1 OF 1

PO#: _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: SD 19 CTB - WATERLINE

LAI PROJECT #: 22-0105-01 COLLECTOR: DSG/RN

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☒ MTBE ☐ | 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 ☐ | 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 Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-1 0.5'		2/1/22	1320	S	1				X		X BTEX, TPH 1005, TPH 1006	
S-1 1'			1321									
S-2 0.5'			1322									
S-2 1'			1323									
S-3 0.5'			1324									
S-3 1'			1325									
S-4 0.5'			1326									
S-5 0.5'			1328									
S-6 0.5'			1330									
S-7 0.5'			1332									
S-8 0.5'			1334									

TOTAL 11

RELINQUISHED BY:(Signature) DATE/TIME 2/2/2022 RECEIVED BY: (Signature) 1110 2/2/22

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY: XENCO

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: -8.9/-8.9 THERM#: IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

880-10893 Chain of Custody

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-10893-1
SDG Number: 22-0105-01

Login Number: 10893
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12309-1
Laboratory Sample Delivery Group: 22-0105-01
Client Project/Site: SD 19 CTB Water Line

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
3/25/2022 11:50:40 AM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

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 19 CTB Water Line

Laboratory Job ID: 880-12309-1
SDG: 22-0105-01

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-12309-1
Project/Site: SD 19 CTB Water Line SDG: 22-0105-01

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery 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.
¤	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 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Job ID: 880-12309-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12309-1

Receipt
The samples were received on 3/10/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21733 and analytical batch 880-21907 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 native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch 880-21732 and analytical batch 880-21846 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Toluene, Ethylbenzene, m,p-Xylenes, o-Xylene and Xylenes, Total in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-21371 and analytical batch 880-21357 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 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-21371/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-21160 and analytical batch 880-21379 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28)

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-12079-A-1-F MS) and (880-12079-A-1-G MSD). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Client Sample ID: S-3,1

Date Collected: 03/09/22 08:50
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		03/17/22 13:09	03/18/22 21:05	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		03/17/22 13:09	03/18/22 21:05	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		03/17/22 13:09	03/18/22 21:05	1
m,p-Xylenes	<0.00399	U F1	0.00399		mg/Kg		03/17/22 13:09	03/18/22 21:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 21:05	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		03/17/22 13:09	03/18/22 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:05*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:05*	*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			03/18/22 17:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 08:40	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	<49.8	U F1	49.8		mg/Kg		03/11/22 09:52	03/12/22 06:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U F1	49.8		mg/Kg		03/11/22 09:52	03/12/22 06:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/11/22 09:52	03/12/22 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*123*		*70 - 130*	*03/11/22 09:52*	*03/12/22 06:13*	*1*
o-Terphenyl (Surr)	*124*		*70 - 130*	*03/11/22 09:52*	*03/12/22 06:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.9**		4.99		mg/Kg			03/24/22 20:34	1

Client Sample ID: S-3,3

Date Collected: 03/09/22 08:51
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/18/22 21:26	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/18/22 21:26	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/18/22 21:26	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		03/17/22 13:09	03/18/22 21:26	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/17/22 13:09	03/18/22 21:26	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/17/22 13:09	03/18/22 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:26*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:26*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Client Sample ID: S-3,3
Date Collected: 03/09/22 08:51
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-2
Matrix: Solid

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			03/18/22 17:18	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			03/14/22 08:40	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		03/11/22 10:00	03/11/22 20:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/11/22 10:00	03/11/22 20:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 10:00	03/11/22 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*94*		*70 - 130*	*03/11/22 10:00*	*03/11/22 20:05*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*03/11/22 10:00*	*03/11/22 20:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			03/24/22 21:00	1

Client Sample ID: S-3,5
Date Collected: 03/09/22 08:52
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/18/22 21:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/18/22 21:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/18/22 21:47	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/17/22 13:09	03/18/22 21:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/17/22 13:09	03/18/22 21:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/17/22 13:09	03/18/22 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:47*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/17/22 13:09*	*03/18/22 21:47*	*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			03/18/22 17:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 08:40	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	<49.8	U	49.8		mg/Kg		03/11/22 10:00	03/11/22 20:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		03/11/22 10:00	03/11/22 20:26	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Client Sample ID: S-3,5

Date Collected: 03/09/22 08:52
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-3

Matrix: Solid

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)	<49.8	U	49.8		mg/Kg		03/11/22 10:00	03/11/22 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*92*		*70 - 130*	*03/11/22 10:00*	*03/11/22 20:26*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*03/11/22 10:00*	*03/11/22 20:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/24/22 21:09	1

Client Sample ID: S-3,10

Date Collected: 03/09/22 08:53
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 16:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 16:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 16:48	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 16:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 16:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 08:00*	*03/18/22 16:48*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/18/22 16:48*	*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			03/18/22 17:18	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			03/14/22 08:40	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		03/14/22 08:36	03/15/22 17:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:36	03/15/22 17:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:36	03/15/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*03/14/22 08:36*	*03/15/22 17:30*	*1*
o-Terphenyl (Surr)	*95*		*70 - 130*	*03/14/22 08:36*	*03/15/22 17:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.51**		4.95		mg/Kg			03/24/22 21:18	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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)
880-12309-1	S-3,1	92	112
880-12309-1 MS	S-3,1	96	93
880-12309-1 MSD	S-3,1	105	94
880-12309-2	S-3,3	104	119
880-12309-3	S-3,5	97	114
880-12309-4	S-3,10	105	109
880-12543-A-2-A MS	Matrix Spike	306 S1+	101
880-12543-A-2-B MSD	Matrix Spike Duplicate	252 S1+	107
LCS 880-21732/1-A	Lab Control Sample	101	110
LCS 880-21733/1-A	Lab Control Sample	97	105
LCSD 880-21732/2-A	Lab Control Sample Dup	102	110
LCSD 880-21733/2-A	Lab Control Sample Dup	100	98
MB 880-21732/5-A	Method Blank	101	104
MB 880-21733/5-A	Method Blank	103	103

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)
880-12079-A-1-F MS	Matrix Spike	45 S1-	8 S1-
880-12079-A-1-G MSD	Matrix Spike Duplicate	50 S1-	9 S1-
880-12309-1	S-3,1	123	124
880-12309-1 MS	S-3,1	106	91
880-12309-1 MSD	S-3,1	103	89
880-12309-2	S-3,3	94	105
880-12309-3	S-3,5	92	101
880-12309-4	S-3,10	93	95
880-12311-A-1-B MS	Matrix Spike	103	96
880-12311-A-1-C MSD	Matrix Spike Duplicate	106	96
LCS 880-21371/2-A	Lab Control Sample	110	97
LCS 880-21467/2-A	Lab Control Sample	97	105
LCSD 880-21371/3-A	Lab Control Sample Dup	132 S1+	120
LCSD 880-21467/3-A	Lab Control Sample Dup	104	110
MB 880-21371/1-A	Method Blank	125	126
MB 880-21467/1-A	Method Blank	107	117

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-12309-1
Project/Site: SD 19 CTB Water Line SDG: 22-0105-01

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 880-21160/2-A	Lab Control Sample	84	89								
LCSD 880-21160/3-A	Lab Control Sample Dup	107	115								
MB 880-21160/1-A	Method Blank	100	114								

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21732/5-A
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21732

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 10:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 08:00*	*03/18/22 10:33*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/18/22 08:00*	*03/18/22 10:33*	*1*

Lab Sample ID: LCS 880-21732/1-A
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21732

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09946		mg/Kg		99	70 - 130		
Toluene			0.100	0.09811		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.09914		mg/Kg		99	70 - 130		
m,p-Xylenes			0.200	0.2039		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1001		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 880-21732/2-A
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21732

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09832		mg/Kg		98	70 - 130	1	35
Toluene			0.100	0.09691		mg/Kg		97	70 - 130	1	35
Ethylbenzene			0.100	0.09797		mg/Kg		98	70 - 130	1	35
m,p-Xylenes			0.200	0.2022		mg/Kg		101	70 - 130	1	35
o-Xylene			0.100	0.09968		mg/Kg		100	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-12543-A-2-A MS
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21732

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.00630		0.0990	0.08332		mg/Kg		78	70 - 130		
Toluene	0.341	F1	0.0990	0.8502	E F1	mg/Kg		514	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: 880-12543-A-2-A MS
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21732

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.148	F1	0.0990	0.3497	F1	mg/Kg		204	70 - 130
m,p-Xylenes	1.52	E	0.198	2.444	E 4	mg/Kg		469	70 - 130
o-Xylene	0.383	F1	0.0990	0.7030	E F1	mg/Kg		323	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*306*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-12543-A-2-B MSD
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21732

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00630		0.100	0.09134		mg/Kg		85	70 - 130	9	35
Toluene	0.341	F1	0.100	1.085	E F1	mg/Kg		742	70 - 130	24	35
Ethylbenzene	0.148	F1	0.100	0.4097	E F1	mg/Kg		262	70 - 130	16	35
m,p-Xylenes	1.52	E	0.200	3.003	E 4	mg/Kg		742	70 - 130	21	35
o-Xylene	0.383	F1	0.100	0.8516	E F1	mg/Kg		468	70 - 130	19	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*252*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: MB 880-21733/5-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21733

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 13:09	03/18/22 20:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 13:09	03/18/22 20:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/17/22 13:09*	*03/18/22 20:43*	*1*

Lab Sample ID: LCS 880-21733/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09847		mg/Kg		98	70 - 130
Toluene	0.100	0.09238		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09551		mg/Kg		96	70 - 130
m,p-Xylenes	0.200	0.1977		mg/Kg		99	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: LCS 880-21733/1-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21733/2-A
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21733

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08554		mg/Kg		86	70 - 130	14	35
Toluene			0.100	0.09210		mg/Kg		92	70 - 130	0	35
Ethylbenzene			0.100	0.09813		mg/Kg		98	70 - 130	3	35
m,p-Xylenes			0.200	0.2075		mg/Kg		104	70 - 130	5	35
o-Xylene			0.100	0.1022		mg/Kg		102	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-12309-1 MS
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: S-3,1
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.100	0.06063	F1	mg/Kg		61	70 - 130		
Toluene	<0.00200	U F1	0.100	0.06296	F1	mg/Kg		63	70 - 130		
Ethylbenzene	<0.00200	U F1	0.100	0.06414	F1	mg/Kg		64	70 - 130		
m,p-Xylenes	<0.00399	U F1	0.200	0.1365	F1	mg/Kg		68	70 - 130		
o-Xylene	<0.00200	U	0.100	0.06952		mg/Kg		70	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-12309-1 MSD
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: S-3,1
Prep Type: Total/NA
Prep Batch: 21733

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0998	0.06647	F1	mg/Kg		67	70 - 130	9	35
Toluene	<0.00200	U F1	0.0998	0.06842	F1	mg/Kg		69	70 - 130	8	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06932	F1	mg/Kg		69	70 - 130	8	35
m,p-Xylenes	<0.00399	U F1	0.200	0.1472		mg/Kg		74	70 - 130	8	35
o-Xylene	<0.00200	U	0.0998	0.07573		mg/Kg		76	70 - 130	9	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: 880-12309-1 MSD
Matrix: Solid
Analysis Batch: 21907

Client Sample ID: S-3,1
Prep Type: Total/NA
Prep Batch: 21733

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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

Lab Sample ID: MB 880-21160/1-A
Matrix: Solid
Analysis Batch: 21379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21160

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		03/08/22 14:48	03/11/22 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/08/22 14:48	03/11/22 11:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/08/22 14:48	03/11/22 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	100		70 - 130	03/08/22 14:48	03/11/22 11:04	1
o-Terphenyl (Surr)	114		70 - 130	03/08/22 14:48	03/11/22 11:04	1

Lab Sample ID: LCS 880-21160/2-A
Matrix: Solid
Analysis Batch: 21379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21160

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	816.9		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	717.8		mg/Kg		72	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	84		70 - 130
o-Terphenyl (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-21160/3-A
Matrix: Solid
Analysis Batch: 21379

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21160

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1003		mg/Kg		100	70 - 130	20	20
Diesel Range Organics (Over C10-C28)			1000	923.7	*1	mg/Kg		92	70 - 130	25	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	107		70 - 130
o-Terphenyl (Surr)	115		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: 880-12079-A-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21379 — **Prep Batch: 21160**

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	998	1066		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *1	998	1108		mg/Kg		106	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*45*	*S1-*	*70 - 130*
o-Terphenyl (Surr)	*8*	*S1-*	*70 - 130*

Lab Sample ID: 880-12079-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21379 — **Prep Batch: 21160**

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	1242		mg/Kg		122	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	998	1339		mg/Kg		130	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*50*	*S1-*	*70 - 130*
o-Terphenyl (Surr)	*9*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-21371/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21357 — **Prep Batch: 21371**

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		03/11/22 09:52	03/12/22 05:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/11/22 09:52	03/12/22 05:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/11/22 09:52	03/12/22 05:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*125*		*70 - 130*	*03/11/22 09:52*	*03/12/22 05:08*	*1*
o-Terphenyl (Surr)	*126*		*70 - 130*	*03/11/22 09:52*	*03/12/22 05:08*	*1*

Lab Sample ID: LCS 880-21371/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21357 — **Prep Batch: 21371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	848.4		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1009		mg/Kg		101	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: LCS 880-21371/2-A
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21371

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	110		70 - 130
o-Terphenyl (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-21371/3-A
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21371

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	955.3		mg/Kg		96	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1220		mg/Kg		122	70 - 130	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	132	S1+	70 - 130
o-Terphenyl (Surr)	120		70 - 130

Lab Sample ID: 880-12309-1 MS
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: S-3,1
Prep Type: Total/NA
Prep Batch: 21371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	998	1444	F1	mg/Kg		141	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	1460	F1	mg/Kg		146	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	91		70 - 130

Lab Sample ID: 880-12309-1 MSD
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: S-3,1
Prep Type: Total/NA
Prep Batch: 21371

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	<49.8	U F1	998	1422	F1	mg/Kg		139	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	1426	F1	mg/Kg		143	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	103		70 - 130
o-Terphenyl (Surr)	89		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: MB 880-21467/1-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21467

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		03/14/22 08:36	03/15/22 10:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:36	03/15/22 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*107*		*70 - 130*	*03/14/22 08:36*	*03/15/22 10:25*	*1*
o-Terphenyl (Surr)	*117*		*70 - 130*	*03/14/22 08:36*	*03/15/22 10:25*	*1*

Lab Sample ID: LCS 880-21467/2-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	837.3		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	918.7		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*97*		*70 - 130*
o-Terphenyl (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-21467/3-A
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	867.7		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1045		mg/Kg		104	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*104*		*70 - 130*
o-Terphenyl (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-12311-A-1-B MS
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	967.9		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	952.5		mg/Kg		95	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Lab Sample ID: 880-12311-A-1-B MS
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21467

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	103		70 - 130
o-Terphenyl (Surr)	96		70 - 130

Lab Sample ID: 880-12311-A-1-C MSD
Matrix: Solid
Analysis Batch: 21609

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21467

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	<49.8	U	998	1045		mg/Kg		103	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	976.3		mg/Kg		98	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	96		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21600/1-A
Matrix: Solid
Analysis Batch: 22122

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			03/24/22 20:07	1

Lab Sample ID: LCS 880-21600/2-A
Matrix: Solid
Analysis Batch: 22122

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	271.9		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-21600/3-A
Matrix: Solid
Analysis Batch: 22122

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	271.2		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-12309-1 MS
Matrix: Solid
Analysis Batch: 22122

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		
Chloride	11.9		250	283.5		mg/Kg		109	90 - 110		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-12309-1 MSD
Matrix: Solid
Analysis Batch: 22122

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	11.9		250	280.2		mg/Kg		108	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

GC VOA

Prep Batch: 21732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-4	S-3,10	Total/NA	Solid	5035	
MB 880-21732/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21732/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21732/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12543-A-2-A MS	Matrix Spike	Total/NA	Solid	5035	
880-12543-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 21733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	5035	
880-12309-2	S-3,3	Total/NA	Solid	5035	
880-12309-3	S-3,5	Total/NA	Solid	5035	
MB 880-21733/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12309-1 MS	S-3,1	Total/NA	Solid	5035	
880-12309-1 MSD	S-3,1	Total/NA	Solid	5035	

Analysis Batch: 21846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-4	S-3,10	Total/NA	Solid	8021B	21732
MB 880-21732/5-A	Method Blank	Total/NA	Solid	8021B	21732
LCS 880-21732/1-A	Lab Control Sample	Total/NA	Solid	8021B	21732
LCSD 880-21732/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21732
880-12543-A-2-A MS	Matrix Spike	Total/NA	Solid	8021B	21732
880-12543-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21732

Analysis Batch: 21907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	8021B	21733
880-12309-2	S-3,3	Total/NA	Solid	8021B	21733
880-12309-3	S-3,5	Total/NA	Solid	8021B	21733
MB 880-21733/5-A	Method Blank	Total/NA	Solid	8021B	21733
LCS 880-21733/1-A	Lab Control Sample	Total/NA	Solid	8021B	21733
LCSD 880-21733/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21733
880-12309-1 MS	S-3,1	Total/NA	Solid	8021B	21733
880-12309-1 MSD	S-3,1	Total/NA	Solid	8021B	21733

Analysis Batch: 21927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	Total BTEX	
880-12309-2	S-3,3	Total/NA	Solid	Total BTEX	
880-12309-3	S-3,5	Total/NA	Solid	Total BTEX	
880-12309-4	S-3,10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 21160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-2	S-3,3	Total/NA	Solid	8015NM Prep	
880-12309-3	S-3,5	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

GC Semi VOA (Continued)

Prep Batch: 21160 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21160/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21160/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21160/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12079-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12079-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	8015B NM	21371
MB 880-21371/1-A	Method Blank	Total/NA	Solid	8015B NM	21371
LCS 880-21371/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21371
LCSD 880-21371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21371
880-12309-1 MS	S-3,1	Total/NA	Solid	8015B NM	21371
880-12309-1 MSD	S-3,1	Total/NA	Solid	8015B NM	21371

Prep Batch: 21371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	8015NM Prep	
MB 880-21371/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21371/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12309-1 MS	S-3,1	Total/NA	Solid	8015NM Prep	
880-12309-1 MSD	S-3,1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-2	S-3,3	Total/NA	Solid	8015B NM	21160
880-12309-3	S-3,5	Total/NA	Solid	8015B NM	21160
MB 880-21160/1-A	Method Blank	Total/NA	Solid	8015B NM	21160
LCS 880-21160/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21160
LCSD 880-21160/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21160
880-12079-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	21160
880-12079-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21160

Prep Batch: 21467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-4	S-3,10	Total/NA	Solid	8015NM Prep	
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Total/NA	Solid	8015 NM	
880-12309-2	S-3,3	Total/NA	Solid	8015 NM	
880-12309-3	S-3,5	Total/NA	Solid	8015 NM	
880-12309-4	S-3,10	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

GC Semi VOA

Analysis Batch: 21609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-4	S-3,10	Total/NA	Solid	8015B NM	21467
MB 880-21467/1-A	Method Blank	Total/NA	Solid	8015B NM	21467
LCS 880-21467/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21467
LCSD 880-21467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21467
880-12311-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21467
880-12311-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21467

HPLC/IC

Leach Batch: 21600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Soluble	Solid	DI Leach	
880-12309-2	S-3,3	Soluble	Solid	DI Leach	
880-12309-3	S-3,5	Soluble	Solid	DI Leach	
880-12309-4	S-3,10	Soluble	Solid	DI Leach	
MB 880-21600/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21600/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21600/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12309-1 MS	S-3,1	Soluble	Solid	DI Leach	
880-12309-1 MSD	S-3,1	Soluble	Solid	DI Leach	

Analysis Batch: 22122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12309-1	S-3,1	Soluble	Solid	300.0	21600
880-12309-2	S-3,3	Soluble	Solid	300.0	21600
880-12309-3	S-3,5	Soluble	Solid	300.0	21600
880-12309-4	S-3,10	Soluble	Solid	300.0	21600
MB 880-21600/1-A	Method Blank	Soluble	Solid	300.0	21600
LCS 880-21600/2-A	Lab Control Sample	Soluble	Solid	300.0	21600
LCSD 880-21600/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21600
880-12309-1 MS	S-3,1	Soluble	Solid	300.0	21600
880-12309-1 MSD	S-3,1	Soluble	Solid	300.0	21600

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Client Sample ID: S-3,1
Date Collected: 03/09/22 08:50
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/18/22 21:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21927	03/18/22 17:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21471	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21371	03/11/22 09:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/12/22 06:13	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21600	03/15/22 08:29	CH	XEN MID
Soluble	Analysis	300.0		1			22122	03/24/22 20:34	CH	XEN MID

Client Sample ID: S-3,3
Date Collected: 03/09/22 08:51
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/18/22 21:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21927	03/18/22 17:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21471	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21160	03/11/22 10:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21379	03/11/22 20:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21600	03/15/22 08:29	CH	XEN MID
Soluble	Analysis	300.0		1			22122	03/24/22 21:00	CH	XEN MID

Client Sample ID: S-3,5
Date Collected: 03/09/22 08:52
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21733	03/17/22 13:09	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21907	03/18/22 21:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21927	03/18/22 17:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21471	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21160	03/11/22 10:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21379	03/11/22 20:26	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21600	03/15/22 08:29	CH	XEN MID
Soluble	Analysis	300.0		1			22122	03/24/22 21:09	CH	XEN MID

Client Sample ID: S-3,10
Date Collected: 03/09/22 08:53
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21732	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 16:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21927	03/18/22 17:18	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Client Sample ID: S-3,10

Date Collected: 03/09/22 08:53
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12309-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21471	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21467	03/14/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21609	03/15/22 17:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21600	03/15/22 08:29	CH	XEN MID
Soluble	Analysis	300.0		1			22122	03/24/22 21:18	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. Job ID: 880-12309-1
Project/Site: SD 19 CTB Water Line SDG: 22-0105-01

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: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Water Line

Job ID: 880-12309-1
SDG: 22-0105-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-12309-1	S-3,1	Solid	03/09/22 08:50	03/10/22 15:05
880-12309-2	S-3,3	Solid	03/09/22 08:51	03/10/22 15:05
880-12309-3	S-3,5	Solid	03/09/22 08:52	03/10/22 15:05
880-12309-4	S-3,10	Solid	03/09/22 08:53	03/10/22 15:05

12309 LO
~~12297~~

No. 2461

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202
Midland, TX 79701
432-687-0901

Data Reported to:

DATE: 3/10/2022 PAGE 1 OF 1

PO#: _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: SD 19 CTB Water line

LAI PROJECT #: 22-0105-01 COLLECTOR: JP + JR

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☒ MTBE ☐ | 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 ☐ | 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 Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	BTEX	TRPH 418.1	GASOLINE MOD 8015	DIESEL - MOD 8015	OIL - MOD 8015	pH	FIELD NOTES
S-3, 1		3/9/22	0850	S	1				X		X	X	X	X	X	X	
S-3, 3		"	0851	"	"				"		"	"	"	"	"		
S-3, 5		"	0852	"	"				"		"	"	"	"	"		
S-3, 10		"	0853	"	"				"		"	"	"	"	"		
TOTAL																	

880-12309 Chain of Custody

RELINQUISHED BY:(Signature) DATE/TIME 3/10/22 1505 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 2.1 THERM#: IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-12309-1
SDG Number: 22-0105-01

Login Number: 12309
List Number: 1
Creator: Teel, Brianna

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-10894-1
Laboratory Sample Delivery Group: 22-0105-4
Client Project/Site: SD 19 CTB - Manifold

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
2/15/2022 8:37:58 AM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

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 19 CTB - Manifold

Laboratory Job ID: 880-10894-1
SDG: 22-0105-4

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

Qualifiers

GC VOA

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

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.
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: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Job ID: 880-10894-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10894-1

Receipt
The samples were received on 2/2/2022 11:10 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 time was -8.8°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: S-1 0-.5' (880-10894-1), S-1 1' (880-10894-2), S-2 0-.5' (880-10894-3), S-2 1' (880-10894-4), S-3 0-.5' (880-10894-5), S-3 1' (880-10894-6), S-4 0-.5' (880-10894-7), S-4 1' (880-10894-8), S-5 0-.5' (880-10894-9), S-5 1' (880-10894-10) and (CCV 880-18404/53). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18463 and analytical batch 880-18462 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 880-18467 and analytical batch 880-18404 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
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18560 and analytical batch 880-18646 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 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-10895-A-21-C MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-1 0-.5' (880-10894-1), S-3 0-.5' (880-10894-5) and (880-10870-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18572 and analytical batch 880-18733 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike (MS) recoveries for preparation batch 880-18573 and analytical batch 880-18737 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.The associated samples are: S-2 0-.5' (880-10894-3), S-2 1' (880-10894-4), S-3 0-.5' (880-10894-5), S-3 1' (880-10894-6), S-4 0-.5' (880-10894-7), S-4 1' (880-10894-8), S-5 0-.5' (880-10894-9), S-5 1' (880-10894-10), S-6 0-.5' (880-10894-11), S-6 1' (880-10894-12) and (880-10894-A-3-D MS).

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-1 0-.5'

Lab Sample ID: 880-10894-1
Matrix: Solid
Date Collected: 02/01/22 12:55
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 08:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 08:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 08:40	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 08:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 08:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*213*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 08:40*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*02/03/22 10:06*	*02/04/22 08:40*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 16:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 16:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*63*	*S1-*	*70 - 130*	*02/04/22 11:03*	*02/06/22 16:42*	*1*
o-Terphenyl (Surr)	*71*		*70 - 130*	*02/04/22 11:03*	*02/06/22 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53.6**		4.98		mg/Kg			02/09/22 23:30	1

Client Sample ID: S-1 1'

Lab Sample ID: 880-10894-2
Matrix: Solid
Date Collected: 02/01/22 12:56
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 09:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 09:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 09:08	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 09:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 09:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*182*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 09:08*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*02/03/22 10:06*	*02/04/22 09:08*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-1 1'

Lab Sample ID: 880-10894-2
Matrix: Solid
Date Collected: 02/01/22 12:56
Date Received: 02/02/22 11:10

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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 17:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 17:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:06*	*1*
o-Terphenyl (Surr)	*76*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.1**		4.97		mg/Kg			02/09/22 23:35	1

Client Sample ID: S-2 0-.5'

Lab Sample ID: 880-10894-3
Matrix: Solid
Date Collected: 02/01/22 12:57
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 09:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 09:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 09:36	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		02/03/22 10:06	02/04/22 09:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 09:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/03/22 10:06	02/04/22 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*183*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 09:36*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/03/22 10:06*	*02/04/22 09:36*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 17:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 17:30	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-2 0-.5'

Lab Sample ID: 880-10894-3
Matrix: Solid
Date Collected: 02/01/22 12:57
Date Received: 02/02/22 11:10

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		02/04/22 11:03	02/06/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*79*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:30*	*1*
o-Terphenyl (Surr)	*89*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4190**	**F1**	25.0		mg/Kg			02/12/22 01:22	5

Client Sample ID: S-2 1'

Lab Sample ID: 880-10894-4
Matrix: Solid
Date Collected: 02/01/22 12:58
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 10:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 10:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 10:04	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 10:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 10:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*163*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 10:04*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/03/22 10:06*	*02/04/22 10:04*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 17:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 17:53	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*73*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:53*	*1*
o-Terphenyl (Surr)	*83*		*70 - 130*	*02/04/22 11:03*	*02/06/22 17:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**953**		5.01		mg/Kg			02/12/22 01:50	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-3 0-.5'

Lab Sample ID: 880-10894-5
Matrix: Solid
Date Collected: 02/01/22 12:59
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 10:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 10:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 10:32	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		02/03/22 10:06	02/04/22 10:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 10:32	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/03/22 10:06	02/04/22 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*206*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 10:32*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*02/03/22 10:06*	*02/04/22 10:32*	*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			02/04/22 16:57	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**55.8**		50.0		mg/Kg			02/08/22 16:56	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		02/04/22 11:03	02/06/22 18:16	1
Diesel Range Organics (Over C10-C28)	**55.8**		50.0		mg/Kg		02/04/22 11:03	02/06/22 18:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*66*	*S1-*	*70 - 130*	*02/04/22 11:03*	*02/06/22 18:16*	*1*
o-Terphenyl (Surr)	*76*		*70 - 130*	*02/04/22 11:03*	*02/06/22 18:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7210**		49.8		mg/Kg			02/12/22 02:00	10

Client Sample ID: S-3 1'

Lab Sample ID: 880-10894-6
Matrix: Solid
Date Collected: 02/01/22 13:00
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 11:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 11:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 11:01	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 11:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 11:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*191*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 11:01*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*02/03/22 10:06*	*02/04/22 11:01*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-3 1'

Lab Sample ID: 880-10894-6
Date Collected: 02/01/22 13:00
Matrix: Solid
Date Received: 02/02/22 11:10

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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 19:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 19:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*71*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:03*	*1*
o-Terphenyl (Surr)	*81*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4270**		24.8		mg/Kg			02/12/22 02:09	5

Client Sample ID: S-4 0-.5'

Lab Sample ID: 880-10894-7
Date Collected: 02/01/22 13:01
Matrix: Solid
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:29	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		02/03/22 10:06	02/04/22 11:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:29	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/03/22 10:06	02/04/22 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*174*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 11:29*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/03/22 10:06*	*02/04/22 11:29*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 19:26	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

Client Sample ID: S-4 0-.5' Lab Sample ID: 880-10894-7

Date Collected: 02/01/22 13:01 **Matrix: Solid**
Date Received: 02/02/22 11:10

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		02/04/22 11:03	02/06/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*76*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:26*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2270**		25.0		mg/Kg			02/12/22 02:19	5

Client Sample ID: S-4 1' Lab Sample ID: 880-10894-8

Date Collected: 02/01/22 13:02 **Matrix: Solid**
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:57	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		02/03/22 10:06	02/04/22 11:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 10:06	02/04/22 11:57	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/03/22 10:06	02/04/22 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*190*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 11:57*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/03/22 10:06*	*02/04/22 11:57*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 19:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 19:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*72*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:49*	*1*
o-Terphenyl (Surr)	*79*		*70 - 130*	*02/04/22 11:03*	*02/06/22 19:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**123**		4.96		mg/Kg			02/12/22 02:48	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-5 0-.5'

Lab Sample ID: 880-10894-9
Matrix: Solid
Date Collected: 02/01/22 13:03
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 12:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 12:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 12:24	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 12:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:06	02/04/22 12:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:06	02/04/22 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*190*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 12:24*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*02/03/22 10:06*	*02/04/22 12:24*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 20:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 20:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*78*		*70 - 130*	*02/04/22 11:03*	*02/06/22 20:12*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*02/04/22 11:03*	*02/06/22 20:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3240**		25.2		mg/Kg			02/12/22 02:57	5

Client Sample ID: S-5 1'

Lab Sample ID: 880-10894-10
Matrix: Solid
Date Collected: 02/01/22 13:04
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 12:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 12:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 12:52	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 12:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/03/22 10:06	02/04/22 12:52	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/03/22 10:06	02/04/22 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*186*	*S1+*	*70 - 130*	*02/03/22 10:06*	*02/04/22 12:52*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*02/03/22 10:06*	*02/04/22 12:52*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-5 1'

Lab Sample ID: 880-10894-10
Matrix: Solid
Date Collected: 02/01/22 13:04
Date Received: 02/02/22 11:10

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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 20:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 20:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*74*		*70 - 130*	*02/04/22 11:03*	*02/06/22 20:36*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*02/04/22 11:03*	*02/06/22 20:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2210**		24.9		mg/Kg			02/12/22 03:07	5

Client Sample ID: S-6 0-.5'

Lab Sample ID: 880-10894-11
Matrix: Solid
Date Collected: 02/01/22 13:05
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 09:47	02/04/22 09:28	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 09:47	02/04/22 09:28	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 09:47	02/04/22 09:28	1
m,p-Xylenes	<0.00397	U F1	0.00397		mg/Kg		02/03/22 09:47	02/04/22 09:28	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		02/03/22 09:47	02/04/22 09:28	1
Xylenes, Total	<0.00397	U F1	0.00397		mg/Kg		02/03/22 09:47	02/04/22 09:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:28*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:28*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 21:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 21:01	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

Client Sample ID: S-6 0-.5' Lab Sample ID: 880-10894-11

Date Collected: 02/01/22 13:05 **Matrix: Solid**
Date Received: 02/02/22 11:10

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)	<49.9	U	49.9		mg/Kg		02/04/22 11:03	02/06/22 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:01*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**126**		5.00		mg/Kg			02/12/22 03:16	1

Client Sample ID: S-6 1' Lab Sample ID: 880-10894-12

Date Collected: 02/01/22 13:06 **Matrix: Solid**
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 09:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 09:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 09:48	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 09:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 09:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:48*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:48*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 21:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 21:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:24*	*1*
o-Terphenyl (Surr)	*85*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**127**		4.99		mg/Kg			02/12/22 03:26	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-7 0-.5'

Lab Sample ID: 880-10894-13
Matrix: Solid
Date Collected: 02/01/22 13:07
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 10:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 10:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 10:08	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		02/03/22 09:47	02/04/22 10:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 10:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/03/22 09:47	02/04/22 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:08*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:08*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 21:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 21:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*74*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:48*	*1*
o-Terphenyl (Surr)	*85*		*70 - 130*	*02/04/22 11:03*	*02/06/22 21:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**116**		4.98		mg/Kg			02/12/22 03:35	1

Client Sample ID: S-7 1'

Lab Sample ID: 880-10894-14
Matrix: Solid
Date Collected: 02/01/22 13:08
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:29	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 10:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:29*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:29*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-7 1'

Lab Sample ID: 880-10894-14
Date Collected: 02/01/22 13:08
Matrix: Solid
Date Received: 02/02/22 11:10

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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 11:03	02/06/22 22:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 22:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*02/04/22 11:03*	*02/06/22 22:11*	*1*
o-Terphenyl (Surr)	*83*		*70 - 130*	*02/04/22 11:03*	*02/06/22 22:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.3**		5.01		mg/Kg			02/12/22 04:04	1

Client Sample ID: S-8 0-.5'

Lab Sample ID: 880-10894-15
Date Collected: 02/01/22 13:09
Matrix: Solid
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:49	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 10:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 10:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:49*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/03/22 09:47*	*02/04/22 10:49*	*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			02/04/22 16:57	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			02/08/22 16:56	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		02/04/22 13:33	02/06/22 01:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 13:33	02/06/22 01:58	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

Client Sample ID: S-8 0-.5' Lab Sample ID: 880-10894-15

Date Collected: 02/01/22 13:09 **Matrix: Solid**
Date Received: 02/02/22 11:10

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		02/04/22 13:33	02/06/22 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*95*		*70 - 130*	*02/04/22 13:33*	*02/06/22 01:58*	*1*
o-Terphenyl (Surr)	*97*		*70 - 130*	*02/04/22 13:33*	*02/06/22 01:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**942**		24.9		mg/Kg			02/12/22 04:14	5

Client Sample ID: S-8 1' Lab Sample ID: 880-10894-16

Date Collected: 02/01/22 13:10 **Matrix: Solid**
Date Received: 02/02/22 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:10	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 11:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:10*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:10*	*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			02/04/22 16:57	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			02/07/22 11:51	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		02/04/22 11:12	02/07/22 01:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/07/22 01:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/07/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:12*	*02/07/22 01:21*	*1*
o-Terphenyl (Surr)	*81*		*70 - 130*	*02/04/22 11:12*	*02/07/22 01:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**855**		24.9		mg/Kg			02/12/22 04:42	5

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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)
880-10893-A-4-B MS	Matrix Spike	168 S1+	98
880-10893-A-4-C MSD	Matrix Spike Duplicate	157 S1+	105
880-10894-1	S-1 0-.5'	213 S1+	79
880-10894-2	S-1 1'	182 S1+	83
880-10894-3	S-2 0-.5'	183 S1+	85
880-10894-4	S-2 1'	163 S1+	90
880-10894-5	S-3 0-.5'	206 S1+	87
880-10894-6	S-3 1'	191 S1+	84
880-10894-7	S-4 0-.5'	174 S1+	86
880-10894-8	S-4 1'	190 S1+	90
880-10894-9	S-5 0-.5'	190 S1+	87
880-10894-10	S-5 1'	186 S1+	76
880-10894-11	S-6 0-.5'	105	109
880-10894-11 MS	S-6 0-.5'	151 S1+	111
880-10894-11 MSD	S-6 0-.5'	111	95
880-10894-12	S-6 1'	112	97
880-10894-13	S-7 0-.5'	130	114
880-10894-14	S-7 1'	105	107
880-10894-15	S-8 0-.5'	96	78
880-10894-16	S-8 1'	102	105
LCS 880-18463/1-A	Lab Control Sample	117	124
LCS 880-18467/1-A	Lab Control Sample	180 S1+	95
LCSD 880-18463/2-A	Lab Control Sample Dup	97	87
LCSD 880-18467/2-A	Lab Control Sample Dup	154 S1+	87
MB 880-18361/5-A	Method Blank	109	105
MB 880-18404/8	Method Blank	120	72
MB 880-18463/5-A	Method Blank	119	102
MB 880-18467/5-A	Method Blank	128	76

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)
880-10870-A-1-C MS	Matrix Spike	73	76
880-10870-A-1-D MSD	Matrix Spike Duplicate	67 S1-	68 S1-
880-10894-1	S-1 0-.5'	63 S1-	71
880-10894-2	S-1 1'	70	76
880-10894-3	S-2 0-.5'	79	89
880-10894-4	S-2 1'	73	83
880-10894-5	S-3 0-.5'	66 S1-	76
880-10894-6	S-3 1'	71	81
880-10894-7	S-4 0-.5'	76	84
880-10894-8	S-4 1'	72	79
880-10894-9	S-5 0-.5'	78	86

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-10894-10	S-5 1'	74	84								
880-10894-11	S-6 0-.5'	77	86								
880-10894-12	S-6 1'	77	85								
880-10894-13	S-7 0-.5'	74	85								
880-10894-14	S-7 1'	75	83								
880-10894-15	S-8 0-.5'	95	97								
880-10894-16	S-8 1'	88	81								
880-10895-A-21-C MS	Matrix Spike	58 S1-	52 S1-								
880-10895-A-21-D MSD	Matrix Spike Duplicate	76	73								
880-10912-A-21-C MS	Matrix Spike	82	83								
880-10912-A-21-D MSD	Matrix Spike Duplicate	75	75								
LCS 880-18556/2-A	Lab Control Sample	94	102								
LCSD 880-18556/3-A	Lab Control Sample Dup	89	96								
MB 880-18556/1-A	Method Blank	86	97								

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 880-18560/2-A	Lab Control Sample	84	89								
LCS 880-18594/2-A	Lab Control Sample	93	88								
LCSD 880-18560/3-A	Lab Control Sample Dup	98	94								
LCSD 880-18594/3-A	Lab Control Sample Dup	100	103								
MB 880-18560/1-A	Method Blank	106	108								
MB 880-18594/1-A	Method Blank	102	107								

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18361

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:00	02/03/22 22:14	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 09:00	02/03/22 22:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:00	02/03/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 09:00	02/03/22 22:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/03/22 09:00*	*02/03/22 22:14*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:00*	*02/03/22 22:14*	*1*

Lab Sample ID: MB 880-18404/8
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Toluene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg			02/03/22 17:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			02/03/22 17:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			02/03/22 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*02/03/22 17:23*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*		*02/03/22 17:23*	*1*

Lab Sample ID: MB 880-18463/5-A
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18463

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 09:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 09:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 09:06	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 09:47	02/04/22 09:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 09:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 09:47	02/04/22 09:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:06*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/03/22 09:47*	*02/04/22 09:06*	*1*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: LCS 880-18463/1-A
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18463

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08004		mg/Kg		80	70 - 130		
Toluene			0.100	0.07854		mg/Kg		79	70 - 130		
Ethylbenzene			0.100	0.07803		mg/Kg		78	70 - 130		
m,p-Xylenes			0.200	0.1590		mg/Kg		79	70 - 130		
o-Xylene			0.100	0.07935		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

Lab Sample ID: LCSD 880-18463/2-A
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18463

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07142		mg/Kg		71	70 - 130	11	35
Toluene			0.100	0.07131		mg/Kg		71	70 - 130	10	35
Ethylbenzene			0.100	0.07194		mg/Kg		72	70 - 130	8	35
m,p-Xylenes			0.200	0.1438		mg/Kg		72	70 - 130	10	35
o-Xylene			0.100	0.07339		mg/Kg		73	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-10894-11 MS
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: S-6 0-.5'
Prep Type: Total/NA
Prep Batch: 18463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U F1	0.0996	0.02380	F1	mg/Kg		24	70 - 130		
Toluene	<0.00198	U F1	0.0996	0.01997	F1	mg/Kg		20	70 - 130		
Ethylbenzene	<0.00198	U F1	0.0996	0.02563	F1	mg/Kg		26	70 - 130		
m,p-Xylenes	<0.00397	U F1	0.199	0.04632	F1	mg/Kg		23	70 - 130		
o-Xylene	<0.00198	U F1	0.0996	0.04216	F1	mg/Kg		42	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*151*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-10894-11 MSD
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: S-6 0-.5'
Prep Type: Total/NA
Prep Batch: 18463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.03207	F1	mg/Kg		32	70 - 130	30	35
Toluene	<0.00198	U F1	0.100	0.02755	F1	mg/Kg		28	70 - 130	32	35
Ethylbenzene	<0.00198	U F1	0.100	0.03155	F1	mg/Kg		32	70 - 130	21	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: 880-10894-11 MSD
Matrix: Solid
Analysis Batch: 18462

Client Sample ID: S-6 0-.5'
Prep Type: Total/NA
Prep Batch: 18463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m,p-Xylenes	<0.00397	U F1	0.200	0.06298	F1	mg/Kg		31	70 - 130	30	35
o-Xylene	<0.00198	U F1	0.100	0.04333	F1	mg/Kg		43	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-18467/5-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18467

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:06	02/04/22 02:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 10:06	02/04/22 02:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*02/03/22 10:06*	*02/04/22 02:17*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*02/03/22 10:06*	*02/04/22 02:17*	*1*

Lab Sample ID: LCS 880-18467/1-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08145		mg/Kg		81	70 - 130		
Toluene			0.100	0.08647		mg/Kg		86	70 - 130		
Ethylbenzene			0.100	0.09778		mg/Kg		98	70 - 130		
m,p-Xylenes			0.200	0.1881		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.1011		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*180*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-18467/2-A
Matrix: Solid
Analysis Batch: 18404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07464		mg/Kg		75	70 - 130	9	35
Toluene			0.100	0.07488		mg/Kg		75	70 - 130	14	35
Ethylbenzene			0.100	0.08497		mg/Kg		85	70 - 130	14	35
m,p-Xylenes			0.200	0.1632		mg/Kg		82	70 - 130	14	35
o-Xylene			0.100	0.08892		mg/Kg		89	70 - 130	13	35

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: 880-10893-A-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18404 — **Prep Batch: 18467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1	0.0996	0.05971	F1	mg/Kg		60	70 - 130
Toluene	<0.00198	U F1	0.0996	0.06053	F1	mg/Kg		61	70 - 130
Ethylbenzene	<0.00198	U F1	0.0996	0.06883	F1	mg/Kg		69	70 - 130
m,p-Xylenes	<0.00397	U F1	0.199	0.1299	F1	mg/Kg		65	70 - 130
o-Xylene	<0.00198	U	0.0996	0.07058		mg/Kg		71	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	168	S1+	70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-10893-A-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18404 — **Prep Batch: 18467**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0996	0.06598	F1	mg/Kg		66	70 - 130	10	35
Toluene	<0.00198	U F1	0.0996	0.06460	F1	mg/Kg		65	70 - 130	7	35
Ethylbenzene	<0.00198	U F1	0.0996	0.07157		mg/Kg		72	70 - 130	4	35
m,p-Xylenes	<0.00397	U F1	0.199	0.1353	F1	mg/Kg		68	70 - 130	4	35
o-Xylene	<0.00198	U	0.0996	0.07369		mg/Kg		74	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-18556/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18649 — **Prep Batch: 18556**

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		02/04/22 11:03	02/06/22 12:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 12:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:03	02/06/22 12:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	86		70 - 130	02/04/22 11:03	02/06/22 12:53	1
o-Terphenyl (Surr)	97		70 - 130	02/04/22 11:03	02/06/22 12:53	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: LCS 880-18556/2-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18556

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	825.5		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1095		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*94*		*70 - 130*
o-Terphenyl (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-18556/3-A
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18556

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	799.4		mg/Kg		80	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1051		mg/Kg		105	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*89*		*70 - 130*
o-Terphenyl (Surr)	*96*		*70 - 130*

Lab Sample ID: 880-10870-A-1-C MS
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	935.8		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	965.8		mg/Kg		93	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*73*		*70 - 130*
o-Terphenyl (Surr)	*76*		*70 - 130*

Lab Sample ID: 880-10870-A-1-D MSD
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18556

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	784.1		mg/Kg		74	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	873.3		mg/Kg		84	70 - 130	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*67*	*S1-*	*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: 880-10870-A-1-D MSD
Matrix: Solid
Analysis Batch: 18649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18556

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	68	S1-	70 - 130

Lab Sample ID: MB 880-18560/1-A
Matrix: Solid
Analysis Batch: 18646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18560

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		02/04/22 11:12	02/06/22 21:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/06/22 21:12	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/06/22 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	106		70 - 130	02/04/22 11:12	02/06/22 21:12	1
o-Terphenyl (Surr)	108		70 - 130	02/04/22 11:12	02/06/22 21:12	1

Lab Sample ID: LCS 880-18560/2-A
Matrix: Solid
Analysis Batch: 18646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18560

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	966.6		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	936.4		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	84		70 - 130
o-Terphenyl (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-18560/3-A
Matrix: Solid
Analysis Batch: 18646

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18560

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	994.4		mg/Kg		99	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	901.7		mg/Kg		90	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	98		70 - 130
o-Terphenyl (Surr)	94		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: 880-10895-A-21-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18646 — **Prep Batch: 18560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	1000	649.9	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1 F2	1000	661.8	F1	mg/Kg		66	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*58*	*S1-*	*70 - 130*
o-Terphenyl (Surr)	*52*	*S1-*	*70 - 130*

Lab Sample ID: 880-10895-A-21-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18646 — **Prep Batch: 18560**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1 F2	998	1121	F2	mg/Kg		109	70 - 130	53	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1 F2	998	953.1	F2	mg/Kg		96	70 - 130	36	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*76*		*70 - 130*
o-Terphenyl (Surr)	*73*		*70 - 130*

Lab Sample ID: MB 880-18594/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18620 — **Prep Batch: 18594**

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		02/04/22 13:33	02/05/22 21:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 13:33	02/05/22 21:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 13:33	02/05/22 21:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*02/04/22 13:33*	*02/05/22 21:26*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*02/04/22 13:33*	*02/05/22 21:26*	*1*

Lab Sample ID: LCS 880-18594/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18620 — **Prep Batch: 18594**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1110		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1191		mg/Kg		119	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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

Lab Sample ID: LCS 880-18594/2-A
Matrix: Solid
Analysis Batch: 18620

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18594

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	93		70 - 130
o-Terphenyl (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-18594/3-A
Matrix: Solid
Analysis Batch: 18620

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18594

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1103		mg/Kg		110	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1159		mg/Kg		116	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	100		70 - 130
o-Terphenyl (Surr)	103		70 - 130

Lab Sample ID: 880-10912-A-21-C MS
Matrix: Solid
Analysis Batch: 18620

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18594

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	1126		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1084		mg/Kg		108	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	82		70 - 130
o-Terphenyl (Surr)	83		70 - 130

Lab Sample ID: 880-10912-A-21-D MSD
Matrix: Solid
Analysis Batch: 18620

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 18594

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	1063		mg/Kg		104	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	954.0		mg/Kg		96	70 - 130	13	20

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

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18572/1-A
Matrix: Solid
Analysis Batch: 18733

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			02/09/22 21:53	1

Lab Sample ID: LCS 880-18572/2-A
Matrix: Solid
Analysis Batch: 18733

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	253.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-18572/3-A
Matrix: Solid
Analysis Batch: 18733

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	251.1		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 880-10893-A-11-D MS
Matrix: Solid
Analysis Batch: 18733

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	278	F1	250	501.8	F1	mg/Kg		89	90 - 110		

Lab Sample ID: 880-10893-A-11-E MSD
Matrix: Solid
Analysis Batch: 18733

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	278	F1	250	508.2		mg/Kg		92	90 - 110	1	20

Lab Sample ID: MB 880-18573/1-A
Matrix: Solid
Analysis Batch: 18737

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			02/12/22 00:52	1

Lab Sample ID: LCS 880-18573/2-A
Matrix: Solid
Analysis Batch: 18737

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	267.7		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-18573/3-A
Matrix: Solid
Analysis Batch: 18737

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	265.7		mg/Kg		106	90 - 110	1	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10894-3 MS
Matrix: Solid
Analysis Batch: 18737

Client Sample ID: S-2 0-.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	4190	F1	1250	5577	F1	mg/Kg		111	90 - 110		

Lab Sample ID: 880-10894-3 MSD
Matrix: Solid
Analysis Batch: 18737

Client Sample ID: S-2 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	4190	F1	1250	5561		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-10894-13 MS
Matrix: Solid
Analysis Batch: 18737

Client Sample ID: S-7 0-.5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	116		249	386.9		mg/Kg		109	90 - 110		

Lab Sample ID: 880-10894-13 MSD
Matrix: Solid
Analysis Batch: 18737

Client Sample ID: S-7 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	116		249	382.5		mg/Kg		107	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

GC VOA

Prep Batch: 18361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18361/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 18404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	8021B	18467
880-10894-2	S-1 1'	Total/NA	Solid	8021B	18467
880-10894-3	S-2 0-.5'	Total/NA	Solid	8021B	18467
880-10894-4	S-2 1'	Total/NA	Solid	8021B	18467
880-10894-5	S-3 0-.5'	Total/NA	Solid	8021B	18467
880-10894-6	S-3 1'	Total/NA	Solid	8021B	18467
880-10894-7	S-4 0-.5'	Total/NA	Solid	8021B	18467
880-10894-8	S-4 1'	Total/NA	Solid	8021B	18467
880-10894-9	S-5 0-.5'	Total/NA	Solid	8021B	18467
880-10894-10	S-5 1'	Total/NA	Solid	8021B	18467
MB 880-18404/8	Method Blank	Total/NA	Solid	8021B	
MB 880-18467/5-A	Method Blank	Total/NA	Solid	8021B	18467
LCS 880-18467/1-A	Lab Control Sample	Total/NA	Solid	8021B	18467
LCSD 880-18467/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18467
880-10893-A-4-B MS	Matrix Spike	Total/NA	Solid	8021B	18467
880-10893-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18467

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-11	S-6 0-.5'	Total/NA	Solid	8021B	18463
880-10894-12	S-6 1'	Total/NA	Solid	8021B	18463
880-10894-13	S-7 0-.5'	Total/NA	Solid	8021B	18463
880-10894-14	S-7 1'	Total/NA	Solid	8021B	18463
880-10894-15	S-8 0-.5'	Total/NA	Solid	8021B	18463
880-10894-16	S-8 1'	Total/NA	Solid	8021B	18463
MB 880-18361/5-A	Method Blank	Total/NA	Solid	8021B	18361
MB 880-18463/5-A	Method Blank	Total/NA	Solid	8021B	18463
LCS 880-18463/1-A	Lab Control Sample	Total/NA	Solid	8021B	18463
LCSD 880-18463/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18463
880-10894-11 MS	S-6 0-.5'	Total/NA	Solid	8021B	18463
880-10894-11 MSD	S-6 0-.5'	Total/NA	Solid	8021B	18463

Prep Batch: 18463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-11	S-6 0-.5'	Total/NA	Solid	5035	
880-10894-12	S-6 1'	Total/NA	Solid	5035	
880-10894-13	S-7 0-.5'	Total/NA	Solid	5035	
880-10894-14	S-7 1'	Total/NA	Solid	5035	
880-10894-15	S-8 0-.5'	Total/NA	Solid	5035	
880-10894-16	S-8 1'	Total/NA	Solid	5035	
MB 880-18463/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18463/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18463/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10894-11 MS	S-6 0-.5'	Total/NA	Solid	5035	
880-10894-11 MSD	S-6 0-.5'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

GC VOA

Prep Batch: 18467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	5035	
880-10894-2	S-1 1'	Total/NA	Solid	5035	
880-10894-3	S-2 0-.5'	Total/NA	Solid	5035	
880-10894-4	S-2 1'	Total/NA	Solid	5035	
880-10894-5	S-3 0-.5'	Total/NA	Solid	5035	
880-10894-6	S-3 1'	Total/NA	Solid	5035	
880-10894-7	S-4 0-.5'	Total/NA	Solid	5035	
880-10894-8	S-4 1'	Total/NA	Solid	5035	
880-10894-9	S-5 0-.5'	Total/NA	Solid	5035	
880-10894-10	S-5 1'	Total/NA	Solid	5035	
MB 880-18467/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18467/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18467/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10893-A-4-B MS	Matrix Spike	Total/NA	Solid	5035	
880-10893-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-2	S-1 1'	Total/NA	Solid	Total BTEX	
880-10894-3	S-2 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-4	S-2 1'	Total/NA	Solid	Total BTEX	
880-10894-5	S-3 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-6	S-3 1'	Total/NA	Solid	Total BTEX	
880-10894-7	S-4 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-8	S-4 1'	Total/NA	Solid	Total BTEX	
880-10894-9	S-5 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-10	S-5 1'	Total/NA	Solid	Total BTEX	
880-10894-11	S-6 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-12	S-6 1'	Total/NA	Solid	Total BTEX	
880-10894-13	S-7 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-14	S-7 1'	Total/NA	Solid	Total BTEX	
880-10894-15	S-8 0-.5'	Total/NA	Solid	Total BTEX	
880-10894-16	S-8 1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-2	S-1 1'	Total/NA	Solid	8015NM Prep	
880-10894-3	S-2 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-4	S-2 1'	Total/NA	Solid	8015NM Prep	
880-10894-5	S-3 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-6	S-3 1'	Total/NA	Solid	8015NM Prep	
880-10894-7	S-4 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-8	S-4 1'	Total/NA	Solid	8015NM Prep	
880-10894-9	S-5 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-10	S-5 1'	Total/NA	Solid	8015NM Prep	
880-10894-11	S-6 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-12	S-6 1'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

GC Semi VOA (Continued)

Prep Batch: 18556 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-13	S-7 0-.5'	Total/NA	Solid	8015NM Prep	
880-10894-14	S-7 1'	Total/NA	Solid	8015NM Prep	
MB 880-18556/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18556/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10870-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10870-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 18560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-16	S-8 1'	Total/NA	Solid	8015NM Prep	
MB 880-18560/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18560/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10895-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10895-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 18594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-15	S-8 0-.5'	Total/NA	Solid	8015NM Prep	
MB 880-18594/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18594/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18594/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10912-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10912-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-15	S-8 0-.5'	Total/NA	Solid	8015B NM	18594
MB 880-18594/1-A	Method Blank	Total/NA	Solid	8015B NM	18594
LCS 880-18594/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18594
LCSD 880-18594/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18594
880-10912-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18594
880-10912-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18594

Analysis Batch: 18646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-16	S-8 1'	Total/NA	Solid	8015B NM	18560
MB 880-18560/1-A	Method Blank	Total/NA	Solid	8015B NM	18560
LCS 880-18560/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18560
LCSD 880-18560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18560
880-10895-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18560
880-10895-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18560

Analysis Batch: 18649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-2	S-1 1'	Total/NA	Solid	8015B NM	18556
880-10894-3	S-2 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-4	S-2 1'	Total/NA	Solid	8015B NM	18556
880-10894-5	S-3 0-.5'	Total/NA	Solid	8015B NM	18556

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

GC Semi VOA (Continued)

Analysis Batch: 18649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-6	S-3 1'	Total/NA	Solid	8015B NM	18556
880-10894-7	S-4 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-8	S-4 1'	Total/NA	Solid	8015B NM	18556
880-10894-9	S-5 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-10	S-5 1'	Total/NA	Solid	8015B NM	18556
880-10894-11	S-6 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-12	S-6 1'	Total/NA	Solid	8015B NM	18556
880-10894-13	S-7 0-.5'	Total/NA	Solid	8015B NM	18556
880-10894-14	S-7 1'	Total/NA	Solid	8015B NM	18556
MB 880-18556/1-A	Method Blank	Total/NA	Solid	8015B NM	18556
LCS 880-18556/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18556
LCSD 880-18556/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18556
880-10870-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18556
880-10870-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18556

Analysis Batch: 18702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-16	S-8 1'	Total/NA	Solid	8015 NM	

Analysis Batch: 18870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Total/NA	Solid	8015 NM	
880-10894-2	S-1 1'	Total/NA	Solid	8015 NM	
880-10894-3	S-2 0-.5'	Total/NA	Solid	8015 NM	
880-10894-4	S-2 1'	Total/NA	Solid	8015 NM	
880-10894-5	S-3 0-.5'	Total/NA	Solid	8015 NM	
880-10894-6	S-3 1'	Total/NA	Solid	8015 NM	
880-10894-7	S-4 0-.5'	Total/NA	Solid	8015 NM	
880-10894-8	S-4 1'	Total/NA	Solid	8015 NM	
880-10894-9	S-5 0-.5'	Total/NA	Solid	8015 NM	
880-10894-10	S-5 1'	Total/NA	Solid	8015 NM	
880-10894-11	S-6 0-.5'	Total/NA	Solid	8015 NM	
880-10894-12	S-6 1'	Total/NA	Solid	8015 NM	
880-10894-13	S-7 0-.5'	Total/NA	Solid	8015 NM	
880-10894-14	S-7 1'	Total/NA	Solid	8015 NM	
880-10894-15	S-8 0-.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Soluble	Solid	DI Leach	
880-10894-2	S-1 1'	Soluble	Solid	DI Leach	
MB 880-18572/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18572/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18572/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10893-A-11-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10893-A-11-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

HPLC/IC

Leach Batch: 18573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-3	S-2 0-.5'	Soluble	Solid	DI Leach	
880-10894-4	S-2 1'	Soluble	Solid	DI Leach	
880-10894-5	S-3 0-.5'	Soluble	Solid	DI Leach	
880-10894-6	S-3 1'	Soluble	Solid	DI Leach	
880-10894-7	S-4 0-.5'	Soluble	Solid	DI Leach	
880-10894-8	S-4 1'	Soluble	Solid	DI Leach	
880-10894-9	S-5 0-.5'	Soluble	Solid	DI Leach	
880-10894-10	S-5 1'	Soluble	Solid	DI Leach	
880-10894-11	S-6 0-.5'	Soluble	Solid	DI Leach	
880-10894-12	S-6 1'	Soluble	Solid	DI Leach	
880-10894-13	S-7 0-.5'	Soluble	Solid	DI Leach	
880-10894-14	S-7 1'	Soluble	Solid	DI Leach	
880-10894-15	S-8 0-.5'	Soluble	Solid	DI Leach	
880-10894-16	S-8 1'	Soluble	Solid	DI Leach	
MB 880-18573/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18573/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18573/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10894-3 MS	S-2 0-.5'	Soluble	Solid	DI Leach	
880-10894-3 MSD	S-2 0-.5'	Soluble	Solid	DI Leach	
880-10894-13 MS	S-7 0-.5'	Soluble	Solid	DI Leach	
880-10894-13 MSD	S-7 0-.5'	Soluble	Solid	DI Leach	

Analysis Batch: 18733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-1	S-1 0-.5'	Soluble	Solid	300.0	18572
880-10894-2	S-1 1'	Soluble	Solid	300.0	18572
MB 880-18572/1-A	Method Blank	Soluble	Solid	300.0	18572
LCS 880-18572/2-A	Lab Control Sample	Soluble	Solid	300.0	18572
LCSD 880-18572/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18572
880-10893-A-11-D MS	Matrix Spike	Soluble	Solid	300.0	18572
880-10893-A-11-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18572

Analysis Batch: 18737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-3	S-2 0-.5'	Soluble	Solid	300.0	18573
880-10894-4	S-2 1'	Soluble	Solid	300.0	18573
880-10894-5	S-3 0-.5'	Soluble	Solid	300.0	18573
880-10894-6	S-3 1'	Soluble	Solid	300.0	18573
880-10894-7	S-4 0-.5'	Soluble	Solid	300.0	18573
880-10894-8	S-4 1'	Soluble	Solid	300.0	18573
880-10894-9	S-5 0-.5'	Soluble	Solid	300.0	18573
880-10894-10	S-5 1'	Soluble	Solid	300.0	18573
880-10894-11	S-6 0-.5'	Soluble	Solid	300.0	18573
880-10894-12	S-6 1'	Soluble	Solid	300.0	18573
880-10894-13	S-7 0-.5'	Soluble	Solid	300.0	18573
880-10894-14	S-7 1'	Soluble	Solid	300.0	18573
880-10894-15	S-8 0-.5'	Soluble	Solid	300.0	18573
880-10894-16	S-8 1'	Soluble	Solid	300.0	18573
MB 880-18573/1-A	Method Blank	Soluble	Solid	300.0	18573
LCS 880-18573/2-A	Lab Control Sample	Soluble	Solid	300.0	18573
LCSD 880-18573/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18573

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

HPLC/IC (Continued)

Analysis Batch: 18737 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10894-3 MS	S-2 0-.5'	Soluble	Solid	300.0	18573
880-10894-3 MSD	S-2 0-.5'	Soluble	Solid	300.0	18573
880-10894-13 MS	S-7 0-.5'	Soluble	Solid	300.0	18573
880-10894-13 MSD	S-7 0-.5'	Soluble	Solid	300.0	18573

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-1 0-.5'

Lab Sample ID: 880-10894-1
Matrix: Solid
Date Collected: 02/01/22 12:55
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 08:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:30	CH	XEN MID

Client Sample ID: S-1 1'

Lab Sample ID: 880-10894-2
Matrix: Solid
Date Collected: 02/01/22 12:56
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 09:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 17:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18572	02/04/22 12:49	CH	XEN MID
Soluble	Analysis	300.0		1			18733	02/09/22 23:35	CH	XEN MID

Client Sample ID: S-2 0-.5'

Lab Sample ID: 880-10894-3
Matrix: Solid
Date Collected: 02/01/22 12:57
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 09:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 17:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 01:22	SC	XEN MID

Client Sample ID: S-2 1'

Lab Sample ID: 880-10894-4
Matrix: Solid
Date Collected: 02/01/22 12:58
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 10:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-2 1'
Date Collected: 02/01/22 12:58
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 17:53	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 01:50	SC	XEN MID

Client Sample ID: S-3 0-.5'
Date Collected: 02/01/22 12:59
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 10:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 18:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		10			18737	02/12/22 02:00	SC	XEN MID

Client Sample ID: S-3 1'
Date Collected: 02/01/22 13:00
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 11:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 02:09	SC	XEN MID

Client Sample ID: S-4 0-.5'
Date Collected: 02/01/22 13:01
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 11:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 19:26	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-4 0-.5'

Lab Sample ID: 880-10894-7
Matrix: Solid
Date Collected: 02/01/22 13:01
Date Received: 02/02/22 11:10

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 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 02:19	SC	XEN MID

Client Sample ID: S-4 1'

Lab Sample ID: 880-10894-8
Matrix: Solid
Date Collected: 02/01/22 13:02
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 11:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 19:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 02:48	SC	XEN MID

Client Sample ID: S-5 0-.5'

Lab Sample ID: 880-10894-9
Matrix: Solid
Date Collected: 02/01/22 13:03
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 12:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 20:12	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 02:57	SC	XEN MID

Client Sample ID: S-5 1'

Lab Sample ID: 880-10894-10
Matrix: Solid
Date Collected: 02/01/22 13:04
Date Received: 02/02/22 11:10

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	18467	02/03/22 10:06	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 12:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 20:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 03:07	SC	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-6 0-.5'
Date Collected: 02/01/22 13:05
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 09:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 21:01	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 03:16	SC	XEN MID

Client Sample ID: S-6 1'
Date Collected: 02/01/22 13:06
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 09:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 21:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 03:26	SC	XEN MID

Client Sample ID: S-7 0-.5'
Date Collected: 02/01/22 13:07
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 10:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 21:48	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 03:35	SC	XEN MID

Client Sample ID: S-7 1'
Date Collected: 02/01/22 13:08
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10894-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 10:29	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Client Sample ID: S-7 1'

Lab Sample ID: 880-10894-14
Matrix: Solid
Date Collected: 02/01/22 13:08
Date Received: 02/02/22 11:10

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			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18556	02/04/22 11:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18649	02/06/22 22:11	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		1			18737	02/12/22 04:04	SC	XEN MID

Client Sample ID: S-8 0-.5'

Lab Sample ID: 880-10894-15
Matrix: Solid
Date Collected: 02/01/22 13:09
Date Received: 02/02/22 11:10

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	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 10:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18870	02/08/22 16:56	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18594	02/04/22 13:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18620	02/06/22 01:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 04:14	SC	XEN MID

Client Sample ID: S-8 1'

Lab Sample ID: 880-10894-16
Matrix: Solid
Date Collected: 02/01/22 13:10
Date Received: 02/02/22 11:10

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	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 11:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18617	02/04/22 16:57	MR	XEN MID
Total/NA	Analysis	8015 NM		1			18702	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18560	02/04/22 11:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/07/22 01:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18573	02/04/22 12:51	CH	XEN MID
Soluble	Analysis	300.0		5			18737	02/12/22 04:42	SC	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: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

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. Job ID: 880-10894-1
Project/Site: SD 19 CTB - Manifold SDG: 22-0105-4

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB - Manifold

Job ID: 880-10894-1
SDG: 22-0105-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-10894-1	S-1 0-.5'	Solid	02/01/22 12:55	02/02/22 11:10
880-10894-2	S-1 1'	Solid	02/01/22 12:56	02/02/22 11:10
880-10894-3	S-2 0-.5'	Solid	02/01/22 12:57	02/02/22 11:10
880-10894-4	S-2 1'	Solid	02/01/22 12:58	02/02/22 11:10
880-10894-5	S-3 0-.5'	Solid	02/01/22 12:59	02/02/22 11:10
880-10894-6	S-3 1'	Solid	02/01/22 13:00	02/02/22 11:10
880-10894-7	S-4 0-.5'	Solid	02/01/22 13:01	02/02/22 11:10
880-10894-8	S-4 1'	Solid	02/01/22 13:02	02/02/22 11:10
880-10894-9	S-5 0-.5'	Solid	02/01/22 13:03	02/02/22 11:10
880-10894-10	S-5 1'	Solid	02/01/22 13:04	02/02/22 11:10
880-10894-11	S-6 0-.5'	Solid	02/01/22 13:05	02/02/22 11:10
880-10894-12	S-6 1'	Solid	02/01/22 13:06	02/02/22 11:10
880-10894-13	S-7 0-.5'	Solid	02/01/22 13:07	02/02/22 11:10
880-10894-14	S-7 1'	Solid	02/01/22 13:08	02/02/22 11:10
880-10894-15	S-8 0-.5'	Solid	02/01/22 13:09	02/02/22 11:10
880-10894-16	S-8 1'	Solid	02/01/22 13:10	02/02/22 11:10

No. 2446

10894

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202
Midland, TX 79701
432-687-0901

DATE: 2/2/2022 PAGE 1 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: SD 19 CTB - MANIFOLD

LAI PROJECT #: 22-0105-04 COLLECTOR: DSG/BN

Data Reported to:

TRRP report? ☐ Yes ☒ No

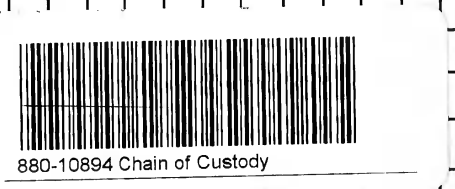
TIME ZONE: Time zone/State: NM/MST

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☒ MTBE ☐ | 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 ☐ | 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 Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	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	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
S-1 0.5'		2/1/22	1255	S	1				X		X		X	X	X													X		
S-1 1'			1256																											
S-2 0.5'			1257																											
S-2 1'			1258																											
S-3 0.5'			1259																											
S-3 1'			1300																											
S-4 0.5'			1301																											
S-4 1'			1302																											
S-5 0.5'			1303																											
S-5 1'			1304																											
S-6 0.5'			1305																											
S-6 1'			1306																											
S-7 0.5'			1307																											
S-7 1'			1308																											
S-8 0.5'			1309																											
TOTAL 15																														



RELINQUISHED BY:(Signature) DATE/TIME 2/2/2022 RECEIVED BY: (Signature) 1110 2/2/22

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY: VENCO

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: -0.9/-0.8 THERM#: IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

No. 2447

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202
Midland, TX 79701
432-687-0901

DATE: 2/2/2022 PAGE 2 OF 2

PO#: _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: SD CTB 19 - MANIFOLD

LAI PROJECT #: 22-0105-04 COLLECTOR: DSGIRN

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST/NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl, HNO_3, H_2SO_4 ☐ NaOH ☐, ICE, UNPRESSERVED

ANALYSES: BTEX ☒ MTBE ☐ | 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 ☐ | 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 ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ CYANIDE ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	BTEX ☒ MTBE ☐	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 ☐	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 ☐	pH ☐ HEXAVALENT CHROMIUM ☐ CYANIDE ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
S-8 1'		2/1/22	1310	S	1				X		X		X	X	X														X			
TOTAL 1																															

RELINQUISHED BY:(Signature) DATE/TIME 2/2/2022 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY: XENCO

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: _____ THERM#: _____
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-10894-1
SDG Number: 22-0105-4

Login Number: 10894
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-12315-1
Laboratory Sample Delivery Group: 22-0105-04
Client Project/Site: SD 19 CTB Manifold

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
3/25/2022 9:38:33 AM

Holly Taylor, Project Manager
(806)794-1296
holly.taylor@eurofinset.com

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Laboratory Job ID: 880-12315-1
SDG: 22-0105-04

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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.
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: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Job ID: 880-12315-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12315-1

Comments
No additional comments.

Receipt
The samples were received on 3/10/2022 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1º 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 880-21371 and analytical batch 880-21357 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 sample was outside control limits: (LCSD 880-21371/3-A). Evidence of matrix interferences is not obvious.

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

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22210 and analytical batch 880-22211 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 300.0: The matrix spike (MS) recoveries for preparation batch 880-21602 and analytical batch 880-22052 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.

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 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-2,1

Date Collected: 03/08/22 12:30
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 22:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 22:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 22:15	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 22:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 22:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:15*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:15*	*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			03/18/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 08:40	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	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 21:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 21:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*03/14/22 08:40*	*03/14/22 21:56*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*03/14/22 08:40*	*03/14/22 21:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5960**		49.8		mg/Kg			03/24/22 02:49	10

Client Sample ID: S-2,3

Date Collected: 03/08/22 12:31
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/18/22 08:00	03/18/22 22:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/18/22 08:00	03/18/22 22:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/18/22 08:00	03/18/22 22:36	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		03/18/22 08:00	03/18/22 22:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/18/22 08:00	03/18/22 22:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/18/22 08:00	03/18/22 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:36*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:36*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-2,3
Date Collected: 03/08/22 12:31
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-2
Matrix: Solid

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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/14/22 23:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/14/22 23:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/14/22 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:00*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4350**		24.9		mg/Kg			03/24/22 02:58	5

Client Sample ID: S-2,5
Date Collected: 03/08/22 12:32
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 22:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 22:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 22:57	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 22:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 22:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:57*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/18/22 08:00*	*03/18/22 22:57*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/14/22 23:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/14/22 23:22	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-2,5

Date Collected: 03/08/22 12:32
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/14/22 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*111*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:22*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3420**		25.0		mg/Kg			03/24/22 03:07	5

Client Sample ID: S-2,10

Date Collected: 03/08/22 12:33
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:17	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 23:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:17*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:17*	*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			03/18/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 08:40	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	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 23:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 23:44	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/14/22 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*118*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:44*	*1*
o-Terphenyl (Surr)	*118*		*70 - 130*	*03/14/22 08:40*	*03/14/22 23:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.7**		5.00		mg/Kg			03/24/22 03:34	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-3.1

Date Collected: 03/08/22 11:05
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-5

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 23:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 23:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 23:38	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 23:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/18/22 23:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/18/22 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:38*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:38*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 00:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 00:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*106*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:03*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7370**		49.7		mg/Kg			03/24/22 03:42	10

Client Sample ID: S-3,3

Date Collected: 03/08/22 11:06
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-6

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:58	1
Toluene	**0.00310**		0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:58	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		03/18/22 08:00	03/18/22 23:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 23:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/18/22 08:00	03/18/22 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:58*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/18/22 23:58*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-3,3

Date Collected: 03/08/22 11:06
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-6

Matrix: Solid

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			03/18/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**185**		50.0		mg/Kg			03/14/22 08:40	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		03/14/22 08:40	03/15/22 00:23	1
Diesel Range Organics (Over C10-C28)	**185**		50.0		mg/Kg		03/14/22 08:40	03/15/22 00:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:23*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20700**		248		mg/Kg			03/24/22 03:51	50

Client Sample ID: S-3,5

Date Collected: 03/08/22 11:07
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-7

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 00:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 00:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 00:19	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/19/22 00:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 00:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/19/22 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/18/22 08:00*	*03/19/22 00:19*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/18/22 08:00*	*03/19/22 00:19*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 00:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 00:43	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-3,5

Date Collected: 03/08/22 11:07
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*105*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:43*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*03/14/22 08:40*	*03/15/22 00:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4850**		50.2		mg/Kg			03/24/22 04:00	10

Client Sample ID: S-3,10

Date Collected: 03/08/22 11:08
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-8

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/18/22 08:00	03/19/22 00:40	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/18/22 08:00	03/19/22 00:40	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/18/22 08:00	03/19/22 00:40	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		03/18/22 08:00	03/19/22 00:40	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/18/22 08:00	03/19/22 00:40	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/18/22 08:00	03/19/22 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/18/22 08:00*	*03/19/22 00:40*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/19/22 00:40*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 01:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 01:04	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:04*	*1*
o-Terphenyl (Surr)	*109*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3560**		24.9		mg/Kg			03/24/22 04:09	5

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-3,14

Date Collected: 03/08/22 11:09
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-9

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 01:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 01:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 01:00	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/19/22 01:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/18/22 08:00	03/19/22 01:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/18/22 08:00	03/19/22 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/18/22 08:00*	*03/19/22 01:00*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/18/22 08:00*	*03/19/22 01:00*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*116*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:24*	*1*
o-Terphenyl (Surr)	*117*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**881**	**F1**	4.99		mg/Kg			03/24/22 04:18	1

Client Sample ID: S-5,1

Date Collected: 03/08/22 13:00
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-10

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/18/22 08:00	03/19/22 01:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/18/22 08:00	03/19/22 01:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/18/22 08:00	03/19/22 01:21	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		03/18/22 08:00	03/19/22 01:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/18/22 08:00	03/19/22 01:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/18/22 08:00	03/19/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/18/22 08:00*	*03/19/22 01:21*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/18/22 08:00*	*03/19/22 01:21*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-5,1

Date Collected: 03/08/22 13:00
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-10
Matrix: Solid

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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 01:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 01:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 01:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*106*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:44*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*03/14/22 08:40*	*03/15/22 01:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		5.00		mg/Kg			03/24/22 15:50	1

Client Sample ID: S-5,3

Date Collected: 03/08/22 13:01
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 12:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 12:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 12:57	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		03/19/22 09:25	03/19/22 12:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 12:57	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/19/22 09:25	03/19/22 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/19/22 09:25*	*03/19/22 12:57*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/19/22 09:25*	*03/19/22 12:57*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 02:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 02:24	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-5,3

Date Collected: 03/08/22 13:01
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*03/14/22 08:40*	*03/15/22 02:24*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*03/14/22 08:40*	*03/15/22 02:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**158**		4.95		mg/Kg			03/24/22 04:53	1

Client Sample ID: S-5,5

Date Collected: 03/08/22 13:02
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-12

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 13:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 13:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 13:18	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		03/19/22 09:25	03/19/22 13:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/19/22 09:25	03/19/22 13:18	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/19/22 09:25	03/19/22 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/19/22 09:25*	*03/19/22 13:18*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/19/22 09:25*	*03/19/22 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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 02:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 02:45	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 02:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*107*		*70 - 130*	*03/14/22 08:40*	*03/15/22 02:45*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*03/14/22 08:40*	*03/15/22 02:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			03/24/22 05:20	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-5,10
Date Collected: 03/08/22 13:03
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-13
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:38	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		03/19/22 09:25	03/19/22 13:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/19/22 09:25	03/19/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/19/22 09:25*	*03/19/22 13:38*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/19/22 09:25*	*03/19/22 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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 03:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 03:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:04*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.2**		5.04		mg/Kg			03/24/22 05:29	1

Client Sample ID: S-8,1
Date Collected: 03/08/22 13:45
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-14
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:59	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/19/22 09:25	03/19/22 13:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 13:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/19/22 09:25	03/19/22 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/19/22 09:25*	*03/19/22 13:59*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/19/22 09:25*	*03/19/22 13:59*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-8,1

Date Collected: 03/08/22 13:45
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-14

Matrix: Solid

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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 03:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 03:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*111*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:24*	*1*
o-Terphenyl (Surr)	*110*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**822**		24.9		mg/Kg			03/24/22 05:37	5

Client Sample ID: S-8,3

Date Collected: 03/08/22 13:46
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-15

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 14:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 14:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 14:19	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 14:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 14:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/19/22 09:25*	*03/19/22 14:19*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/19/22 09:25*	*03/19/22 14:19*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 03:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 03:44	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-8,3
Date Collected: 03/08/22 13:46
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:44*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*03/14/22 08:40*	*03/15/22 03:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.6**		5.00		mg/Kg			03/24/22 05:46	1

Client Sample ID: S-8,5
Date Collected: 03/08/22 13:47
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-16
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 14:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 14:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 14:40	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		03/19/22 09:25	03/19/22 14:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 14:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/19/22 09:25	03/19/22 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/19/22 09:25*	*03/19/22 14:40*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/19/22 09:25*	*03/19/22 14:40*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 04:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 04:05	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:05*	*1*
o-Terphenyl (Surr)	*109*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.5**		4.98		mg/Kg			03/24/22 05:55	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-8,10

Date Collected: 03/08/22 13:48
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-17

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/19/22 09:25	03/19/22 15:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/19/22 09:25	03/19/22 15:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/19/22 09:25	03/19/22 15:00	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		03/19/22 09:25	03/19/22 15:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/19/22 09:25	03/19/22 15:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/19/22 09:25	03/19/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:00*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:00*	*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			03/18/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/14/22 08:40	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	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/15/22 04:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/15/22 04:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/14/22 08:40	03/15/22 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:24*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.26**		4.98		mg/Kg			03/24/22 06:04	1

Client Sample ID: S-9,0.5

Date Collected: 03/08/22 10:15
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-18

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:21	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 15:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:21*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:21*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-9,0.5
Date Collected: 03/08/22 10:15
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-18
Matrix: Solid

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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 04:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 04:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:44*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*03/14/22 08:40*	*03/15/22 04:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**327**		25.0		mg/Kg			03/24/22 15:59	5

Client Sample ID: S-9,1
Date Collected: 03/08/22 10:16
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-19
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:41	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 15:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 15:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:41*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/19/22 09:25*	*03/19/22 15:41*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 05:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 05:04	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-9,1

Date Collected: 03/08/22 10:16
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/22 08:40	03/15/22 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*03/14/22 08:40*	*03/15/22 05:04*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*03/14/22 08:40*	*03/15/22 05:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**224**		25.0		mg/Kg			03/23/22 15:32	5

Client Sample ID: S-10,0.5

Date Collected: 03/08/22 10:40
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-20
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 16:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 16:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 16:02	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 16:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/19/22 09:25	03/19/22 16:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/19/22 09:25	03/19/22 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/19/22 09:25*	*03/19/22 16:02*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/19/22 09:25*	*03/19/22 16:02*	*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			03/18/22 13:18	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			03/14/22 08:40	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		03/14/22 08:40	03/15/22 05:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 05:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/15/22 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*03/14/22 08:40*	*03/15/22 05:24*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*03/14/22 08:40*	*03/15/22 05:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**349**		4.95		mg/Kg			03/23/22 15:59	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-10,1
Date Collected: 03/08/22 10:41
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-21
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 18:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 18:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 18:14	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		03/17/22 08:30	03/17/22 18:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 18:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/17/22 08:30	03/17/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/17/22 08:30*	*03/17/22 18:14*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/17/22 08:30*	*03/17/22 18:14*	*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			03/18/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**89.1**		50.0		mg/Kg			03/14/22 08:40	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		03/11/22 09:52	03/12/22 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/22 09:52	03/12/22 08:23	1
Oil Range Organics (Over C28-C36)	**89.1**		50.0		mg/Kg		03/11/22 09:52	03/12/22 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*97*		*70 - 130*	*03/11/22 09:52*	*03/12/22 08:23*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*03/11/22 09:52*	*03/12/22 08:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.04		mg/Kg			03/23/22 16:07	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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)
880-12315-1	S-2,1	101	107
880-12315-1 MS	S-2,1	105	110
880-12315-1 MSD	S-2,1	108	113
880-12315-2	S-2,3	105	109
880-12315-3	S-2,5	105	108
880-12315-4	S-2,10	102	107
880-12315-5	S-3.1	102	109
880-12315-6	S-3,3	104	109
880-12315-7	S-3,5	108	110
880-12315-8	S-3,10	106	109
880-12315-9	S-3,14	106	109
880-12315-10	S-5,1	102	105
880-12315-11	S-5,3	104	110
880-12315-11 MS	S-5,3	104	111
880-12315-11 MSD	S-5,3	105	111
880-12315-12	S-5,5	105	101
880-12315-13	S-5,10	107	110
880-12315-14	S-8,1	103	108
880-12315-15	S-8,3	106	111
880-12315-16	S-8,5	104	109
880-12315-17	S-8,10	103	108
880-12315-18	S-9,0.5	105	109
880-12315-19	S-9,1	105	109
880-12315-20	S-10,0.5	104	107
880-12315-21	S-10,1	106	105
880-12320-A-3-F MS	Matrix Spike	112	89
880-12320-A-3-G MSD	Matrix Spike Duplicate	128	97
LCS 880-21697/1-A	Lab Control Sample	98	100
LCS 880-21700/1-A	Lab Control Sample	101	111
LCS 880-21935/1-A	Lab Control Sample	103	111
LCSD 880-21697/2-A	Lab Control Sample Dup	99	100
LCSD 880-21700/2-A	Lab Control Sample Dup	103	111
LCSD 880-21935/2-A	Lab Control Sample Dup	104	112
MB 880-21697/5-A	Method Blank	97	100
MB 880-21700/5-A	Method Blank	100	104
MB 880-21732/5-A	Method Blank	101	104
MB 880-21935/5-A	Method Blank	104	105

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)
880-12309-A-1-B MS	Matrix Spike	106	91
880-12309-A-1-C MSD	Matrix Spike Duplicate	103	89

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-12315-1
Project/Site: SD 19 CTB Manifold SDG: 22-0105-04

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-12315-1	S-2,1	104	101								
880-12315-1 MS	S-2,1	97	82								
880-12315-1 MSD	S-2,1	113	101								
880-12315-2	S-2,3	102	101								
880-12315-3	S-2,5	111	107								
880-12315-4	S-2,10	118	118								
880-12315-5	S-3.1	106	106								
880-12315-6	S-3,3	110	107								
880-12315-7	S-3,5	105	103								
880-12315-8	S-3,10	109	109								
880-12315-9	S-3,14	116	117								
880-12315-10	S-5,1	106	105								
880-12315-11	S-5,3	103	102								
880-12315-12	S-5,5	107	107								
880-12315-13	S-5,10	103	105								
880-12315-14	S-8,1	111	110								
880-12315-15	S-8,3	100	100								
880-12315-16	S-8,5	109	109								
880-12315-17	S-8,10	104	103								
880-12315-18	S-9,0.5	104	103								
880-12315-19	S-9,1	102	100								
880-12315-20	S-10,0.5	109	106								
880-12315-21	S-10,1	97	98								
LCS 880-21371/2-A	Lab Control Sample	110	97								
LCS 880-21468/2-A	Lab Control Sample	123	125								
LCSD 880-21371/3-A	Lab Control Sample Dup	132 S1+	120								
LCSD 880-21468/3-A	Lab Control Sample Dup	108	114								
MB 880-21371/1-A	Method Blank	125	126								
MB 880-21468/1-A	Method Blank	127	132 S1+								

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21697/5-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21697

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 12:07	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/17/22 08:30	03/17/22 12:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/22 08:30	03/17/22 12:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/22 08:30	03/17/22 12:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/17/22 08:30*	*03/17/22 12:07*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/17/22 08:30*	*03/17/22 12:07*	*1*

Lab Sample ID: LCS 880-21697/1-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21697

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08591		mg/Kg		86	70 - 130		
Toluene			0.100	0.08605		mg/Kg		86	70 - 130		
Ethylbenzene			0.100	0.08745		mg/Kg		87	70 - 130		
m,p-Xylenes			0.200	0.2003		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.1012		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-21697/2-A
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21697

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1022		mg/Kg		102	70 - 130	17	35
Toluene			0.100	0.09993		mg/Kg		100	70 - 130	15	35
Ethylbenzene			0.100	0.09959		mg/Kg		100	70 - 130	13	35
m,p-Xylenes			0.200	0.2354		mg/Kg		118	70 - 130	16	35
o-Xylene			0.100	0.1145		mg/Kg		115	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-12320-A-3-F MS
Matrix: Solid
Analysis Batch: 21774

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00201	U	0.0998	0.07400		mg/Kg		73	70 - 130		
Toluene	<0.00201	U	0.0998	0.08657		mg/Kg		85	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: 880-12320-A-3-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21774 — **Prep Batch: 21697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00201	U	0.0998	0.08452		mg/Kg		84	70 - 130
m,p-Xylenes	<0.00402	U	0.200	0.2012		mg/Kg		101	70 - 130
o-Xylene	<0.00201	U	0.0998	0.09510		mg/Kg		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: 880-12320-A-3-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21774 — **Prep Batch: 21697**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.101	0.08368		mg/Kg		82	70 - 130	12	35
Toluene	<0.00201	U	0.101	0.09310		mg/Kg		91	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.101	0.09334		mg/Kg		92	70 - 130	10	35
m,p-Xylenes	<0.00402	U	0.202	0.2269		mg/Kg		113	70 - 130	12	35
o-Xylene	<0.00201	U	0.101	0.1095		mg/Kg		109	70 - 130	14	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 880-21700/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 21:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 21:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 21:54	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 21:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 21:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 21:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/18/22 08:00*	*03/18/22 21:54*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/18/22 08:00*	*03/18/22 21:54*	*1*

Lab Sample ID: LCS 880-21700/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09804		mg/Kg		98	70 - 130
Toluene	0.100	0.09504		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09412		mg/Kg		94	70 - 130
m,p-Xylenes	0.200	0.1934		mg/Kg		97	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: LCS 880-21700/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.09571		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-21700/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09964		mg/Kg		100	70 - 130	2	35
Toluene			0.100	0.09742		mg/Kg		97	70 - 130	2	35
Ethylbenzene			0.100	0.09726		mg/Kg		97	70 - 130	3	35
m,p-Xylenes			0.200	0.2002		mg/Kg		100	70 - 130	4	35
o-Xylene			0.100	0.09908		mg/Kg		99	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-12315-1 MS — **Client Sample ID: S-2,1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.101	0.08424		mg/Kg		84	70 - 130		
Toluene	<0.00200	U	0.101	0.08230		mg/Kg		82	70 - 130		
Ethylbenzene	<0.00200	U	0.101	0.08150		mg/Kg		81	70 - 130		
m,p-Xylenes	<0.00400	U	0.201	0.1685		mg/Kg		84	70 - 130		
o-Xylene	<0.00200	U	0.101	0.08253		mg/Kg		82	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-12315-1 MSD — **Client Sample ID: S-2,1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21846 — **Prep Batch: 21700**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.09062		mg/Kg		90	70 - 130	7	35
Toluene	<0.00200	U	0.100	0.08739		mg/Kg		87	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.08441		mg/Kg		84	70 - 130	4	35
m,p-Xylenes	<0.00400	U	0.200	0.1740		mg/Kg		87	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.08511		mg/Kg		85	70 - 130	3	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: 880-12315-1 MSD
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: S-2,1
Prep Type: Total/NA
Prep Batch: 21700

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: MB 880-21732/5-A
Matrix: Solid
Analysis Batch: 21846

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21732

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/22 08:00	03/18/22 10:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/22 08:00	03/18/22 10:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/18/22 08:00	03/18/22 10:33	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03/18/22 08:00	03/18/22 10:33	1

Lab Sample ID: MB 880-21935/5-A
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21935

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 12:36	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/19/22 09:25	03/19/22 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/19/22 09:25	03/19/22 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/19/22 09:25	03/19/22 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/19/22 09:25	03/19/22 12:36	1
1,4-Difluorobenzene (Surr)	105		70 - 130	03/19/22 09:25	03/19/22 12:36	1

Lab Sample ID: LCS 880-21935/1-A
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21935

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1011		mg/Kg		101	70 - 130		
Toluene			0.100	0.1005		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.1025		mg/Kg		102	70 - 130		
m,p-Xylenes			0.200	0.2105		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1021		mg/Kg		102	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: LCS 880-21935/1-A
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21935

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-21935/2-A
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21935

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1095		mg/Kg		109	70 - 130	8	35
Toluene			0.100	0.1081		mg/Kg		108	70 - 130	7	35
Ethylbenzene			0.100	0.1096		mg/Kg		110	70 - 130	7	35
m,p-Xylenes			0.200	0.2259		mg/Kg		113	70 - 130	7	35
o-Xylene			0.100	0.1096		mg/Kg		110	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-12315-11 MS
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: S-5,3
Prep Type: Total/NA
Prep Batch: 21935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.100	0.08164		mg/Kg		81	70 - 130
Toluene	<0.00202	U	0.100	0.07915		mg/Kg		79	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.07729		mg/Kg		77	70 - 130
m,p-Xylenes	<0.00404	U	0.200	0.1611		mg/Kg		80	70 - 130
o-Xylene	<0.00202	U	0.100	0.07937		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-12315-11 MSD
Matrix: Solid
Analysis Batch: 21936

Client Sample ID: S-5,3
Prep Type: Total/NA
Prep Batch: 21935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08491		mg/Kg		85	70 - 130	4	35
Toluene	<0.00202	U	0.100	0.08152		mg/Kg		81	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.100	0.08010		mg/Kg		80	70 - 130	4	35
m,p-Xylenes	<0.00404	U	0.200	0.1651		mg/Kg		82	70 - 130	2	35
o-Xylene	<0.00202	U	0.100	0.08108		mg/Kg		81	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: MB 880-21371/1-A
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21371

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		03/11/22 09:52	03/12/22 05:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/22 09:52	03/12/22 05:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/22 09:52	03/12/22 05:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*125*		*70 - 130*	*03/11/22 09:52*	*03/12/22 05:08*	*1*
o-Terphenyl (Surr)	*126*		*70 - 130*	*03/11/22 09:52*	*03/12/22 05:08*	*1*

Lab Sample ID: LCS 880-21371/2-A
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21371

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	848.4		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1009		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*110*		*70 - 130*
o-Terphenyl (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-21371/3-A
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 21371

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	955.3		mg/Kg		96	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1220		mg/Kg		122	70 - 130	19	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*132*	*S1+*	*70 - 130*
o-Terphenyl (Surr)	*120*		*70 - 130*

Lab Sample ID: 880-12309-A-1-B MS
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21371

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1	998	1444	F1	mg/Kg		141	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	1460	F1	mg/Kg		146	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: 880-12309-A-1-B MS
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21371

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	91		70 - 130

Lab Sample ID: 880-12309-A-1-C MSD
Matrix: Solid
Analysis Batch: 21357

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21371

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	<49.8	U F1	998	1422	F1	mg/Kg		139	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	1426	F1	mg/Kg		143	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	103		70 - 130
o-Terphenyl (Surr)	89		70 - 130

Lab Sample ID: MB 880-21468/1-A
Matrix: Solid
Analysis Batch: 21456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21468

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		03/14/22 08:40	03/14/22 20:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/14/22 20:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/22 08:40	03/14/22 20:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	127		70 - 130	03/14/22 08:40	03/14/22 20:54	1
o-Terphenyl (Surr)	132	S1+	70 - 130	03/14/22 08:40	03/14/22 20:54	1

Lab Sample ID: LCS 880-21468/2-A
Matrix: Solid
Analysis Batch: 21456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21468

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	959.2		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1105		mg/Kg		111	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	123		70 - 130
o-Terphenyl (Surr)	125		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Lab Sample ID: LCSD 880-21468/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21468**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	851.8		mg/Kg		85	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1095		mg/Kg		109	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*108*		*70 - 130*
o-Terphenyl (Surr)	*114*		*70 - 130*

Lab Sample ID: 880-12315-1 MS — **Client Sample ID: S-2,1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1101		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	998	987.0		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*97*		*70 - 130*
o-Terphenyl (Surr)	*82*		*70 - 130*

Lab Sample ID: 880-12315-1 MSD — **Client Sample ID: S-2,1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 21456 — **Prep Batch: 21468**

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	<49.8	U	998	1185		mg/Kg		119	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1196		mg/Kg		120	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*113*		*70 - 130*
o-Terphenyl (Surr)	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-21602/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 22052

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/24/22 01:47	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-21602/2-A
Matrix: Solid
Analysis Batch: 22052

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	271.9		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-21602/3-A
Matrix: Solid
Analysis Batch: 22052

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	272.8		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-12315-9 MS
Matrix: Solid
Analysis Batch: 22052

Client Sample ID: S-3,14
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	881	F1	250	1102	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 880-12315-9 MSD
Matrix: Solid
Analysis Batch: 22052

Client Sample ID: S-3,14
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	881	F1	250	1118		mg/Kg		95	90 - 110	1	20

Lab Sample ID: MB 880-22210/1-A
Matrix: Solid
Analysis Batch: 22211

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			03/23/22 14:12	1

Lab Sample ID: LCS 880-22210/2-A
Matrix: Solid
Analysis Batch: 22211

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	268.8		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-22210/3-A
Matrix: Solid
Analysis Batch: 22211

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	270.3		mg/Kg		108	90 - 110	1	20

Lab Sample ID: 880-12712-A-1-F MS
Matrix: Solid
Analysis Batch: 22211

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	1500		1250	2878		mg/Kg		110	90 - 110		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-12712-A-1-G MSD
Matrix: Solid
Analysis Batch: 22211

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	1500		1250	2877		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 890-2112-A-3-H MS
Matrix: Solid
Analysis Batch: 22211

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	7.48	F1	249	286.4	F1	mg/Kg		112	90 - 110

Lab Sample ID: 890-2112-A-3-I MSD
Matrix: Solid
Analysis Batch: 22211

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	7.48	F1	249	287.5	F1	mg/Kg		113	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

GC VOA

Prep Batch: 21697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-21	S-10,1	Total/NA	Solid	5035	
MB 880-21697/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21697/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21697/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12320-A-3-F MS	Matrix Spike	Total/NA	Solid	5035	
880-12320-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 21700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	5035	
880-12315-2	S-2,3	Total/NA	Solid	5035	
880-12315-3	S-2,5	Total/NA	Solid	5035	
880-12315-4	S-2,10	Total/NA	Solid	5035	
880-12315-5	S-3.1	Total/NA	Solid	5035	
880-12315-6	S-3,3	Total/NA	Solid	5035	
880-12315-7	S-3,5	Total/NA	Solid	5035	
880-12315-8	S-3,10	Total/NA	Solid	5035	
880-12315-9	S-3,14	Total/NA	Solid	5035	
880-12315-10	S-5,1	Total/NA	Solid	5035	
MB 880-21700/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21700/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21700/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12315-1 MS	S-2,1	Total/NA	Solid	5035	
880-12315-1 MSD	S-2,1	Total/NA	Solid	5035	

Prep Batch: 21732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21732/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 21774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-21	S-10,1	Total/NA	Solid	8021B	21697
MB 880-21697/5-A	Method Blank	Total/NA	Solid	8021B	21697
LCS 880-21697/1-A	Lab Control Sample	Total/NA	Solid	8021B	21697
LCSD 880-21697/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21697
880-12320-A-3-F MS	Matrix Spike	Total/NA	Solid	8021B	21697
880-12320-A-3-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21697

Analysis Batch: 21846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	8021B	21700
880-12315-2	S-2,3	Total/NA	Solid	8021B	21700
880-12315-3	S-2,5	Total/NA	Solid	8021B	21700
880-12315-4	S-2,10	Total/NA	Solid	8021B	21700
880-12315-5	S-3.1	Total/NA	Solid	8021B	21700
880-12315-6	S-3,3	Total/NA	Solid	8021B	21700
880-12315-7	S-3,5	Total/NA	Solid	8021B	21700
880-12315-8	S-3,10	Total/NA	Solid	8021B	21700
880-12315-9	S-3,14	Total/NA	Solid	8021B	21700
880-12315-10	S-5,1	Total/NA	Solid	8021B	21700
MB 880-21700/5-A	Method Blank	Total/NA	Solid	8021B	21700

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

GC VOA (Continued)

Analysis Batch: 21846 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21732/5-A	Method Blank	Total/NA	Solid	8021B	21732
LCS 880-21700/1-A	Lab Control Sample	Total/NA	Solid	8021B	21700
LCSD 880-21700/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21700
880-12315-1 MS	S-2,1	Total/NA	Solid	8021B	21700
880-12315-1 MSD	S-2,1	Total/NA	Solid	8021B	21700

Analysis Batch: 21900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	Total BTEX	
880-12315-2	S-2,3	Total/NA	Solid	Total BTEX	
880-12315-3	S-2,5	Total/NA	Solid	Total BTEX	
880-12315-4	S-2,10	Total/NA	Solid	Total BTEX	
880-12315-5	S-3.1	Total/NA	Solid	Total BTEX	
880-12315-6	S-3,3	Total/NA	Solid	Total BTEX	
880-12315-7	S-3,5	Total/NA	Solid	Total BTEX	
880-12315-8	S-3,10	Total/NA	Solid	Total BTEX	
880-12315-9	S-3,14	Total/NA	Solid	Total BTEX	
880-12315-10	S-5,1	Total/NA	Solid	Total BTEX	
880-12315-11	S-5,3	Total/NA	Solid	Total BTEX	
880-12315-12	S-5,5	Total/NA	Solid	Total BTEX	
880-12315-13	S-5,10	Total/NA	Solid	Total BTEX	
880-12315-14	S-8,1	Total/NA	Solid	Total BTEX	
880-12315-15	S-8,3	Total/NA	Solid	Total BTEX	
880-12315-16	S-8,5	Total/NA	Solid	Total BTEX	
880-12315-17	S-8,10	Total/NA	Solid	Total BTEX	
880-12315-18	S-9,0.5	Total/NA	Solid	Total BTEX	
880-12315-19	S-9,1	Total/NA	Solid	Total BTEX	
880-12315-20	S-10,0.5	Total/NA	Solid	Total BTEX	
880-12315-21	S-10,1	Total/NA	Solid	Total BTEX	

Prep Batch: 21935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-11	S-5,3	Total/NA	Solid	5035	
880-12315-12	S-5,5	Total/NA	Solid	5035	
880-12315-13	S-5,10	Total/NA	Solid	5035	
880-12315-14	S-8,1	Total/NA	Solid	5035	
880-12315-15	S-8,3	Total/NA	Solid	5035	
880-12315-16	S-8,5	Total/NA	Solid	5035	
880-12315-17	S-8,10	Total/NA	Solid	5035	
880-12315-18	S-9,0.5	Total/NA	Solid	5035	
880-12315-19	S-9,1	Total/NA	Solid	5035	
880-12315-20	S-10,0.5	Total/NA	Solid	5035	
MB 880-21935/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-21935/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21935/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12315-11 MS	S-5,3	Total/NA	Solid	5035	
880-12315-11 MSD	S-5,3	Total/NA	Solid	5035	

Analysis Batch: 21936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-11	S-5,3	Total/NA	Solid	8021B	21935

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

GC VOA (Continued)

Analysis Batch: 21936 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-12	S-5,5	Total/NA	Solid	8021B	21935
880-12315-13	S-5,10	Total/NA	Solid	8021B	21935
880-12315-14	S-8,1	Total/NA	Solid	8021B	21935
880-12315-15	S-8,3	Total/NA	Solid	8021B	21935
880-12315-16	S-8,5	Total/NA	Solid	8021B	21935
880-12315-17	S-8,10	Total/NA	Solid	8021B	21935
880-12315-18	S-9,0.5	Total/NA	Solid	8021B	21935
880-12315-19	S-9,1	Total/NA	Solid	8021B	21935
880-12315-20	S-10,0.5	Total/NA	Solid	8021B	21935
MB 880-21935/5-A	Method Blank	Total/NA	Solid	8021B	21935
LCS 880-21935/1-A	Lab Control Sample	Total/NA	Solid	8021B	21935
LCSD 880-21935/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21935
880-12315-11 MS	S-5,3	Total/NA	Solid	8021B	21935
880-12315-11 MSD	S-5,3	Total/NA	Solid	8021B	21935

GC Semi VOA

Analysis Batch: 21357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-21	S-10,1	Total/NA	Solid	8015B NM	21371
MB 880-21371/1-A	Method Blank	Total/NA	Solid	8015B NM	21371
LCS 880-21371/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21371
LCSD 880-21371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21371
880-12309-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	21371
880-12309-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	21371

Prep Batch: 21371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-21	S-10,1	Total/NA	Solid	8015NM Prep	
MB 880-21371/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21371/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21371/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12309-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12309-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	8015B NM	21468
880-12315-2	S-2,3	Total/NA	Solid	8015B NM	21468
880-12315-3	S-2,5	Total/NA	Solid	8015B NM	21468
880-12315-4	S-2,10	Total/NA	Solid	8015B NM	21468
880-12315-5	S-3.1	Total/NA	Solid	8015B NM	21468
880-12315-6	S-3,3	Total/NA	Solid	8015B NM	21468
880-12315-7	S-3,5	Total/NA	Solid	8015B NM	21468
880-12315-8	S-3,10	Total/NA	Solid	8015B NM	21468
880-12315-9	S-3,14	Total/NA	Solid	8015B NM	21468
880-12315-10	S-5,1	Total/NA	Solid	8015B NM	21468
880-12315-11	S-5,3	Total/NA	Solid	8015B NM	21468
880-12315-12	S-5,5	Total/NA	Solid	8015B NM	21468
880-12315-13	S-5,10	Total/NA	Solid	8015B NM	21468
880-12315-14	S-8,1	Total/NA	Solid	8015B NM	21468

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

GC Semi VOA (Continued)

Analysis Batch: 21456 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-15	S-8,3	Total/NA	Solid	8015B NM	21468
880-12315-16	S-8,5	Total/NA	Solid	8015B NM	21468
880-12315-17	S-8,10	Total/NA	Solid	8015B NM	21468
880-12315-18	S-9,0.5	Total/NA	Solid	8015B NM	21468
880-12315-19	S-9,1	Total/NA	Solid	8015B NM	21468
880-12315-20	S-10,0.5	Total/NA	Solid	8015B NM	21468
MB 880-21468/1-A	Method Blank	Total/NA	Solid	8015B NM	21468
LCS 880-21468/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	21468
LCSD 880-21468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	21468
880-12315-1 MS	S-2,1	Total/NA	Solid	8015B NM	21468
880-12315-1 MSD	S-2,1	Total/NA	Solid	8015B NM	21468

Prep Batch: 21468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	8015NM Prep	
880-12315-2	S-2,3	Total/NA	Solid	8015NM Prep	
880-12315-3	S-2,5	Total/NA	Solid	8015NM Prep	
880-12315-4	S-2,10	Total/NA	Solid	8015NM Prep	
880-12315-5	S-3.1	Total/NA	Solid	8015NM Prep	
880-12315-6	S-3,3	Total/NA	Solid	8015NM Prep	
880-12315-7	S-3,5	Total/NA	Solid	8015NM Prep	
880-12315-8	S-3,10	Total/NA	Solid	8015NM Prep	
880-12315-9	S-3,14	Total/NA	Solid	8015NM Prep	
880-12315-10	S-5,1	Total/NA	Solid	8015NM Prep	
880-12315-11	S-5,3	Total/NA	Solid	8015NM Prep	
880-12315-12	S-5,5	Total/NA	Solid	8015NM Prep	
880-12315-13	S-5,10	Total/NA	Solid	8015NM Prep	
880-12315-14	S-8,1	Total/NA	Solid	8015NM Prep	
880-12315-15	S-8,3	Total/NA	Solid	8015NM Prep	
880-12315-16	S-8,5	Total/NA	Solid	8015NM Prep	
880-12315-17	S-8,10	Total/NA	Solid	8015NM Prep	
880-12315-18	S-9,0.5	Total/NA	Solid	8015NM Prep	
880-12315-19	S-9,1	Total/NA	Solid	8015NM Prep	
880-12315-20	S-10,0.5	Total/NA	Solid	8015NM Prep	
MB 880-21468/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-21468/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-21468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12315-1 MS	S-2,1	Total/NA	Solid	8015NM Prep	
880-12315-1 MSD	S-2,1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 21472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Total/NA	Solid	8015 NM	
880-12315-2	S-2,3	Total/NA	Solid	8015 NM	
880-12315-3	S-2,5	Total/NA	Solid	8015 NM	
880-12315-4	S-2,10	Total/NA	Solid	8015 NM	
880-12315-5	S-3.1	Total/NA	Solid	8015 NM	
880-12315-6	S-3,3	Total/NA	Solid	8015 NM	
880-12315-7	S-3,5	Total/NA	Solid	8015 NM	
880-12315-8	S-3,10	Total/NA	Solid	8015 NM	
880-12315-9	S-3,14	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

GC Semi VOA (Continued)

Analysis Batch: 21472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-10	S-5,1	Total/NA	Solid	8015 NM	
880-12315-11	S-5,3	Total/NA	Solid	8015 NM	
880-12315-12	S-5,5	Total/NA	Solid	8015 NM	
880-12315-13	S-5,10	Total/NA	Solid	8015 NM	
880-12315-14	S-8,1	Total/NA	Solid	8015 NM	
880-12315-15	S-8,3	Total/NA	Solid	8015 NM	
880-12315-16	S-8,5	Total/NA	Solid	8015 NM	
880-12315-17	S-8,10	Total/NA	Solid	8015 NM	
880-12315-18	S-9,0.5	Total/NA	Solid	8015 NM	
880-12315-19	S-9,1	Total/NA	Solid	8015 NM	
880-12315-20	S-10,0.5	Total/NA	Solid	8015 NM	
880-12315-21	S-10,1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 21602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Soluble	Solid	DI Leach	
880-12315-2	S-2,3	Soluble	Solid	DI Leach	
880-12315-3	S-2,5	Soluble	Solid	DI Leach	
880-12315-4	S-2,10	Soluble	Solid	DI Leach	
880-12315-5	S-3.1	Soluble	Solid	DI Leach	
880-12315-6	S-3,3	Soluble	Solid	DI Leach	
880-12315-7	S-3,5	Soluble	Solid	DI Leach	
880-12315-8	S-3,10	Soluble	Solid	DI Leach	
880-12315-9	S-3,14	Soluble	Solid	DI Leach	
880-12315-10	S-5,1	Soluble	Solid	DI Leach	
880-12315-11	S-5,3	Soluble	Solid	DI Leach	
880-12315-12	S-5,5	Soluble	Solid	DI Leach	
880-12315-13	S-5,10	Soluble	Solid	DI Leach	
880-12315-14	S-8,1	Soluble	Solid	DI Leach	
880-12315-15	S-8,3	Soluble	Solid	DI Leach	
880-12315-16	S-8,5	Soluble	Solid	DI Leach	
880-12315-17	S-8,10	Soluble	Solid	DI Leach	
880-12315-18	S-9,0.5	Soluble	Solid	DI Leach	
MB 880-21602/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-21602/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-21602/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12315-9 MS	S-3,14	Soluble	Solid	DI Leach	
880-12315-9 MSD	S-3,14	Soluble	Solid	DI Leach	

Analysis Batch: 22052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-1	S-2,1	Soluble	Solid	300.0	21602
880-12315-2	S-2,3	Soluble	Solid	300.0	21602
880-12315-3	S-2,5	Soluble	Solid	300.0	21602
880-12315-4	S-2,10	Soluble	Solid	300.0	21602
880-12315-5	S-3.1	Soluble	Solid	300.0	21602
880-12315-6	S-3,3	Soluble	Solid	300.0	21602
880-12315-7	S-3,5	Soluble	Solid	300.0	21602
880-12315-8	S-3,10	Soluble	Solid	300.0	21602

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

HPLC/IC (Continued)

Analysis Batch: 22052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-9	S-3,14	Soluble	Solid	300.0	21602
880-12315-10	S-5,1	Soluble	Solid	300.0	21602
880-12315-11	S-5,3	Soluble	Solid	300.0	21602
880-12315-12	S-5,5	Soluble	Solid	300.0	21602
880-12315-13	S-5,10	Soluble	Solid	300.0	21602
880-12315-14	S-8,1	Soluble	Solid	300.0	21602
880-12315-15	S-8,3	Soluble	Solid	300.0	21602
880-12315-16	S-8,5	Soluble	Solid	300.0	21602
880-12315-17	S-8,10	Soluble	Solid	300.0	21602
880-12315-18	S-9,0.5	Soluble	Solid	300.0	21602
MB 880-21602/1-A	Method Blank	Soluble	Solid	300.0	21602
LCS 880-21602/2-A	Lab Control Sample	Soluble	Solid	300.0	21602
LCSD 880-21602/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	21602
880-12315-9 MS	S-3,14	Soluble	Solid	300.0	21602
880-12315-9 MSD	S-3,14	Soluble	Solid	300.0	21602

Leach Batch: 22210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-19	S-9,1	Soluble	Solid	DI Leach	
880-12315-20	S-10,0.5	Soluble	Solid	DI Leach	
880-12315-21	S-10,1	Soluble	Solid	DI Leach	
MB 880-22210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12712-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12712-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2112-A-3-H MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2112-A-3-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 22211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12315-19	S-9,1	Soluble	Solid	300.0	22210
880-12315-20	S-10,0.5	Soluble	Solid	300.0	22210
880-12315-21	S-10,1	Soluble	Solid	300.0	22210
MB 880-22210/1-A	Method Blank	Soluble	Solid	300.0	22210
LCS 880-22210/2-A	Lab Control Sample	Soluble	Solid	300.0	22210
LCSD 880-22210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22210
880-12712-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	22210
880-12712-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22210
890-2112-A-3-H MS	Matrix Spike	Soluble	Solid	300.0	22210
890-2112-A-3-I MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22210

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-2,1
Date Collected: 03/08/22 12:30
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 22:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 21:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		10			22052	03/24/22 02:49	SC	XEN MID

Client Sample ID: S-2,3
Date Collected: 03/08/22 12:31
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 22:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 23:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		5			22052	03/24/22 02:58	SC	XEN MID

Client Sample ID: S-2,5
Date Collected: 03/08/22 12:32
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 22:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 23:22	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		5			22052	03/24/22 03:07	SC	XEN MID

Client Sample ID: S-2,10
Date Collected: 03/08/22 12:33
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 23:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-2,10
Date Collected: 03/08/22 12:33
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/14/22 23:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 03:34	SC	XEN MID

Client Sample ID: S-3.1
Date Collected: 03/08/22 11:05
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 23:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 00:03	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		10			22052	03/24/22 03:42	SC	XEN MID

Client Sample ID: S-3,3
Date Collected: 03/08/22 11:06
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/18/22 23:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 00:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		50			22052	03/24/22 03:51	SC	XEN MID

Client Sample ID: S-3,5
Date Collected: 03/08/22 11:07
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/19/22 00:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 00:43	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-3,5
Date Collected: 03/08/22 11:07
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		10			22052	03/24/22 04:00	SC	XEN MID

Client Sample ID: S-3,10
Date Collected: 03/08/22 11:08
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/19/22 00:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 01:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		5			22052	03/24/22 04:09	SC	XEN MID

Client Sample ID: S-3,14
Date Collected: 03/08/22 11:09
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/19/22 01:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 01:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 04:18	SC	XEN MID

Client Sample ID: S-5,1
Date Collected: 03/08/22 13:00
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21700	03/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21846	03/19/22 01:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 01:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 15:50	SC	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-5,3

Date Collected: 03/08/22 13:01
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 12:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 02:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 04:53	SC	XEN MID

Client Sample ID: S-5,5

Date Collected: 03/08/22 13:02
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 13:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 02:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 05:20	SC	XEN MID

Client Sample ID: S-5,10

Date Collected: 03/08/22 13:03
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 13:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 03:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 05:29	SC	XEN MID

Client Sample ID: S-8,1

Date Collected: 03/08/22 13:45
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 13:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-8,1
Date Collected: 03/08/22 13:45
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 03:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		5			22052	03/24/22 05:37	SC	XEN MID

Client Sample ID: S-8,3
Date Collected: 03/08/22 13:46
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 14:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 03:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 05:46	SC	XEN MID

Client Sample ID: S-8,5
Date Collected: 03/08/22 13:47
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 14:40	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 04:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 05:55	SC	XEN MID

Client Sample ID: S-8,10
Date Collected: 03/08/22 13:48
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 15:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 04:24	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-8,10
Date Collected: 03/08/22 13:48
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		1			22052	03/24/22 06:04	SC	XEN MID

Client Sample ID: S-9,0.5
Date Collected: 03/08/22 10:15
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 15:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 04:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	21602	03/15/22 08:33	CH	XEN MID
Soluble	Analysis	300.0		5			22052	03/24/22 15:59	SC	XEN MID

Client Sample ID: S-9,1
Date Collected: 03/08/22 10:16
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 15:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 05:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	22210	03/23/22 13:49	SC	XEN MID
Soluble	Analysis	300.0		5			22211	03/23/22 15:32	SC	XEN MID

Client Sample ID: S-10,0.5
Date Collected: 03/08/22 10:40
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	21935	03/19/22 09:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21936	03/19/22 16:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21468	03/14/22 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21456	03/15/22 05:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	22210	03/23/22 13:49	SC	XEN MID
Soluble	Analysis	300.0		1			22211	03/23/22 15:59	SC	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Client Sample ID: S-10,1
Date Collected: 03/08/22 10:41
Date Received: 03/10/22 15:05

Lab Sample ID: 880-12315-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	21697	03/17/22 08:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	21774	03/17/22 18:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			21900	03/18/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			21472	03/14/22 08:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	21371	03/11/22 09:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1			21357	03/12/22 08:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	22210	03/23/22 13:49	SC	XEN MID
Soluble	Analysis	300.0		1			22211	03/23/22 16:07	SC	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. Job ID: 880-12315-1
Project/Site: SD 19 CTB Manifold SDG: 22-0105-04

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: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-12315-1
SDG: 22-0105-04

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-12315-1	S-2,1	Solid	03/08/22 12:30	03/10/22 15:05
880-12315-2	S-2,3	Solid	03/08/22 12:31	03/10/22 15:05
880-12315-3	S-2,5	Solid	03/08/22 12:32	03/10/22 15:05
880-12315-4	S-2,10	Solid	03/08/22 12:33	03/10/22 15:05
880-12315-5	S-3.1	Solid	03/08/22 11:05	03/10/22 15:05
880-12315-6	S-3,3	Solid	03/08/22 11:06	03/10/22 15:05
880-12315-7	S-3,5	Solid	03/08/22 11:07	03/10/22 15:05
880-12315-8	S-3,10	Solid	03/08/22 11:08	03/10/22 15:05
880-12315-9	S-3,14	Solid	03/08/22 11:09	03/10/22 15:05
880-12315-10	S-5,1	Solid	03/08/22 13:00	03/10/22 15:05
880-12315-11	S-5,3	Solid	03/08/22 13:01	03/10/22 15:05
880-12315-12	S-5,5	Solid	03/08/22 13:02	03/10/22 15:05
880-12315-13	S-5,10	Solid	03/08/22 13:03	03/10/22 15:05
880-12315-14	S-8,1	Solid	03/08/22 13:45	03/10/22 15:05
880-12315-15	S-8,3	Solid	03/08/22 13:46	03/10/22 15:05
880-12315-16	S-8,5	Solid	03/08/22 13:47	03/10/22 15:05
880-12315-17	S-8,10	Solid	03/08/22 13:48	03/10/22 15:05
880-12315-18	S-9,0.5	Solid	03/08/22 10:15	03/10/22 15:05
880-12315-19	S-9,1	Solid	03/08/22 10:16	03/10/22 15:05
880-12315-20	S-10,0.5	Solid	03/08/22 10:40	03/10/22 15:05
880-12315-21	S-10,1	Solid	03/08/22 10:41	03/10/22 15:05

No. 2459

12315

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N Marienfeld, Ste 202
Midland, TX 79701
432-687-0901

Data Reported to

DATE: 3/10/2022 PAGE 1 OF 2

PO#: LAB WORK ORDER#

PROJECT LOCATION OR NAME SD 19 CTB Manifold

LAI PROJECT #: 22-0105-04 COLLECTOR: TP & OR

TRRP report? ☐ Yes ☒ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

TIME ZONE
Time zone/State: MST/NM

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☐ MTBE ☐ | 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 ☐ | 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 ☐ | CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-2, 1		3/8/22	1230	S	1				X		BTEX, TPH 1005, TPH 1006, GASOLINE MOD 8015, DIESEL - MOD 8015, OIL - MOD 8015, TCLP - METALS (RCRA), TOTAL METALS (RCRA), LEAD - TOTAL, TDS, pH	
S-2, 3			1231									
S-2, 5			1232									
S-2, 10			1233									
~~S-2, 15~~			~~1234~~									
S-3, 1			1105									
S-3, 3			1106									
S-3, 5			1107									
S-3, 10			1108									
S-3, 14			1109									
S-5, 1			1300									
S-5, 3			1301									
S-5, 5			1302									
S-5, 10			1303									
S-8, 1			1345									

TOTAL

880-12315 Chain of Custody

RELINQUISHED BY (Signature)	DATE/TIME 3/10/22 1505	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP 2.1 THERM# IR9
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

No. 2460

12315 CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N Marienfeld, Ste 202
Midland, TX 79701
432-687-0901

Data Reported to

DATE 3/10/2022 PAGE 2 OF 2

PO#: LAB WORK ORDER#

PROJECT LOCATION OR NAME SD 19 CTB Manifold

LAI PROJECT # 22-0105-04 COLLECTOR: TP & JR

TRRP report? ☐ Yes ☒ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

TIME ZONE
Time zone/State: MST/NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX 4 ☐ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 4	DIESEL - MOD 8015 4	OIL - MOD 8015 4	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	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 ☐	CHLORIDES 4 ☐ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
S-8, 3		3/8/22	1346	S	1				X		X		X	X	X												X		
S-8, 5			1347																										
S-8, 10			1348																										
S-9, 0.5			1015																										
S-9, 1			1016																										
S-10, 0.5			1040																										
S-10, 1			1041																										
TOTAL																													

RELINQUISHED BY (Signature) DATE/TIME 3/8/2022 1505 RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature)

LABORATORY Xenco

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP 2.1 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-12315-1
SDG Number: 22-0105-04

Login Number: 12315
List Number: 1
Creator: Teel, Brianna

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-14735-1
Laboratory Sample Delivery Group: 22-0105-04
Client Project/Site: SD 19 CTB Manifold

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
5/20/2022 4:57:58 PM

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

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Laboratory Job ID: 880-14735-1
SDG: 22-0105-04

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-14735-1
Project/Site: SD 19 CTB Manifold SDG: 22-0105-04

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Job ID: 880-14735-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-14735-1

Receipt
The samples were received on 5/12/2022 8:46 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 time was 0.1°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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-25531 and analytical batch 880-25492 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25452 and analytical batch 880-25494 were outside control limits. Sample matrix interference 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.

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Client Sample ID: S-3 15'

Lab Sample ID: 880-14735-1
Matrix: Solid
Date Collected: 05/10/22 14:56
Date Received: 05/12/22 08:46

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/16/22 13:30	05/17/22 19:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/16/22 13:30	05/17/22 19:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/16/22 13:30	05/17/22 19:37	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		05/16/22 13:30	05/17/22 19:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/16/22 13:30	05/17/22 19:37	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/16/22 13:30	05/17/22 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/16/22 13:30*	*05/17/22 19:37*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*05/16/22 13:30*	*05/17/22 19:37*	*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			05/18/22 09:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/16/22 12:00	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	<49.8	U	49.8		mg/Kg		05/12/22 15:30	05/13/22 20:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/12/22 15:30	05/13/22 20:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/12/22 15:30	05/13/22 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*90*		*70 - 130*	*05/12/22 15:30*	*05/13/22 20:29*	*1*
o-Terphenyl (Surr)	*91*		*70 - 130*	*05/12/22 15:30*	*05/13/22 20:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**233**		5.01		mg/Kg			05/16/22 18:25	1

Client Sample ID: S-3 20'

Lab Sample ID: 880-14735-2
Matrix: Solid
Date Collected: 05/10/22 15:00
Date Received: 05/12/22 08:46

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:30	05/17/22 19:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:30	05/17/22 19:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:30	05/17/22 19:58	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		05/16/22 13:30	05/17/22 19:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/16/22 13:30	05/17/22 19:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/16/22 13:30	05/17/22 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*05/16/22 13:30*	*05/17/22 19:58*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/16/22 13:30*	*05/17/22 19:58*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Client Sample ID: S-3 20'

Lab Sample ID: 880-14735-2
Matrix: Solid
Date Collected: 05/10/22 15:00
Date Received: 05/12/22 08:46

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			05/18/22 09:03	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			05/16/22 12:00	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		05/12/22 15:30	05/13/22 20:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/22 15:30	05/13/22 20:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/22 15:30	05/13/22 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*84*		*70 - 130*	*05/12/22 15:30*	*05/13/22 20:51*	*1*
o-Terphenyl (Surr)	*83*		*70 - 130*	*05/12/22 15:30*	*05/13/22 20:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.0**		4.95		mg/Kg			05/16/22 18:32	1

Client Sample ID: S-3 25'

Lab Sample ID: 880-14735-3
Matrix: Solid
Date Collected: 05/10/22 15:05
Date Received: 05/12/22 08:46

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:30	05/17/22 20:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:30	05/17/22 20:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:30	05/17/22 20:19	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		05/16/22 13:30	05/17/22 20:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/16/22 13:30	05/17/22 20:19	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/16/22 13:30	05/17/22 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/16/22 13:30*	*05/17/22 20:19*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/16/22 13:30*	*05/17/22 20:19*	*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			05/18/22 09:03	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			05/16/22 12:00	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 *1	50.0		mg/Kg		05/13/22 11:17	05/13/22 22:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 22:39	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Client Sample ID: S-3 25'
Date Collected: 05/10/22 15:05
Date Received: 05/12/22 08:46

Lab Sample ID: 880-14735-3
Matrix: Solid

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		05/13/22 11:17	05/13/22 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*05/13/22 11:17*	*05/13/22 22:39*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*05/13/22 11:17*	*05/13/22 22:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.0**		4.99		mg/Kg			05/16/22 18:38	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14735-1	S-3 15'	107	104
880-14735-2	S-3 20'	104	103
880-14735-3	S-3 25'	102	103
890-2301-A-1-D MS	Matrix Spike	104	104
890-2301-A-1-E MSD	Matrix Spike Duplicate	103	102
LCS 880-25636/1-A	Lab Control Sample	98	96
LCSD 880-25636/2-A	Lab Control Sample Dup	102	102
MB 880-25636/5-A	Method Blank	97	98

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14735-1	S-3 15'	90	91
880-14735-2	S-3 20'	84	83
880-14735-3	S-3 25'	102	107
880-14735-3 MS	S-3 25'	86	83
880-14735-3 MSD	S-3 25'	83	80
880-14745-A-22-B MS	Matrix Spike	95	82
880-14745-A-22-C MSD	Matrix Spike Duplicate	84	72
LCS 880-25452/2-A	Lab Control Sample	114	109
LCS 880-25531/2-A	Lab Control Sample	108	108
LCSD 880-25452/3-A	Lab Control Sample Dup	106	101
LCSD 880-25531/3-A	Lab Control Sample Dup	105	108
MB 880-25452/1-A	Method Blank	99	106
MB 880-25531/1-A	Method Blank	102	108

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25636/5-A
Matrix: Solid
Analysis Batch: 25672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25636

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:30	05/17/22 11:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:30	05/17/22 11:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:30	05/17/22 11:48	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/16/22 13:30	05/17/22 11:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/22 13:30	05/17/22 11:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/22 13:30	05/17/22 11:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/16/22 13:30*	*05/17/22 11:48*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/16/22 13:30*	*05/17/22 11:48*	*1*

Lab Sample ID: LCS 880-25636/1-A
Matrix: Solid
Analysis Batch: 25672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25636

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09524		mg/Kg		95	70 - 130		
Toluene			0.100	0.09684		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1120		mg/Kg		112	70 - 130		
m,p-Xylenes			0.200	0.2019		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.09544		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-25636/2-A
Matrix: Solid
Analysis Batch: 25672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 25636

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1015		mg/Kg		101	70 - 130	6	35
Toluene			0.100	0.09620		mg/Kg		96	70 - 130	1	35
Ethylbenzene			0.100	0.1102		mg/Kg		110	70 - 130	2	35
m,p-Xylenes			0.200	0.1975		mg/Kg		99	70 - 130	2	35
o-Xylene			0.100	0.09391		mg/Kg		94	70 - 130	2	35

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

Lab Sample ID: 890-2301-A-1-D MS
Matrix: Solid
Analysis Batch: 25672

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 25636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.09146		mg/Kg		92	70 - 130		
Toluene	<0.00199	U	0.0996	0.08637		mg/Kg		86	70 - 130		

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

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

Lab Sample ID: 890-2301-A-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 25672 — **Prep Batch: 25636**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.09756		mg/Kg		98	70 - 130
m,p-Xylenes	<0.00398	U	0.199	0.1748		mg/Kg		88	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08344		mg/Kg		83	70 - 130

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

Lab Sample ID: 890-2301-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 25672 — **Prep Batch: 25636**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.08543		mg/Kg		86	70 - 130	7	35
Toluene	<0.00199	U	0.0998	0.08179		mg/Kg		81	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.0998	0.09262		mg/Kg		93	70 - 130	5	35
m,p-Xylenes	<0.00398	U	0.200	0.1656		mg/Kg		83	70 - 130	5	35
o-Xylene	<0.00199	U	0.0998	0.07884		mg/Kg		79	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-25452/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 25494 — **Prep Batch: 25452**

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		05/12/22 15:30	05/13/22 10:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/12/22 15:30	05/13/22 10:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/12/22 15:30	05/13/22 10:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*05/12/22 15:30*	*05/13/22 10:39*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*05/12/22 15:30*	*05/13/22 10:39*	*1*

Lab Sample ID: LCS 880-25452/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 25494 — **Prep Batch: 25452**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1110		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1100		mg/Kg		110	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

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

Lab Sample ID: LCS 880-25452/2-A
Matrix: Solid
Analysis Batch: 25494

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25452

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	114		70 - 130
o-Terphenyl (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-25452/3-A
Matrix: Solid
Analysis Batch: 25494

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 25452

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1129		mg/Kg		113	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1011		mg/Kg		101	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	101		70 - 130

Lab Sample ID: 880-14745-A-22-B MS
Matrix: Solid
Analysis Batch: 25494

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 25452

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	904.0		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	200	F1	1000	977.4		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	95		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Lab Sample ID: 880-14745-A-22-C MSD
Matrix: Solid
Analysis Batch: 25494

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 25452

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	806.2		mg/Kg		78	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	200	F1	998	863.2	F1	mg/Kg		66	70 - 130	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	84		70 - 130
o-Terphenyl (Surr)	72		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

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

Lab Sample ID: MB 880-25531/1-A
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25531

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		05/13/22 11:17	05/13/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/22 11:17	05/13/22 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*05/13/22 11:17*	*05/13/22 21:34*	*1*
o-Terphenyl (Surr)	*108*		*70 - 130*	*05/13/22 11:17*	*05/13/22 21:34*	*1*

Lab Sample ID: LCS 880-25531/2-A
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25531

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	883.9		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1071		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*108*		*70 - 130*
o-Terphenyl (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-25531/3-A
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 25531

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1141	*1	mg/Kg		114	70 - 130	25	20
Diesel Range Organics (Over C10-C28)			1000	1077		mg/Kg		108	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*105*		*70 - 130*
o-Terphenyl (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-14735-3 MS
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: S-3 25'
Prep Type: Total/NA
Prep Batch: 25531

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	1000	817.2		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	945.2		mg/Kg		95	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

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

Lab Sample ID: 880-14735-3 MS
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: S-3 25'
Prep Type: Total/NA
Prep Batch: 25531

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	86		70 - 130
o-Terphenyl (Surr)	83		70 - 130

Lab Sample ID: 880-14735-3 MSD
Matrix: Solid
Analysis Batch: 25492

Client Sample ID: S-3 25'
Prep Type: Total/NA
Prep Batch: 25531

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 *1	998	812.7		mg/Kg		80	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	917.5		mg/Kg		92	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	83		70 - 130
o-Terphenyl (Surr)	80		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25455/1-A
Matrix: Solid
Analysis Batch: 25619

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			05/16/22 16:50	1

Lab Sample ID: LCS 880-25455/2-A
Matrix: Solid
Analysis Batch: 25619

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-25455/3-A
Matrix: Solid
Analysis Batch: 25619

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	271.5		mg/Kg		109	90 - 110	6	20

Lab Sample ID: 880-14735-3 MS
Matrix: Solid
Analysis Batch: 25619

Client Sample ID: S-3 25'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	78.0		250	347.8		mg/Kg		108	90 - 110		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-14735-3 MSD
Matrix: Solid
Analysis Batch: 25619

Client Sample ID: S-3 25'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	78.0		250	340.6		mg/Kg		105	90 - 110	2	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

GC VOA

Prep Batch: 25636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	5035	
880-14735-2	S-3 20'	Total/NA	Solid	5035	
880-14735-3	S-3 25'	Total/NA	Solid	5035	
MB 880-25636/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25636/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25636/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2301-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2301-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	8021B	25636
880-14735-2	S-3 20'	Total/NA	Solid	8021B	25636
880-14735-3	S-3 25'	Total/NA	Solid	8021B	25636
MB 880-25636/5-A	Method Blank	Total/NA	Solid	8021B	25636
LCS 880-25636/1-A	Lab Control Sample	Total/NA	Solid	8021B	25636
LCSD 880-25636/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25636
890-2301-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	25636
890-2301-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25636

Analysis Batch: 25795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	Total BTEX	
880-14735-2	S-3 20'	Total/NA	Solid	Total BTEX	
880-14735-3	S-3 25'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 25452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	8015NM Prep	
880-14735-2	S-3 20'	Total/NA	Solid	8015NM Prep	
MB 880-25452/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25452/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14745-A-22-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14745-A-22-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-3	S-3 25'	Total/NA	Solid	8015B NM	25531
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015B NM	25531
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25531
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25531
880-14735-3 MS	S-3 25'	Total/NA	Solid	8015B NM	25531
880-14735-3 MSD	S-3 25'	Total/NA	Solid	8015B NM	25531

Analysis Batch: 25494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	8015B NM	25452
880-14735-2	S-3 20'	Total/NA	Solid	8015B NM	25452

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

GC Semi VOA (Continued)

Analysis Batch: 25494 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-25452/1-A	Method Blank	Total/NA	Solid	8015B NM	25452
LCS 880-25452/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25452
LCSD 880-25452/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25452
880-14745-A-22-B MS	Matrix Spike	Total/NA	Solid	8015B NM	25452
880-14745-A-22-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25452

Prep Batch: 25531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-3	S-3 25'	Total/NA	Solid	8015NM Prep	
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14735-3 MS	S-3 25'	Total/NA	Solid	8015NM Prep	
880-14735-3 MSD	S-3 25'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Total/NA	Solid	8015 NM	
880-14735-2	S-3 20'	Total/NA	Solid	8015 NM	
880-14735-3	S-3 25'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Soluble	Solid	DI Leach	
880-14735-2	S-3 20'	Soluble	Solid	DI Leach	
880-14735-3	S-3 25'	Soluble	Solid	DI Leach	
MB 880-25455/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25455/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25455/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-14735-3 MS	S-3 25'	Soluble	Solid	DI Leach	
880-14735-3 MSD	S-3 25'	Soluble	Solid	DI Leach	

Analysis Batch: 25619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14735-1	S-3 15'	Soluble	Solid	300.0	25455
880-14735-2	S-3 20'	Soluble	Solid	300.0	25455
880-14735-3	S-3 25'	Soluble	Solid	300.0	25455
MB 880-25455/1-A	Method Blank	Soluble	Solid	300.0	25455
LCS 880-25455/2-A	Lab Control Sample	Soluble	Solid	300.0	25455
LCSD 880-25455/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25455
880-14735-3 MS	S-3 25'	Soluble	Solid	300.0	25455
880-14735-3 MSD	S-3 25'	Soluble	Solid	300.0	25455

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Client Sample ID: S-3 15'

Lab Sample ID: 880-14735-1
Matrix: Solid
Date Collected: 05/10/22 14:56
Date Received: 05/12/22 08:46

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	25636	05/16/22 13:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25672	05/17/22 19:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25795	05/18/22 09:03	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25627	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	25452	05/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25494	05/13/22 20:29	SM	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 18:25	CH	XEN MID

Client Sample ID: S-3 20'

Lab Sample ID: 880-14735-2
Matrix: Solid
Date Collected: 05/10/22 15:00
Date Received: 05/12/22 08:46

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	25636	05/16/22 13:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25672	05/17/22 19:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25795	05/18/22 09:03	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25627	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25452	05/12/22 15:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25494	05/13/22 20:51	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 18:32	CH	XEN MID

Client Sample ID: S-3 25'

Lab Sample ID: 880-14735-3
Matrix: Solid
Date Collected: 05/10/22 15:05
Date Received: 05/12/22 08:46

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	25636	05/16/22 13:30	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25672	05/17/22 20:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25795	05/18/22 09:03	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			25627	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/13/22 22:39	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	25455	05/12/22 15:38	CH	XEN MID
Soluble	Analysis	300.0		1			25619	05/16/22 18:38	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. Job ID: 880-14735-1
Project/Site: SD 19 CTB Manifold SDG: 22-0105-04

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. Job ID: 880-14735-1
Project/Site: SD 19 CTB Manifold SDG: 22-0105-04

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD 19 CTB Manifold

Job ID: 880-14735-1
SDG: 22-0105-04

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-14735-1	S-3 15'	Solid	05/10/22 14:56	05/12/22 08:46
880-14735-2	S-3 20'	Solid	05/10/22 15:00	05/12/22 08:46
880-14735-3	S-3 25'	Solid	05/10/22 15:05	05/12/22 08:46

No. 2237

14735 CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N Marienfeld Ste 202
Midland TX 79701
432 687 0901

Data Reported to

DATE 5-12-22 PAGE 1 OF 1

PO# LAB WORK ORDER#

PROJECT LOCATION OR NAME SD 19 CTB Manifold

LAI PROJECT # 22-0105-04 COLLECTOR JR

TRRP report? ☐ Yes ☒ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

TIME ZONE
Time zone/State MST/NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐	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 ☐	TCLP - METALS (RCRA) ☐	TCLP PEST ☐	TCLP HERB ☐	TCLP VOC ☐	TOTAL METALS (RCRA) ☐	Semi-VOC ☐	LEAD - TOTAL ☐	OTHER LIST ☐	RCI ☐	DW 200.8 ☐	TOX ☐	TCLP ☐	TDS ☐	FLASHPOINT ☐	TSS ☐	% MOISTURE ☐	pH ☐	CYANIDE ☐	HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐	PECHLORATE ☐	CHLORIDE ☐	ANIONS ☐	ALKALINITY ☐	Hold	FIELD NOTES
S-3 15'		5-10-22	1456	S	1				X		X		X	X	X																																Hold Samples
S-3 20'			1500																																												S-3 30', 35', and 40'
S-3 25'			1505																																												
S-3 30'			1510																																										X		
S-3 35'			1515																																										X		
S-3 40'			1520																																										X		

TOTAL 6

RELINQUISHED BY (Signature) Jake Peters DATE/TIME 5/12/22 8:46 RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature)

LABORATORY Xenco

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY
RECEIVING TEMP 3.1 THERM# IR2
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

880-14735 Chain of Custody

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-14735-1
SDG Number: 22-0105-04

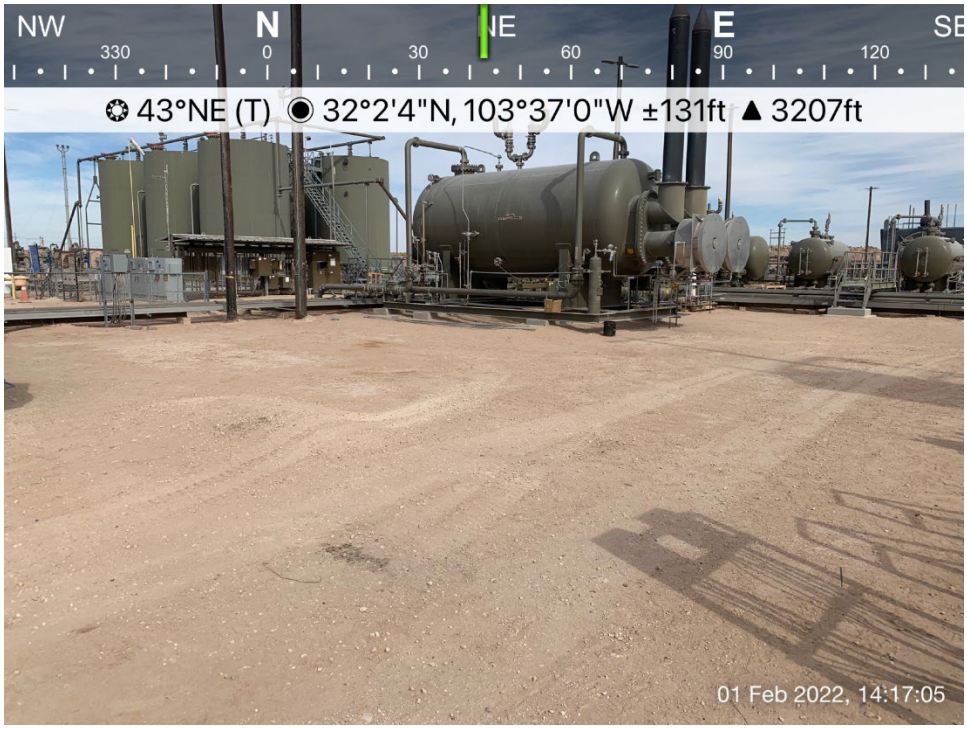
Login Number: 14735
List Number: 1
Creator: Rodriguez, Leticia

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	

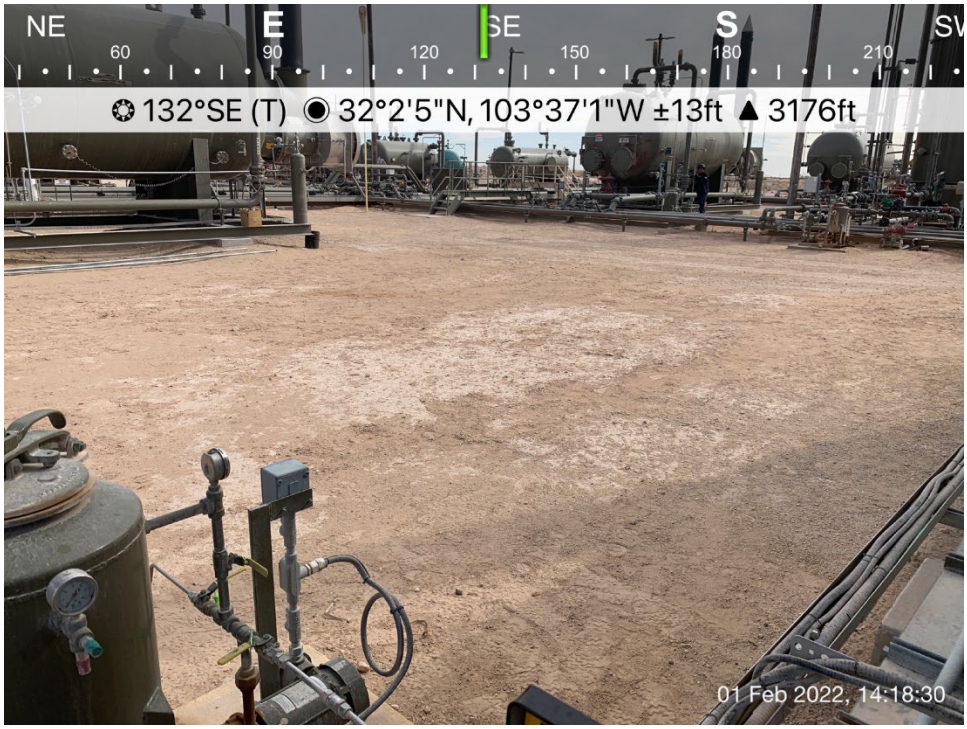
Appendix E

Photographs

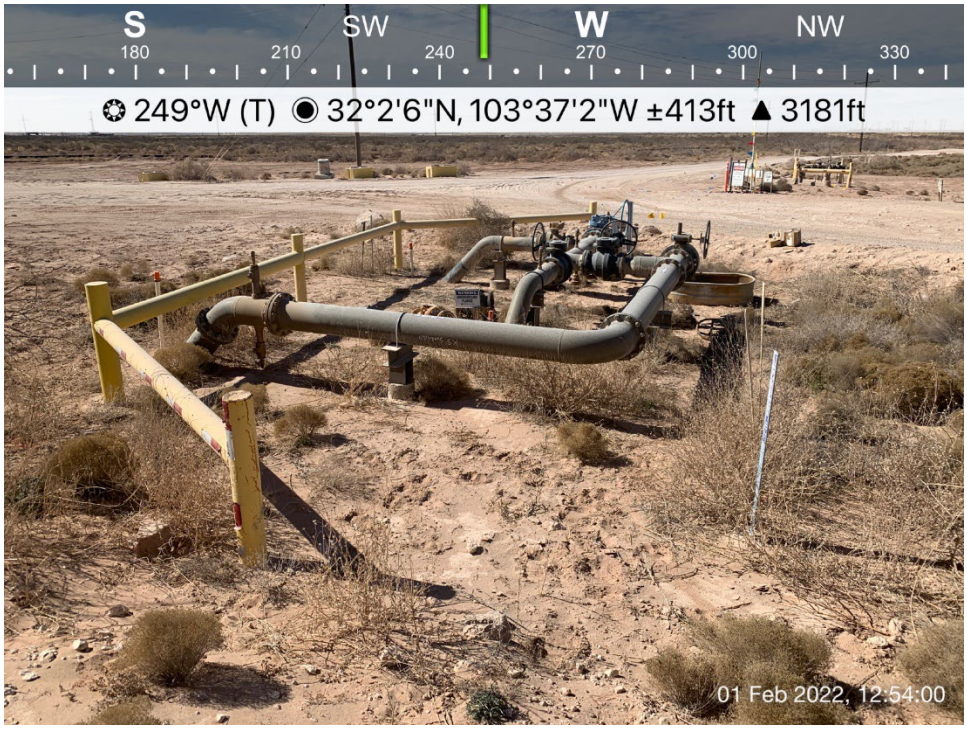


Waterline Release Impacted Area, Viewing Northeast

Waterline Release Impacted Area, Viewing North



Waterline Release Impacted Area, Viewing Southeast



Manifold Release Impacted Area, Viewing West

Manifold Release Impacted Area, Viewing East

Manifold Release Impacted Area, Viewing Northeast

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 132009

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 132009
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved.	8/11/2022