State of New Mexico
Oil Conservation Division

Incident ID	nAPP2203347230
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?	>101.5 (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

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature: Amy Barnhill Date: 5-23-22

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2203347230
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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: Lead Environmental Specialist

Signature: Amy Barnhill Date: 5-23-22

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

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2203347230
District RP	
Facility ID	
Application ID	

Closure

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

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

[X] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[X] Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

[X] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[X] Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature: Amy Barnhill Date: 5-23-22

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: 06/01/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

Tracking Number: nAPP2203347230
Closure Report
Salado Draw CTB 24 (Hydrovac Piles)
Hydrovac Dumping
Lea County, New Mexico

Latitude: N 32.025058°
Longitude: W -103.634239°

LAI Project No. 21-0100-23

May 5, 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

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1.0 INTRODUCTION

Larson & Associates, Inc. (LAI), has prepared this closure report on behalf of Chevron USA Inc. (Chevron) for submittal to the New Mexico Oil Conservation Division (OCD) District I for two (2) hydrovac dump sites at the Salado Draw CTB 24 (Site) located in Unit J (NW/4, SE/4), Section 25, Township 17 South, Range 34 East, in Lea County, New Mexico. The geodetic position is North 32.802536° and West -103.510736°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The hydrovac piles (releases) were discovered on April 1, 2021, and occurred when a Chevron contractor conducting hydrovac operations within the spill area for #nRM1926958728 dumped chloride contaminated soil at two (2) locations (Hydrovac -1 and Hydrovac -2) in the pasture adjacent to the pipeline right of way (ROW). Volume of fluid is unknown, but the hydrovac utilized has the capability of containing approximately twelve (12) cubic yards of media (i.e., soil, water, and rock). The affected area of Hydrovac -1 measures approximately 1,213 square feet. Hydrovac -2 measures approximately 1,691 square feet. The surface owner is the United States of America, administered by the Bureau of Land Management (BLM). The initial C-141 was assigned an incident number of nAPP2203347230. Appendix A presents the initial C-141.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is 3,139 approximately feet above mean sea level (msl) at Hydrovac-1 and 3,138 feet msl at Hydrovac-2.
- The surface topography slopes gradually to the southwest.
- There are no surface water features within 1,000 feet of the Sites.
- Karst data provided by the USGS describes this site as “Medium Risk” potential.
- The soils are designated as Pyote and Maljamar Fine Sands, dry, consisting of 30 inches of fine sand, underlain by 30 inches inches of fine sandy loam.
- The surface geology consists of the Quaternary aged sand and silt (USGS).
- Groundwater occurs at a depth greater than 101.5 feet below ground surface (bgs) based on depth to groundwater measurements 72 hours after drilling a soil boring (SB-01) on April 14, 2020.

Appendix B presents the Karst Risk Potential map. Appendix C presents the soil boring log.

1.3 Remediation Levels

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 20,000 mg/Kg

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

2.0 DELINEATION

On February 1, 2022, LAI personnel used a stainless-steel hand auger to collect soil samples at fourteen (14) locations inside the spill areas and in each cardinal direction (S-1 through S-14) to delineate the releases vertically and horizontally. The samples were collected to approximately three (3) feet bgs. The soil samples were delivered under chain of custody and preservation to Eurofins-Xenco (Xenco) Laboratory in Midland, Texas. The laboratory 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, 8015M, and 300E, respectively. Benzene, BTEX, TPH, and chloride were below the remediation action levels of 10 mg/Kg, 50 mg/Kg, 100 mg/Kg, and 600 mg/Kg, respectively, in all samples. Figure 2b and 2c presents an aerial map showing the sample locations. Tables 1 presents the soil sample analytical data summary. Appendix D presents the laboratory reports.

3.0 REMEDIATION

On October 26, 2021, LAI personnel requested approval from the BLM, as surface owner, to excavate soil from within spill areas at Hydrovac-1 and Hydrovac-2. Approval was granted by James A. Amos with BLM on October 29, 2021. Appendix E presents the BLM communications.

On January 17, 2022, Bullseye Testing, LLC. (Bullseye), under supervision from LAI personnel, began to excavate soil from the two (2) spill areas (Hydrovac-1 and Hydrovac-2) measuring approximately 1,213 square feet and 1,691 square feet, respectively. Soil was excavated to a depth of approximately 1-foot bgs and was hauled to R360 Halfway Facility between Carlsbad and Hobbs, New Mexico. Appendix F presents the waste manifests.

On January 19, 2022, LAI personnel collected twenty-five (25) confirmation soil samples from the bottom and sidewalls of the excavation. The soil samples were delivered under chain of custody and preservation to Xenco laboratories. The laboratory analyzed the samples for BTEX, TPH, and chloride by EPA SW-846 8021B, 8015M, and 300E, respectively. Benzene, BTEX, and TPH reported below the NMOCD remediation standards in all confirmation composite soil samples. Chloride reported above the NMOCD remediation standard of 600 mg/Kg in the following samples:

Sample ID	Location	Depth (Feet)	Chloride (mg/Kg)
C-7	Sidewall	0 – 1	663
C-12	Bottom	1	620

On February 21, 2022, Bullseye, under supervision from LAI personnel, excavated an additional one (1) foot of soil from the sidewall at C-7 and one (1) foot from the bottom at C-12. Subsequent laboratory analysis reported benzene, BTEX, TPH, and chloride concentrations below the NMOCD remediation levels. LAI personnel collected (1) composite sample of clean topsoil from a nearby NGL borrow pit.

On March 25, 2022, Bullseye backfilled the excavation with clean topsoil. LAI personnel collected one (1) composite sample (BF-1) of clean topsoil from a nearby burrow pit. Xenco analyzed the sample for benzene, BTEX, TPH, and chloride. Benzene, BTEX, TPH, and chloride were below the analytical method reporting limit (RL). Table 2 presents the confirmation and backfill sample analytical data summary. Figure 3 presents the soil excavation areas and confirmation sample locations. Appendix D presents the laboratory reports.

On April 5, 2022, the excavation was seeded with BLM Mix #2. Appendix F presents the NMOCD communications. Appendix G presents the waste manifests. Appendix H presents photographs.

4.0 CLOSURE REQUEST

Chevron requests no further action.

Tables

Table 1
Soil Sample Analytical Data Summary
SD 24 Hydrovac Piles
Lea County, New Mexico
32° 01' 32.2235" North, 103° 38' 03.2725" West

Sample	Depth (Inches/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**	**600/20,000**
Spill Area 1 (Hydrovac-1)										
S-1	1	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	78.7
	2	2/1/2022	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	60.6
	3	2/1/2022	In-Situ	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	22.6
S-2	1	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	167
	2	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	121
	3	2/1/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	150
S-3	1	2/1/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<4.96
	2	2/1/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	6.94
	3	2/1/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	136
S-4	0.5	2/1/2022	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<5.00
S-5	0.5	2/1/2022	In-Situ	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	5.91
S-6	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	31.1
S-7	0.5	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<5.01
Spill Area 2 (Hydrovac-2)										
S-8	1	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	334
	2	2/1/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	156
	3	2/1/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	143

Table 1
Soil Sample Analytical Data Summary
SD 24 Hydrovac Piles
Lea County, New Mexico
32° 01' 32.2235" North, 103° 38' 03.2725" West

Sample	Depth (Inches/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**	**600/20,000**
S-9	1	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	88.1
	2	2/1/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	56.6
	3	2/1/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	78.9
S-10	1	2/1/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	120
	2	2/1/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	61.5
	3	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	37.4
S-11	0.5	2/1/2022	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<5.00
S-12	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<4.99
S-13	0.5	2/1/2022	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<5.00
S-14	0.5	2/1/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	9.24

Notes: Analysis performed by Xenco Laboratories (Xenco) in Midland, Texas by EPA SW-846 8021B (BTEX), 8015M (TPH), and 300E (Chloride)
Depth in feet below ground surface (bgs)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)
<: denotes concentration less than analytical method reporting limit
Bold and Highlighted exceeds OCD remediation action limits

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 24 CTB Hydrovac Piles
Lea County, New Mexico
North 32°01'32.2235"N West 103°38'03.2725"W

Sample ID	Location	Depth (feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
RAL:					**10**	**50**				**100/2,500**	**600/20,000**
C-1	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	111
C-2	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	113
C-3	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	27.2
C-4	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	26.6
C-5	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	68.8
C-6	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	374
C-7	Sidewall	0 - 1	1/19/2022	Excavated	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	**663**
			2/21/2022	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	147
C-8	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00399	<49.9	51.4	<49.9	51.4	257
C-9	Bottom	1	1/19/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	417
C-10	Bottom	1	1/19/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	159
C-11	Bottom	1	1/19/2022	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	320
C-12	Bottom	1	1/19/2022	Excavated	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	**620**
		2	2/21/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	12.8
C-13	Bottom	1	1/19/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	233
C-14	Bottom	1	1/19/2022	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	422
C-15	Bottom	1	1/19/2022	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	434
C-16	Bottom	1	1/19/2022	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	284
C-17	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	205
C-18	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	14.9
C-19	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	12.1
C-20	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	22.3
C-21	Sidewall	0 - 1	1/19/2022	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	150
C-22	Bottom	1	1/19/2022	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	13.2
C-23	Bottom	1	1/19/2022	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	126
C-24	Bottom	1	1/19/2022	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	148
C-25	Bottom	1	1/19/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	81.2
BF-1	--	--	3/18/2022	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<4.98

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 24 CTB Hydrovac Piles
Lea County, New Mexico
North 32°01'32.2235"N West 103°38'03.2725"W

Notes: analysis performed by Xenco Laboratories (Xenco), Midland, Texas and Carlsbad, New Mexico by EPA SW-846 Methods 8021B (BTEX) and 8015M (TPH), and Method 300 (chloride)

Depth in feet below ground surface (bgs)

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

Bold and Highlighted Denotes Conetrations Above OCD Closure Criteria

Figures

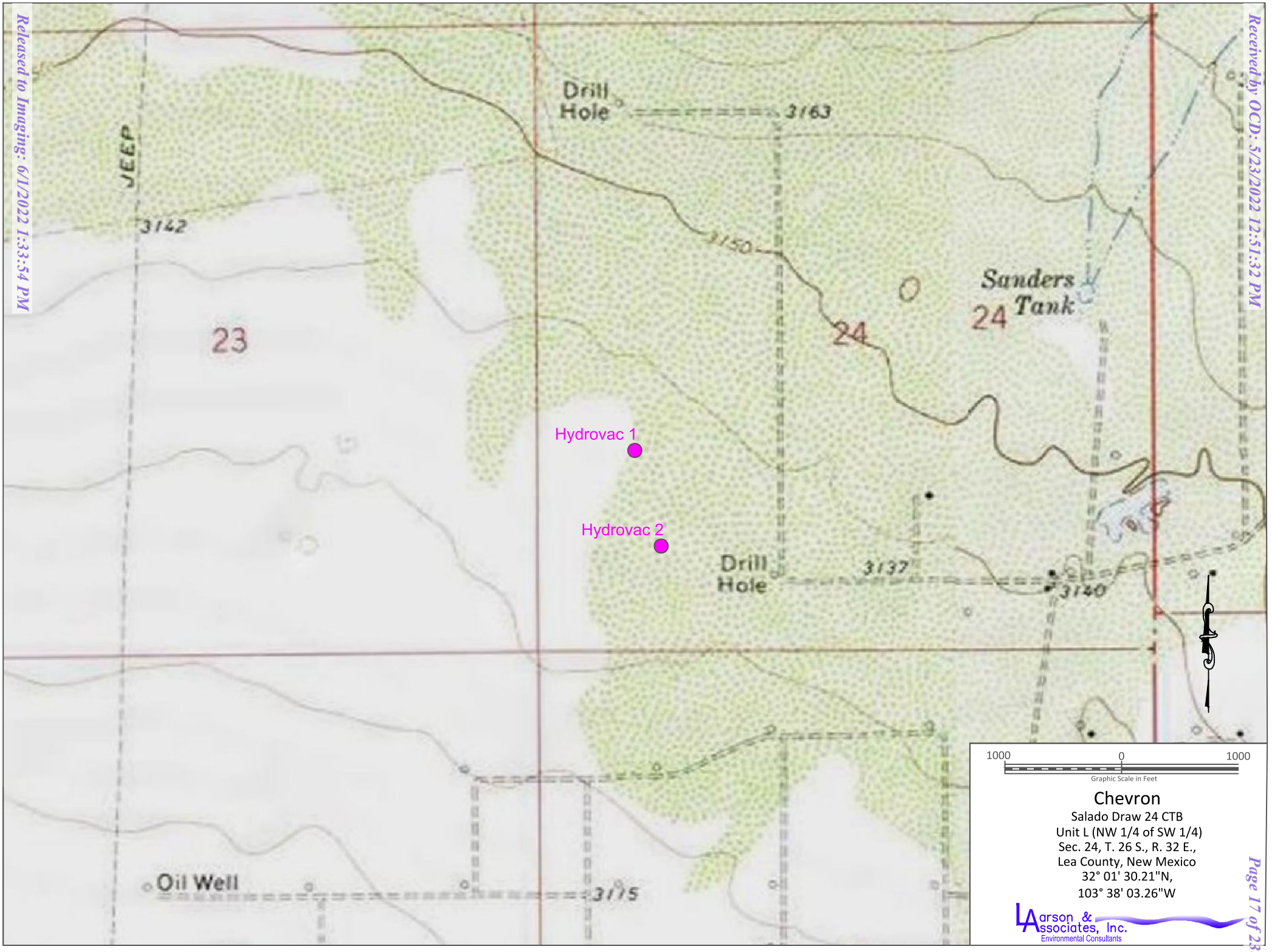


Figure 1 - Topographic Map

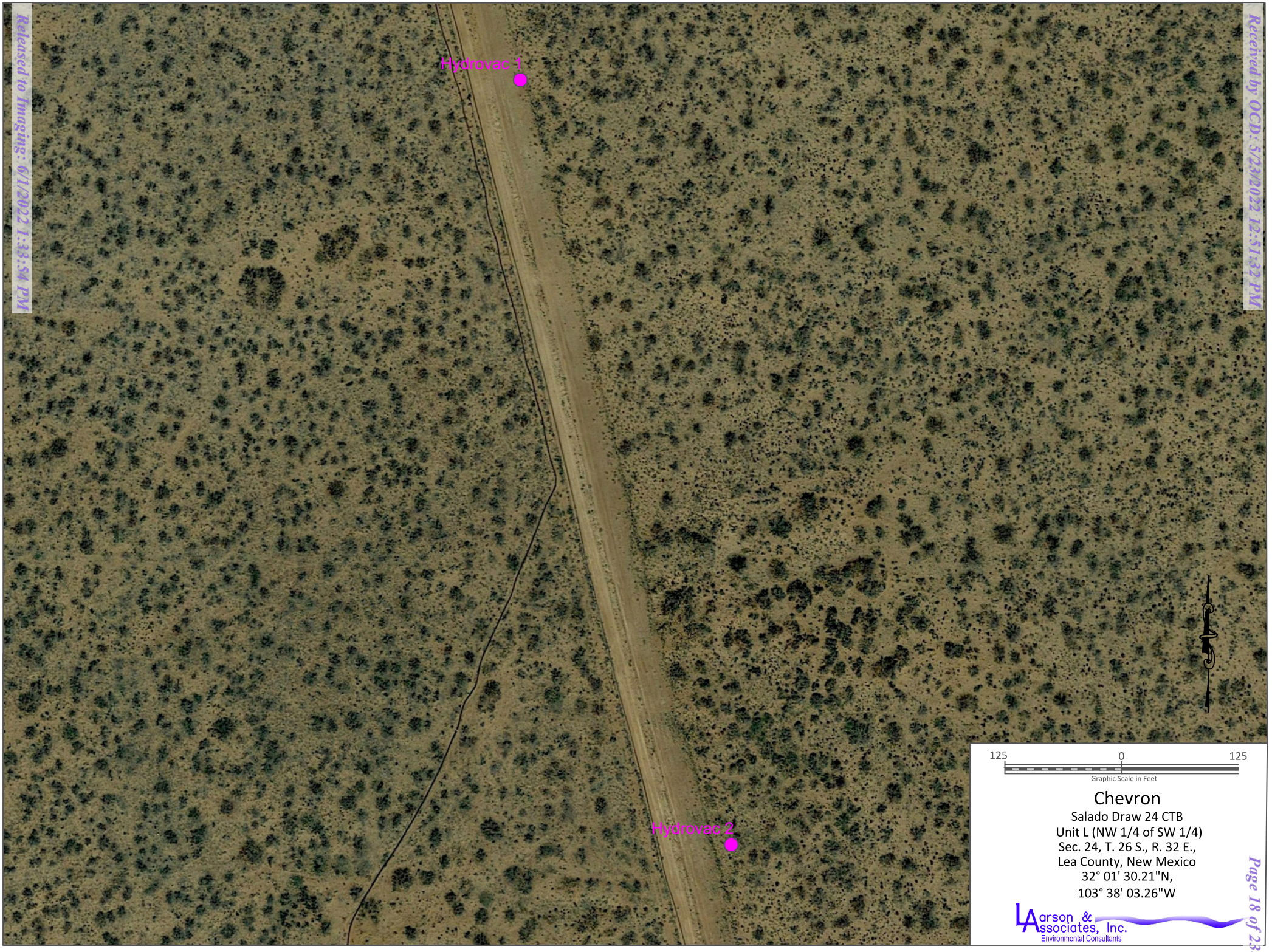


Figure 2a - Aerial Map Showing Hydrovac Spill Locations

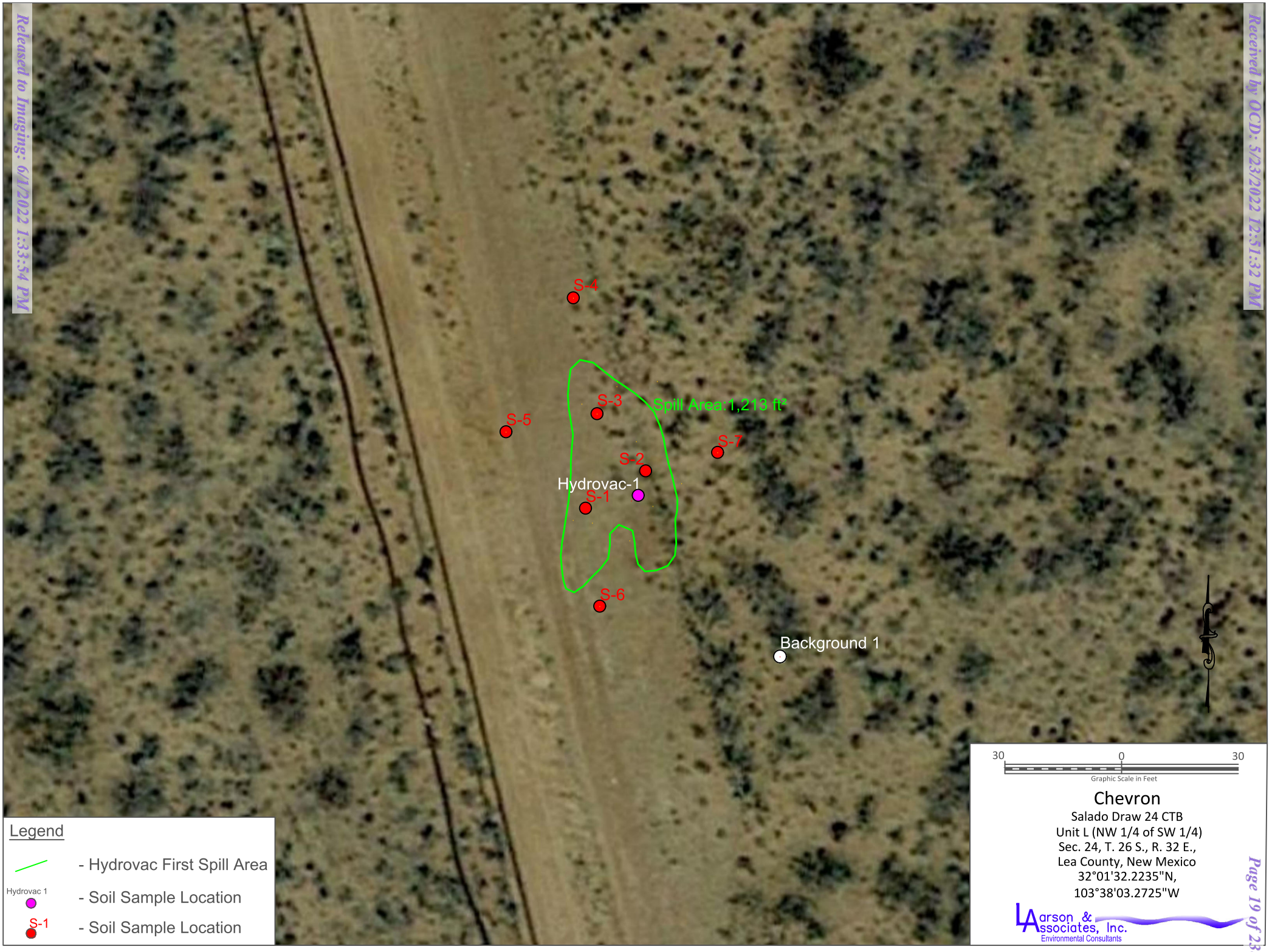


Figure 2b - Focused Aerial Map Showing Hydrovac Spill 1

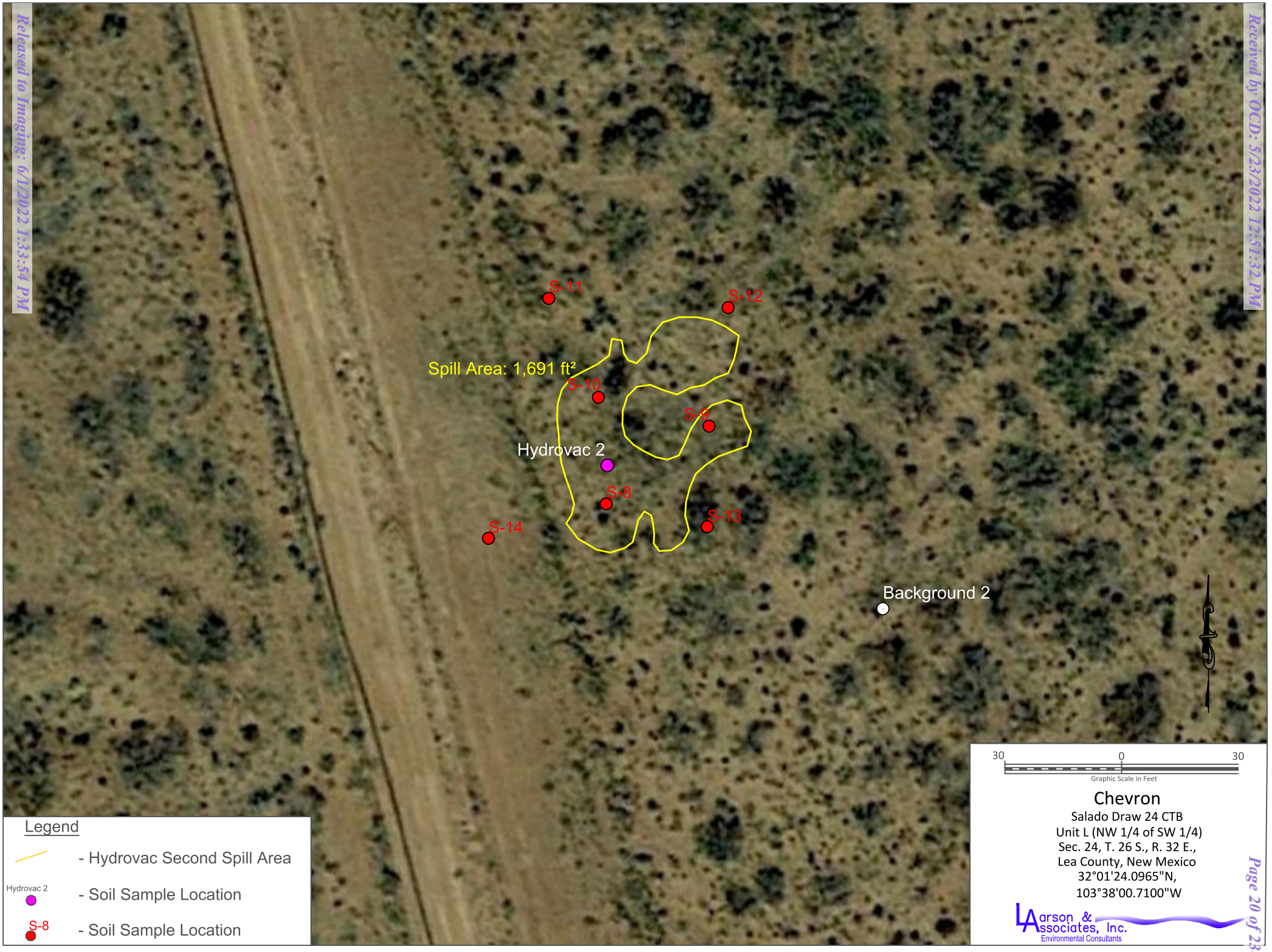


Figure 2c - Focused Aerial Map Showing Hydrovac Spill 2

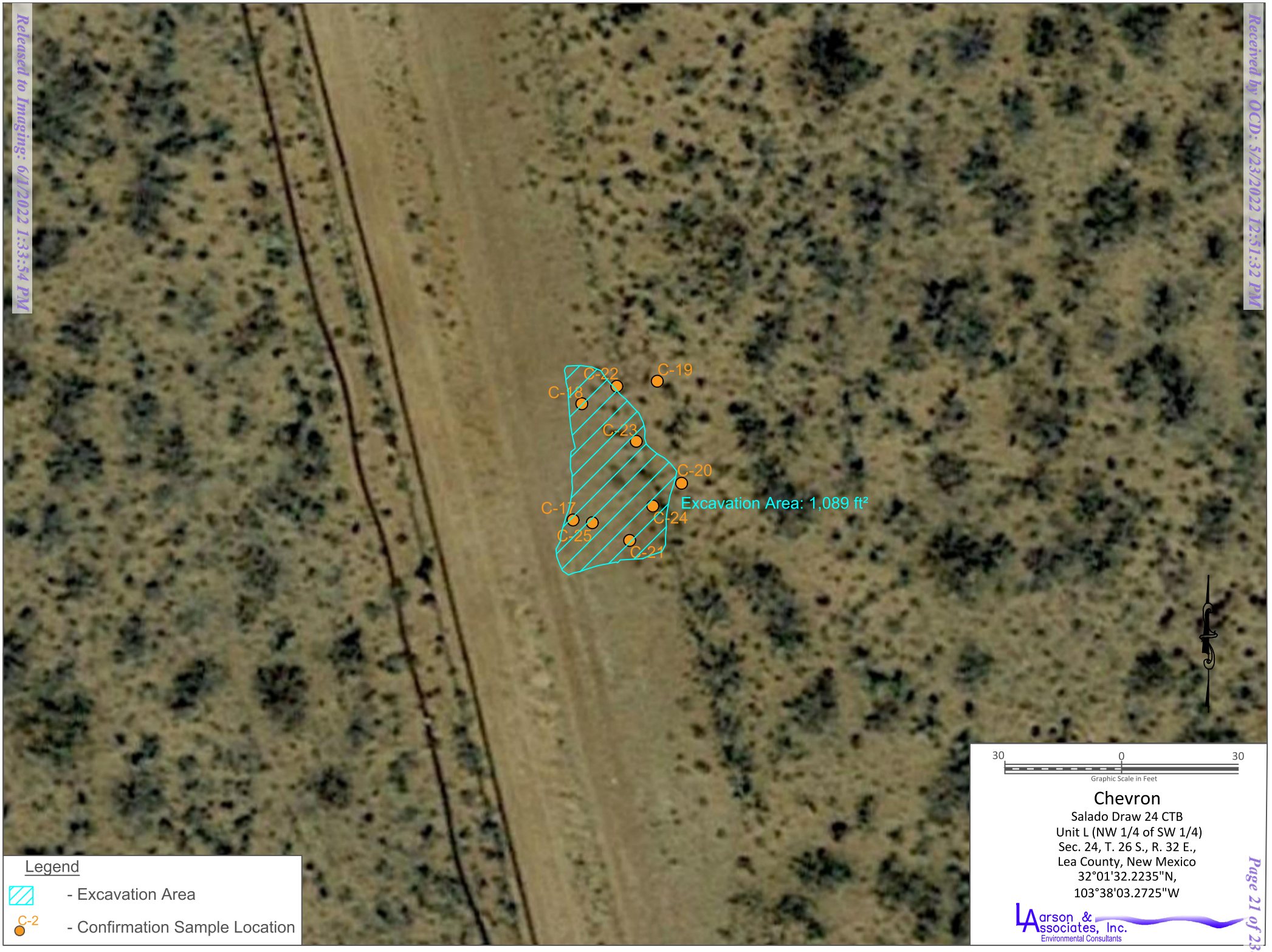


Figure 3a - Focused Aerial Map Showing Hydrovac 1 Excavation Area

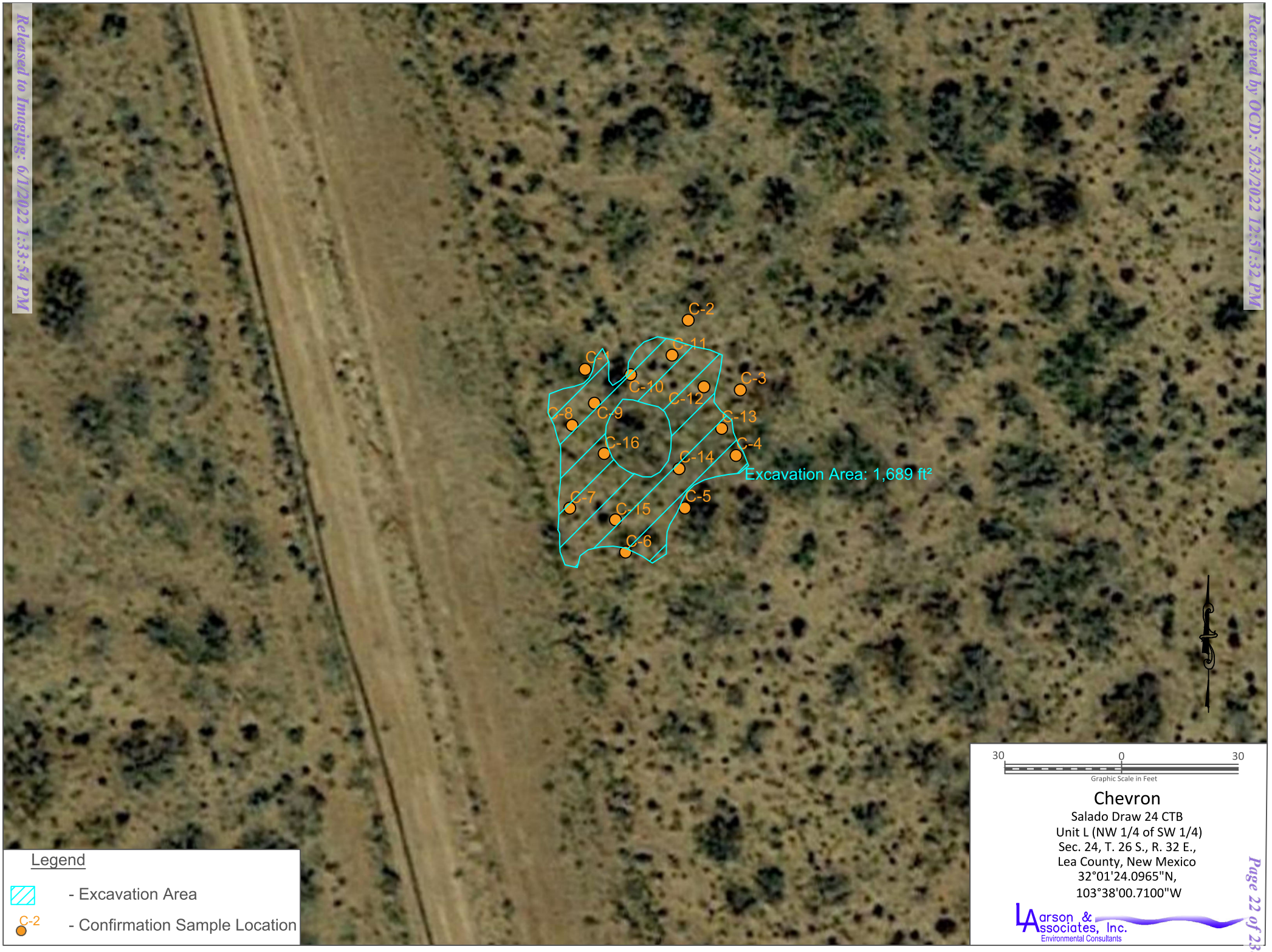


Figure 3b - Focused Aerial Map Showing Hydrovac 2 Excavation Area

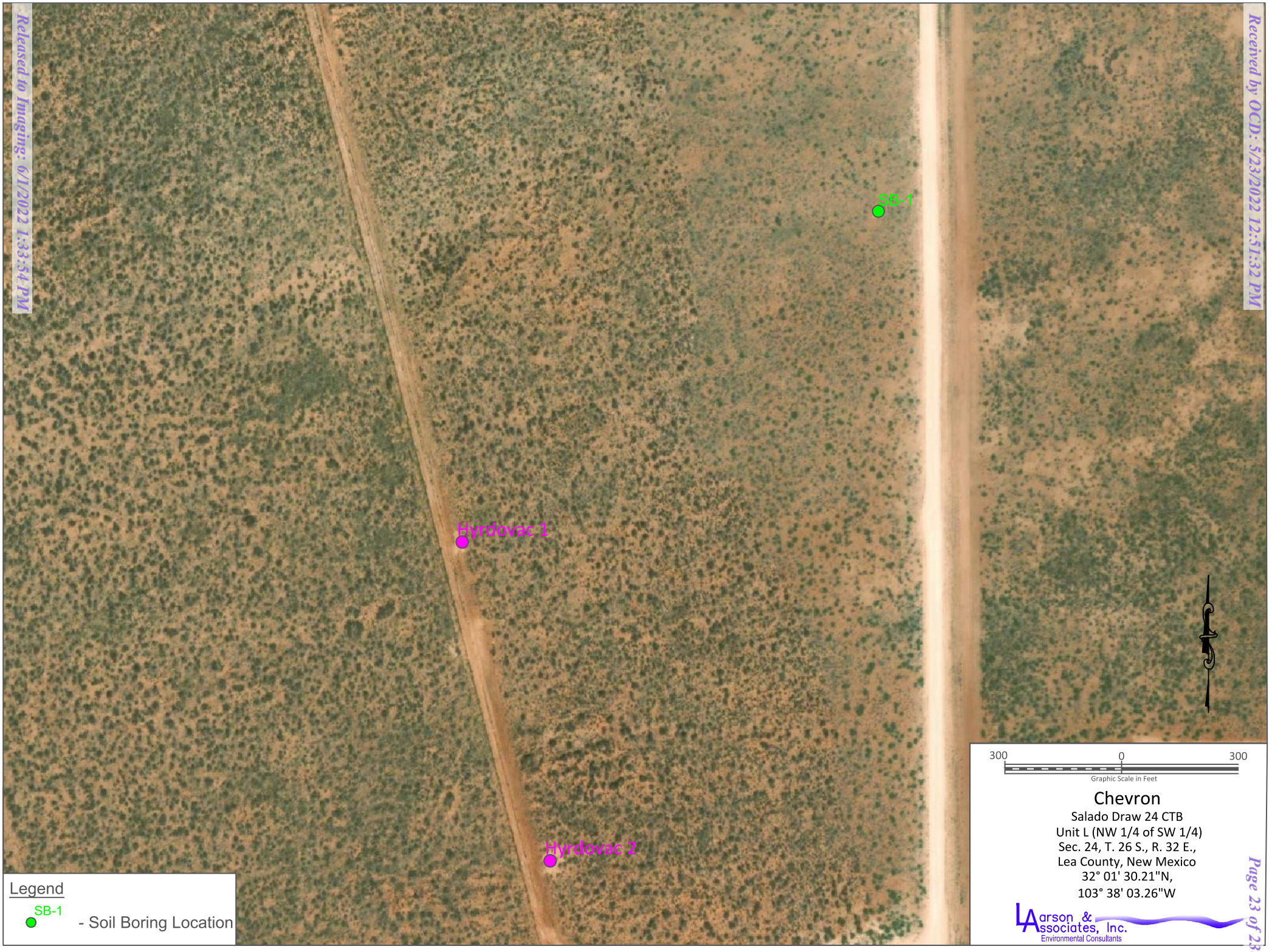


Figure 4 - Aerial Map Showing Soil Boring Location

Appendix A

Chevron Initial C-141

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	nAPP2203347230
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 32.02162 Longitude -103.63290
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Salado Draw CTB 24	Site Type: Oil
Date Release Discovered: 4-1-21	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
M	24	26S	32E	Lea

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (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) Unknown bbls	Volume/Weight Recovered (provide units) 0
Cause of Release: During hydrovac operations, contaminated soil was left on the ground without a liner		

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2203347230
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: 2-2-22

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

OCD Only

Received by: Date:

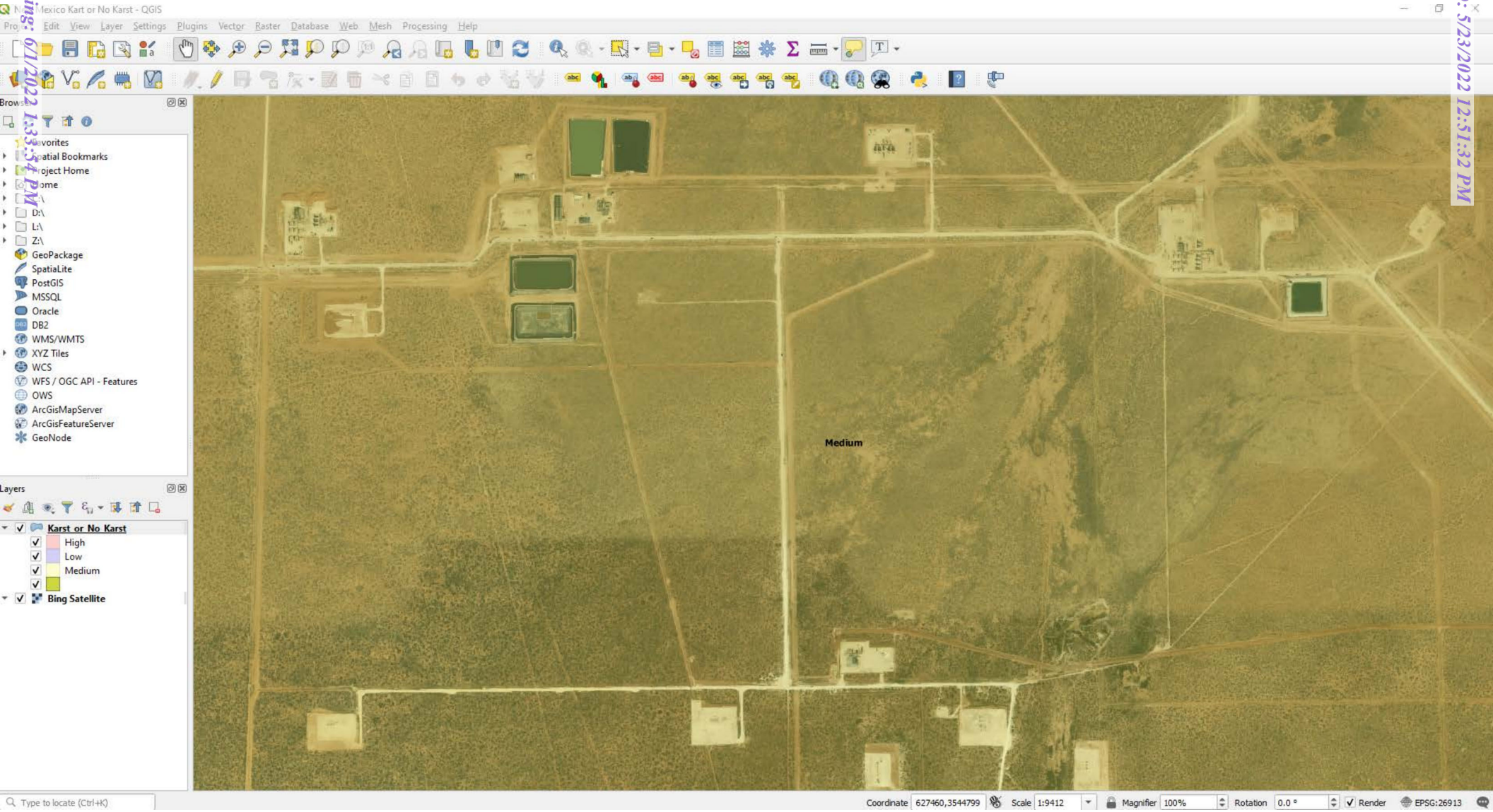
State of New Mexico
Oil Conservation Division

Incident ID	nAPP2203347230
District RP	
Facility ID	
Application ID	

Spill Calculations:

Appendix B

Karst Risk Potential



Appendix C

Soil Boring Log

BORING RECORD

Start: 10:35 MDT
Finish: 15:15

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS
	0	Silty Sand, 5YR 5/4, Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Dry	ML
	5		
	7	Caliche, 2.5YR 8/3, Pink, Very Fine Grained, Poorly Sorted, Dry	Caliche
	10		
	15		
	20		
	25	Silty Sand, 5YR 5/4, Reddish Brown, Fine Grained Quartz Sand with Caliche Clasts (~10mm), Poorly Sorted	ML
	30	Caliche, 2.5YR 8/3, Pink, Very Fine Grained, Poorly Sorted with Subangular Clasts (~10mm)	Caliche
	35		
	39		
	40	Silty Sand, 5YR 6/4, Light Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted with Subangular Caliche Clasts (~10mm)	ML
	45		
	50		
	55		
	60		

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

SAMPLE

NUMBER	PID READING	RECOVERY	DEPTH
1			7
2			25
3			30
4			39

REMARKS: BACKGROUND PID READING
SOIL : _____ PPM
SOIL : _____ PPM

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

JOB NUMBER : Chevron/ 19-0180-01
HOLE DIAMETER : 2"
LOCATION : Salado Draw 24 CTB
LAI GEOLOGIST : E. Chavez
DRILLING CONTRACTOR : Scarborough
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 04-14-2020

BORING NUMBER : SB-01

BORING RECORD

Start: 10:35 MDT
Finish: 15:15

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X 1)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	65	Silty Sand, 5YR 5/6, Yellowish Red, Very Fine Grained, Poorly Sorted with Subangular Caliche and Black Chert Clasts (~0.5mm)	ML			5			66	BACKGROUND PID READING SOIL : PPM SOIL : PPM
	70								70	
	75								75	
	80								80	
	85								85	
	90	Silty Sand, 5YR 4/6, Yellowish Red, Fine Grained, Poorly Sorted with Subangular Caliche (~2mm)	ML						90	
	95								95	
	100					6			100	
		TD:101.5' *Dry After 72 Hours*							101.5	
	105								105	

PID READING scale: 2 4 6 8 10 12 14 16 18

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 04-14-2020
BORING NUMBER : SB-01

JOB NUMBER : Chevron/ 19-0180-01
HOLE DIAMETER : 2"
LOCATION : Salado Draw 24 CTB
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: 880-10392-1
Laboratory Sample Delivery Group: 21-0100-23
Client Project/Site: SD 24 CTB

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
1/26/2022 4:27:38 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 24 CTB

Laboratory Job ID: 880-10392-1
SDG: 21-0100-23

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD 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 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Job ID: 880-10392-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10392-1

Receipt
The samples were received on 1/19/2022 2:30 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 6.9°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 laboratory control sample (LCS) associated with preparation batch 880-17333 and analytical batch 880-17443 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: The sample size used in the preparation of the matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 880-17347 and analytical batch 880-17443 was outside the 10% difference. As the relative percent difference (RPD) calculation is based upon the MS/MSD concentration as opposed to the MS/MSD percent recovery, elevated %RPD values were obtained.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: C-2 (880-10392-2), C-3 (880-10392-3), C-21 (880-10392-21), C-22 (880-10392-22), C-24 (880-10392-24), C-25 (880-10392-25) and (890-1834-A-1-F MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: C-10 (880-10392-10), C-11 (880-10392-11), C-14 (880-10392-14), C-15 (880-10392-15), C-19 (880-10392-19) and C-20 (880-10392-20). 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 880-17339 and analytical batch 880-17452 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-17340 and analytical batch 880-17493 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. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-1 Lab Sample ID: 880-10392-1

Date Collected: 01/19/22 09:00 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 03:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 03:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 03:15	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 03:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 03:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 03:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:15*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:15*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/24/22 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			01/26/22 16:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9		mg/Kg		01/20/22 08:53	01/21/22 13:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 13:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*69*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 13:10*	*1*
o-Terphenyl (Surr)	*63*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 13:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**111**		4.97		mg/Kg			01/22/22 07:30	1

Client Sample ID: C-2 Lab Sample ID: 880-10392-2

Date Collected: 01/19/22 09:05 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 03:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 03:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 03:36	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		01/20/22 07:30	01/22/22 03:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 03:36	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/20/22 07:30	01/22/22 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:36*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:36*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-2 Lab Sample ID: 880-10392-2

Date Collected: 01/19/22 09:05 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/24/22 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			01/26/22 16:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9		mg/Kg		01/20/22 08:53	01/21/22 19:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 19:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*71*		*70 - 130*	*01/20/22 08:53*	*01/21/22 19:05*	*1*
o-Terphenyl (Surr)	*66*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 19:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		4.96		mg/Kg			01/22/22 07:42	1

Client Sample ID: C-3 Lab Sample ID: 880-10392-3

Date Collected: 01/19/22 09:10 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 03:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 03:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 03:57	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 03:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 03:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:57*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*01/20/22 07:30*	*01/22/22 03:57*	*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			01/24/22 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			01/26/22 16:48	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		01/20/22 08:53	01/21/22 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 19:26	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-3 Lab Sample ID: 880-10392-3

Date Collected: 01/19/22 09:10 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/20/22 08:53	01/21/22 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*69*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 19:26*	*1*
o-Terphenyl (Surr)	*70*		*70 - 130*	*01/20/22 08:53*	*01/21/22 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.2**	**F1**	5.00		mg/Kg			01/22/22 07:54	1

Client Sample ID: C-4 Lab Sample ID: 880-10392-4

Date Collected: 01/19/22 09:15 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 04:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 04:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 04:18	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 04:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 04:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 04:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*01/20/22 07:30*	*01/22/22 04:18*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/20/22 07:30*	*01/22/22 04:18*	*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			01/24/22 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			01/26/22 16:48	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		01/20/22 08:53	01/21/22 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 19:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*80*		*70 - 130*	*01/20/22 08:53*	*01/21/22 19:47*	*1*
o-Terphenyl (Surr)	*78*		*70 - 130*	*01/20/22 08:53*	*01/21/22 19:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.6**		4.99		mg/Kg			01/22/22 08:29	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-5 Lab Sample ID: 880-10392-5

Date Collected: 01/19/22 09:20 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 04:39	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 04:39	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 04:39	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 04:39	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 04:39	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 04:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*01/20/22 07:30*	*01/22/22 04:39*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*01/20/22 07:30*	*01/22/22 04:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/24/22 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			01/26/22 16:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9		mg/Kg		01/20/22 08:53	01/21/22 20:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 20:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*78*		*70 - 130*	*01/20/22 08:53*	*01/21/22 20:08*	*1*
o-Terphenyl (Surr)	*77*		*70 - 130*	*01/20/22 08:53*	*01/21/22 20:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.8**		4.97		mg/Kg			01/22/22 08:41	1

Client Sample ID: C-6 Lab Sample ID: 880-10392-6

Date Collected: 01/19/22 09:25 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 05:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 05:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 05:00	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		01/20/22 07:30	01/22/22 05:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 05:00	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/20/22 07:30	01/22/22 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:00*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:00*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-6 Lab Sample ID: 880-10392-6

Date Collected: 01/19/22 09:25 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/24/22 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			01/26/22 16:48	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		01/20/22 08:53	01/21/22 20:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 20:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*62*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 20:30*	*1*
o-Terphenyl (Surr)	*62*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 20:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	374		5.00		mg/Kg			01/22/22 09:17	1

Client Sample ID: C-7 Lab Sample ID: 880-10392-7

Date Collected: 01/19/22 09:30 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:21	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 05:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 05:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:21*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:21*	*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			01/24/22 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			01/26/22 16:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- *1	49.9		mg/Kg		01/20/22 08:53	01/21/22 20:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 08:53	01/21/22 20:51	1

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-7 Lab Sample ID: 880-10392-7

Date Collected: 01/19/22 09:30 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/20/22 08:53	01/21/22 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*60*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 20:51*	*1*
o-Terphenyl (Surr)	*60*	*S1-*	*70 - 130*	*01/20/22 08:53*	*01/21/22 20:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**663**		4.95		mg/Kg			01/22/22 09:29	1

Client Sample ID: C-8 Lab Sample ID: 880-10392-8

Date Collected: 01/19/22 09:35 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:41	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		01/20/22 07:30	01/22/22 05:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 05:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/20/22 07:30	01/22/22 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:41*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/20/22 07:30*	*01/22/22 05:41*	*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			01/24/22 13:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.4**		49.9		mg/Kg			01/26/22 16:48	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		01/24/22 09:22	01/24/22 14:21	1
Diesel Range Organics (Over C10-C28)	**51.4**		49.9		mg/Kg		01/24/22 09:22	01/24/22 14:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*01/24/22 09:22*	*01/24/22 14:21*	*1*
o-Terphenyl (Surr)	*83*		*70 - 130*	*01/24/22 09:22*	*01/24/22 14:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**257**		4.96		mg/Kg			01/22/22 09:40	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-9 Lab Sample ID: 880-10392-9

Date Collected: 01/19/22 09:40 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/20/22 07:30	01/22/22 06:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/20/22 07:30	01/22/22 06:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/20/22 07:30	01/22/22 06:02	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		01/20/22 07:30	01/22/22 06:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/20/22 07:30	01/22/22 06:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/20/22 07:30	01/22/22 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*01/20/22 07:30*	*01/22/22 06:02*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/20/22 07:30*	*01/22/22 06:02*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 15:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*74*		*70 - 130*	*01/24/22 09:22*	*01/24/22 15:25*	*1*
o-Terphenyl (Surr)	*79*		*70 - 130*	*01/24/22 09:22*	*01/24/22 15:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**417**		5.04		mg/Kg			01/22/22 10:51	1

Client Sample ID: C-10 Lab Sample ID: 880-10392-10

Date Collected: 01/19/22 09:45 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 06:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 06:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 06:23	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 06:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 06:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/20/22 07:30	01/22/22 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/20/22 07:30*	*01/22/22 06:23*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/20/22 07:30*	*01/22/22 06:23*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-10 Lab Sample ID: 880-10392-10

Date Collected: 01/19/22 09:45 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 15:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 15:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*60*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 15:46*	*1*
o-Terphenyl (Surr)	*60*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 15:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**159**		4.97		mg/Kg			01/22/22 11:03	1

Client Sample ID: C-11 Lab Sample ID: 880-10392-11

Date Collected: 01/19/22 09:50 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 07:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 07:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 07:46	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 07:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 07:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 07:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*01/20/22 07:30*	*01/22/22 07:46*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/20/22 07:30*	*01/22/22 07:46*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 16:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 16:07	1

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-11 Lab Sample ID: 880-10392-11

Date Collected: 01/19/22 09:50 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/24/22 09:22	01/24/22 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*61*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 16:07*	*1*
o-Terphenyl (Surr)	*65*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 16:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**320**		4.99		mg/Kg			01/22/22 11:15	1

Client Sample ID: C-12 Lab Sample ID: 880-10392-12

Date Collected: 01/19/22 09:55 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 08:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 08:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 08:07	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 08:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/20/22 07:30	01/22/22 08:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/20/22 07:30	01/22/22 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*01/20/22 07:30*	*01/22/22 08:07*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/20/22 07:30*	*01/22/22 08:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 16:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 16:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*01/24/22 09:22*	*01/24/22 16:29*	*1*
o-Terphenyl (Surr)	*77*		*70 - 130*	*01/24/22 09:22*	*01/24/22 16:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**620**		5.00		mg/Kg			01/22/22 11:26	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-13 Lab Sample ID: 880-10392-13

Date Collected: 01/19/22 10:00 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 08:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 08:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 08:28	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		01/20/22 07:30	01/22/22 08:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/20/22 07:30	01/22/22 08:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/20/22 07:30	01/22/22 08:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/20/22 07:30*	*01/22/22 08:28*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*01/20/22 07:30*	*01/22/22 08:28*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 16:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*76*		*70 - 130*	*01/24/22 09:22*	*01/24/22 16:50*	*1*
o-Terphenyl (Surr)	*81*		*70 - 130*	*01/24/22 09:22*	*01/24/22 16:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**233**		4.99		mg/Kg			01/21/22 20:47	1

Client Sample ID: C-14 Lab Sample ID: 880-10392-14

Date Collected: 01/19/22 10:05 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 08:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 08:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 08:49	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		01/20/22 11:30	01/22/22 08:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 08:49	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/20/22 11:30	01/22/22 08:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*01/20/22 11:30*	*01/22/22 08:49*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/20/22 11:30*	*01/22/22 08:49*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-14 Lab Sample ID: 880-10392-14

Date Collected: 01/19/22 10:05 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 17:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 17:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*60*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 17:12*	*1*
o-Terphenyl (Surr)	*63*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 17:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**422**		5.04		mg/Kg			01/21/22 21:06	1

Client Sample ID: C-15 Lab Sample ID: 880-10392-15

Date Collected: 01/19/22 10:10 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 09:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 09:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 09:10	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		01/20/22 11:30	01/22/22 09:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/20/22 11:30	01/22/22 09:10	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/20/22 11:30	01/22/22 09:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:10*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:10*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 17:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 17:33	1

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-15 Lab Sample ID: 880-10392-15

Date Collected: 01/19/22 10:10 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/24/22 09:22	01/24/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*61*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 17:33*	*1*
o-Terphenyl (Surr)	*62*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**434**		4.98		mg/Kg			01/21/22 21:13	1

Client Sample ID: C-16 Lab Sample ID: 880-10392-16

Date Collected: 01/19/22 10:15 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/20/22 11:30	01/22/22 09:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/20/22 11:30	01/22/22 09:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/20/22 11:30	01/22/22 09:31	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		01/20/22 11:30	01/22/22 09:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/20/22 11:30	01/22/22 09:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/20/22 11:30	01/22/22 09:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:31*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:31*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 17:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 17:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*01/24/22 09:22*	*01/24/22 17:55*	*1*
o-Terphenyl (Surr)	*77*		*70 - 130*	*01/24/22 09:22*	*01/24/22 17:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**284**		4.95		mg/Kg			01/21/22 21:19	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-17
Lab Sample ID: 880-10392-17
Date Collected: 01/19/22 10:20 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/20/22 11:30	01/22/22 09:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/20/22 11:30	01/22/22 09:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/20/22 11:30	01/22/22 09:52	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		01/20/22 11:30	01/22/22 09:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/20/22 11:30	01/22/22 09:52	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/20/22 11:30	01/22/22 09:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:52*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*01/20/22 11:30*	*01/22/22 09:52*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 18:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 18:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*01/24/22 09:22*	*01/24/22 18:16*	*1*
o-Terphenyl (Surr)	*73*		*70 - 130*	*01/24/22 09:22*	*01/24/22 18:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**205**		5.01		mg/Kg			01/21/22 21:25	1

Client Sample ID: C-18
Lab Sample ID: 880-10392-18
Date Collected: 01/19/22 10:25 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:13	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/20/22 11:30	01/22/22 10:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/20/22 11:30	01/22/22 10:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/20/22 11:30*	*01/22/22 10:13*	*1*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*	*01/20/22 11:30*	*01/22/22 10:13*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-18 Lab Sample ID: 880-10392-18

Date Collected: 01/19/22 10:25 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 18:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 18:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*01/24/22 09:22*	*01/24/22 18:58*	*1*
o-Terphenyl (Surr)	*77*		*70 - 130*	*01/24/22 09:22*	*01/24/22 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.9**		4.96		mg/Kg			01/21/22 21:45	1

Client Sample ID: C-19 Lab Sample ID: 880-10392-19

Date Collected: 01/19/22 10:30 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:34	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/20/22 11:30	01/22/22 10:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 11:30	01/22/22 10:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/20/22 11:30	01/22/22 10:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*01/20/22 11:30*	*01/22/22 10:34*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*01/20/22 11:30*	*01/22/22 10:34*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 19:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 09:22	01/24/22 19:18	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-19 Lab Sample ID: 880-10392-19

Date Collected: 01/19/22 10:30 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/24/22 09:22	01/24/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*61*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 19:18*	*1*
o-Terphenyl (Surr)	*60*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 19:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.1**		4.99		mg/Kg			01/21/22 21:51	1

Client Sample ID: C-20 Lab Sample ID: 880-10392-20

Date Collected: 01/19/22 10:35 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/20/22 11:30	01/22/22 10:55	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/20/22 11:30	01/22/22 10:55	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/20/22 11:30	01/22/22 10:55	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		01/20/22 11:30	01/22/22 10:55	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/20/22 11:30	01/22/22 10:55	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/20/22 11:30	01/22/22 10:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*150*	*S1+*	*70 - 130*	*01/20/22 11:30*	*01/22/22 10:55*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*01/20/22 11:30*	*01/22/22 10:55*	*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			01/24/22 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			01/26/22 16:48	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		01/24/22 09:22	01/24/22 19:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 19:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*64*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 19:40*	*1*
o-Terphenyl (Surr)	*63*	*S1-*	*70 - 130*	*01/24/22 09:22*	*01/24/22 19:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.3**		4.96		mg/Kg			01/21/22 21:57	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-21 Lab Sample ID: 880-10392-21

Date Collected: 01/19/22 10:40 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 15:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 15:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 15:34	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/24/22 07:35	01/24/22 15:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 15:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/24/22 07:35	01/24/22 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*01/24/22 07:35*	*01/24/22 15:34*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/24/22 07:35*	*01/24/22 15:34*	*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			01/26/22 17:16	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			01/26/22 16:48	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		01/20/22 10:33	01/22/22 10:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 10:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 10:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*54*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 10:51*	*1*
o-Terphenyl (Surr)	*52*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 10:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**150**		5.01		mg/Kg			01/21/22 22:04	1

Client Sample ID: C-22 Lab Sample ID: 880-10392-22

Date Collected: 01/19/22 10:45 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 15:55	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 15:55	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 15:55	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		01/24/22 07:35	01/24/22 15:55	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 15:55	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/24/22 07:35	01/24/22 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*01/24/22 07:35*	*01/24/22 15:55*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*01/24/22 07:35*	*01/24/22 15:55*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-22 Lab Sample ID: 880-10392-22

Date Collected: 01/19/22 10:45 **Matrix: Solid**
Date Received: 01/19/22 14:30

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			01/26/22 17:16	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			01/26/22 16:48	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		01/20/22 10:33	01/22/22 11:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 11:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*65*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 11:12*	*1*
o-Terphenyl (Surr)	*64*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 11:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.2		4.98		mg/Kg			01/21/22 22:10	1

Client Sample ID: C-23 Lab Sample ID: 880-10392-23

Date Collected: 01/19/22 10:50 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 16:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 16:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 16:15	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		01/24/22 07:35	01/24/22 16:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/24/22 07:35	01/24/22 16:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/24/22 07:35	01/24/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:15*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:15*	*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			01/26/22 17:16	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			01/26/22 16:48	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		01/20/22 10:33	01/22/22 11:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 10:33	01/22/22 11:33	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

Client Sample ID: C-23 Lab Sample ID: 880-10392-23

Date Collected: 01/19/22 10:50 **Matrix: Solid**
Date Received: 01/19/22 14:30

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		01/20/22 10:33	01/22/22 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*85*		*70 - 130*	*01/20/22 10:33*	*01/22/22 11:33*	*1*
o-Terphenyl (Surr)	*82*		*70 - 130*	*01/20/22 10:33*	*01/22/22 11:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**126**	**F1**	4.95		mg/Kg			01/21/22 22:17	1

Client Sample ID: C-24 Lab Sample ID: 880-10392-24

Date Collected: 01/19/22 10:55 **Matrix: Solid**
Date Received: 01/19/22 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/24/22 07:35	01/24/22 16:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/24/22 07:35	01/24/22 16:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/24/22 07:35	01/24/22 16:36	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		01/24/22 07:35	01/24/22 16:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/24/22 07:35	01/24/22 16:36	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/24/22 07:35	01/24/22 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:36*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:36*	*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			01/26/22 17:16	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			01/26/22 16:48	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		01/20/22 10:33	01/22/22 11:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/20/22 10:33	01/22/22 11:55	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/20/22 10:33	01/22/22 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*57*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 11:55*	*1*
o-Terphenyl (Surr)	*57*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 11:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**148**		5.00		mg/Kg			01/21/22 22:36	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-25

Date Collected: 01/19/22 11:00
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-25

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		01/24/22 07:35	01/24/22 16:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 16:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 16:56	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/24/22 07:35	01/24/22 16:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 16:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/22 07:35	01/24/22 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:56*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*01/24/22 07:35*	*01/24/22 16:56*	*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			01/26/22 17:16	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			01/26/22 16:48	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		01/20/22 10:33	01/22/22 12:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 12:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*01/20/22 10:33*	*01/22/22 12:17*	*1*
o-Terphenyl (Surr)	*65*	*S1-*	*70 - 130*	*01/20/22 10:33*	*01/22/22 12:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**81.2**		4.97		mg/Kg			01/21/22 22:42	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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)
880-10392-1	C-1	107	106
880-10392-1 MS	C-1	357 S1+	112
880-10392-1 MSD	C-1	353 S1+	95
880-10392-2	C-2	107	85
880-10392-3	C-3	115	70
880-10392-4	C-4	103	99
880-10392-5	C-5	100	112
880-10392-6	C-6	106	116
880-10392-7	C-7	108	105
880-10392-8	C-8	130	97
880-10392-9	C-9	126	96
880-10392-10	C-10	123	101
880-10392-11	C-11	103	110
880-10392-12	C-12	102	98
880-10392-13	C-13	115	86
880-10392-14	C-14	100	108
880-10392-15	C-15	100	108
880-10392-16	C-16	109	103
880-10392-17	C-17	113	115
880-10392-18	C-18	105	129
880-10392-19	C-19	126	72
880-10392-20	C-20	150 S1+	82
880-10392-21	C-21	81	100
880-10392-22	C-22	90	114
880-10392-23	C-23	129	103
880-10392-24	C-24	76	108
880-10392-25	C-25	99	90
890-1841-A-1-F MS	Matrix Spike	116	103
890-1841-A-1-G MSD	Matrix Spike Duplicate	112	95
LCS 880-17275/1-A	Lab Control Sample	124	102
LCS 880-17525/1-A	Lab Control Sample	122	107
LCSD 880-17275/2-A	Lab Control Sample Dup	84	95
LCSD 880-17525/2-A	Lab Control Sample Dup	123	108
MB 880-17275/5-A	Method Blank	116	94
MB 880-17283/5-A	Method Blank	124	91
MB 880-17525/5-A	Method Blank	116	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-10392-1	C-1	69 S1-	63 S1-
880-10392-1 MS	C-1	67 S1-	64 S1-
880-10392-1 MSD	C-1	75	77

Eurofins Midland

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

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)										
880-10392-2	C-2	71	66 S1-										
880-10392-3	C-3	69 S1-	70										
880-10392-4	C-4	80	78										
880-10392-5	C-5	78	77										
880-10392-6	C-6	62 S1-	62 S1-										
880-10392-7	C-7	60 S1-	60 S1-										
880-10392-8	C-8	77	83										
880-10392-8 MS	C-8	85	82										
880-10392-8 MSD	C-8	85	82										
880-10392-9	C-9	74	79										
880-10392-10	C-10	60 S1-	60 S1-										
880-10392-11	C-11	61 S1-	65 S1-										
880-10392-12	C-12	75	77										
880-10392-13	C-13	76	81										
880-10392-14	C-14	60 S1-	63 S1-										
880-10392-15	C-15	61 S1-	62 S1-										
880-10392-16	C-16	75	77										
880-10392-17	C-17	75	73										
880-10392-18	C-18	75	77										
880-10392-19	C-19	61 S1-	60 S1-										
880-10392-20	C-20	64 S1-	63 S1-										
880-10392-21	C-21	54 S1-	52 S1-										
880-10392-22	C-22	65 S1-	64 S1-										
880-10392-23	C-23	85	82										
880-10392-24	C-24	57 S1-	57 S1-										
880-10392-25	C-25	70	65 S1-										
890-1834-A-1-F MS	Matrix Spike	59 S1-	58 S1-										
890-1834-A-1-G MSD	Matrix Spike Duplicate	72	74										
LCS 880-17530/2-A	Lab Control Sample	121	123										
LCSD 880-17530/3-A	Lab Control Sample Dup	119	124										
MB 880-17530/1-A	Method Blank	97	109										

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 880-17333/2-A	Lab Control Sample	87	88										
LCS 880-17347/2-A	Lab Control Sample	88	84										
LCSD 880-17333/3-A	Lab Control Sample Dup	81	80										
LCSD 880-17347/3-A	Lab Control Sample Dup	79	74										
MB 880-17333/1-A	Method Blank	95	93										
MB 880-17347/1-A	Method Blank	97	93										

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17275/5-A
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17275

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 02:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 02:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 02:53	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 02:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/20/22 07:30	01/22/22 02:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/20/22 07:30	01/22/22 02:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/20/22 07:30*	*01/22/22 02:53*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*01/20/22 07:30*	*01/22/22 02:53*	*1*

Lab Sample ID: LCS 880-17275/1-A
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17275

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09952		mg/Kg		100	70 - 130		
Toluene			0.100	0.09815		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1047		mg/Kg		105	70 - 130		
m,p-Xylenes			0.200	0.2053		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1105		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-17275/2-A
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17275

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08539		mg/Kg		85	70 - 130	15	35
Toluene			0.100	0.08311		mg/Kg		83	70 - 130	17	35
Ethylbenzene			0.100	0.08808		mg/Kg		88	70 - 130	17	35
m,p-Xylenes			0.200	0.1750		mg/Kg		88	70 - 130	16	35
o-Xylene			0.100	0.08013		mg/Kg		80	70 - 130	32	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-10392-1 MS
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 17275

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0990	0.1129		mg/Kg		114	70 - 130		
Toluene	<0.00199	U	0.0990	0.08335		mg/Kg		84	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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

Lab Sample ID: 880-10392-1 MS
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 17275

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.0990	0.09484		mg/Kg		96	70 - 130
m,p-Xylenes	<0.00398	U	0.198	0.2054		mg/Kg		104	70 - 130
o-Xylene	<0.00199	U	0.0990	0.08692		mg/Kg		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*357*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 880-10392-1 MSD
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: C-1
Prep Type: Total/NA
Prep Batch: 17275

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	0.1100		mg/Kg		110	70 - 130	3	35
Toluene	<0.00199	U	0.0998	0.07615		mg/Kg		76	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.0998	0.08238		mg/Kg		83	70 - 130	14	35
m,p-Xylenes	<0.00398	U	0.200	0.1607		mg/Kg		80	70 - 130	24	35
o-Xylene	<0.00199	U	0.0998	0.08571		mg/Kg		86	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*353*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-17283/5-A
Matrix: Solid
Analysis Batch: 17417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17283

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/21/22 07:30	01/21/22 15:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/21/22 07:30	01/21/22 15:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/21/22 07:30	01/21/22 15:47	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		01/21/22 07:30	01/21/22 15:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/21/22 07:30	01/21/22 15:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/21/22 07:30	01/21/22 15:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*01/21/22 07:30*	*01/21/22 15:47*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*01/21/22 07:30*	*01/21/22 15:47*	*1*

Lab Sample ID: MB 880-17525/5-A
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17525

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/24/22 07:35	01/24/22 14:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/24/22 07:35	01/24/22 14:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/24/22 07:35	01/24/22 14:04	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		01/24/22 07:35	01/24/22 14:04	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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

Lab Sample ID: MB 880-17525/5-A
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17525

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 07:35	01/24/22 14:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/22 07:35	01/24/22 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*01/24/22 07:35*	*01/24/22 14:04*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/24/22 07:35*	*01/24/22 14:04*	*1*

Lab Sample ID: LCS 880-17525/1-A
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17525

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09114		mg/Kg		91	70 - 130		
Toluene			0.100	0.09665		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1011		mg/Kg		101	70 - 130		
m,p-Xylenes			0.200	0.1998		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.09689		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-17525/2-A
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17525

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09034		mg/Kg		90	70 - 130	1	35
Toluene			0.100	0.09847		mg/Kg		98	70 - 130	2	35
Ethylbenzene			0.100	0.1028		mg/Kg		103	70 - 130	2	35
m,p-Xylenes			0.200	0.2036		mg/Kg		102	70 - 130	2	35
o-Xylene			0.100	0.1036		mg/Kg		104	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-1841-A-1-F MS
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00202	U	0.0996	0.08887		mg/Kg		88	70 - 130		
Toluene	<0.00202	U	0.0996	0.09492		mg/Kg		94	70 - 130		
Ethylbenzene	<0.00202	U	0.0996	0.09305		mg/Kg		93	70 - 130		
m,p-Xylenes	<0.00404	U	0.199	0.1836		mg/Kg		92	70 - 130		
o-Xylene	<0.00202	U	0.0996	0.09100		mg/Kg		90	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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

Lab Sample ID: 890-1841-A-1-F MS
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17525

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-1841-A-1-G MSD
Matrix: Solid
Analysis Batch: 17527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 17525

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	0.08652		mg/Kg		86	70 - 130	3	35
Toluene	<0.00202	U	0.100	0.09056		mg/Kg		89	70 - 130	5	35
Ethylbenzene	<0.00202	U	0.100	0.09097		mg/Kg		91	70 - 130	2	35
m,p-Xylenes	<0.00404	U	0.200	0.1826		mg/Kg		91	70 - 130	1	35
o-Xylene	<0.00202	U	0.100	0.08935		mg/Kg		88	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-17333/1-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17333

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 12:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 12:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 08:53	01/21/22 12:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	01/20/22 08:53	01/21/22 12:08	1
o-Terphenyl (Surr)	93		70 - 130	01/20/22 08:53	01/21/22 12:08	1

Lab Sample ID: LCS 880-17333/2-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17333

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	774.6		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	750.6		mg/Kg		75	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	87		70 - 130
o-Terphenyl (Surr)	88		70 - 130

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-17333/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17443 **Prep Batch: 17333**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	548.1	*- *1	mg/Kg		55	70 - 130	34	20
Diesel Range Organics (Over C10-C28)			1000	760.3		mg/Kg		76	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*81*		*70 - 130*
o-Terphenyl (Surr)	*80*		*70 - 130*

Lab Sample ID: 880-10392-1 MS **Client Sample ID: C-1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17443 **Prep Batch: 17333**

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 *- *1	997	866.1		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	961.9		mg/Kg		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*67*	*S1-*	*70 - 130*
o-Terphenyl (Surr)	*64*	*S1-*	*70 - 130*

Lab Sample ID: 880-10392-1 MSD **Client Sample ID: C-1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17443 **Prep Batch: 17333**

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 *- *1	996	950.0		mg/Kg		91	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1141		mg/Kg		115	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*75*		*70 - 130*
o-Terphenyl (Surr)	*77*		*70 - 130*

Lab Sample ID: MB 880-17347/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17443 **Prep Batch: 17347**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 07:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 07:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/20/22 10:33	01/22/22 07:15	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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

Lab Sample ID: MB 880-17347/1-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17347

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130	01/20/22 10:33	01/22/22 07:15	1
o-Terphenyl (Surr)	93		70 - 130	01/20/22 10:33	01/22/22 07:15	1

Lab Sample ID: LCS 880-17347/2-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17347

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	868.4		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	873.0		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	88		70 - 130
o-Terphenyl (Surr)	84		70 - 130

Lab Sample ID: LCSD 880-17347/3-A
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17347

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	797.6		mg/Kg		80	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	765.3		mg/Kg		77	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	79		70 - 130
o-Terphenyl (Surr)	74		70 - 130

Lab Sample ID: 890-1834-A-1-F MS
Matrix: Solid
Analysis Batch: 17443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17347

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	997	775.9		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F2	997	784.8		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	59	S1-	70 - 130
o-Terphenyl (Surr)	58	S1-	70 - 130

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

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

Lab Sample ID: 890-1834-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17443 **Prep Batch: 17347**

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	996	862.8		mg/Kg		84	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<49.9	U F2	996	1007	F2	mg/Kg		101	70 - 130	25	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*72*		*70 - 130*
o-Terphenyl (Surr)	*74*		*70 - 130*

Lab Sample ID: MB 880-17530/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17551 **Prep Batch: 17530**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 11:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 11:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 09:22	01/24/22 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*97*		*70 - 130*	*01/24/22 09:22*	*01/24/22 11:46*	*1*
o-Terphenyl (Surr)	*109*		*70 - 130*	*01/24/22 09:22*	*01/24/22 11:46*	*1*

Lab Sample ID: LCS 880-17530/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17551 **Prep Batch: 17530**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1026		mg/Kg		103	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	966.6		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*121*		*70 - 130*
o-Terphenyl (Surr)	*123*		*70 - 130*

Lab Sample ID: LCSD 880-17530/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17551 **Prep Batch: 17530**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	981.2		mg/Kg		98	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	959.9		mg/Kg		96	70 - 130	1	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-17530/3-A
Matrix: Solid
Analysis Batch: 17551

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17530

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	119		70 - 130
o-Terphenyl (Surr)	124		70 - 130

Lab Sample ID: 880-10392-8 MS
Matrix: Solid
Analysis Batch: 17551

Client Sample ID: C-8
Prep Type: Total/NA
Prep Batch: 17530

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	997	1274		mg/Kg		128	70 - 130
Diesel Range Organics (Over C10-C28)	51.4		997	1185		mg/Kg		114	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	85		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Lab Sample ID: 880-10392-8 MSD
Matrix: Solid
Analysis Batch: 17551

Client Sample ID: C-8
Prep Type: Total/NA
Prep Batch: 17530

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	996	1257		mg/Kg		126	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	51.4		996	1204		mg/Kg		116	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	85		70 - 130
o-Terphenyl (Surr)	82		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-17339/1-A
Matrix: Solid
Analysis Batch: 17452

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/22/22 04:32	1

Lab Sample ID: LCS 880-17339/2-A
Matrix: Solid
Analysis Batch: 17452

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	253.0		mg/Kg		101	90 - 110

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-17339/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17452

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	260.4		mg/Kg		104	90 - 110	3	20

Lab Sample ID: 880-10392-3 MS — **Client Sample ID: C-3**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17452

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	27.2	F1	250	326.8	F1	mg/Kg		120	90 - 110

Lab Sample ID: 880-10392-3 MSD — **Client Sample ID: C-3**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17452

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	27.2	F1	250	311.2	F1	mg/Kg		114	90 - 110	5	20

Lab Sample ID: MB 880-17340/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17493

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/21/22 20:28	1

Lab Sample ID: LCS 880-17340/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17493

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	263.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-17340/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17493

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	251.5		mg/Kg		101	90 - 110	5	20

Lab Sample ID: 880-10392-13 MS — **Client Sample ID: C-13**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	233		250	460.2		mg/Kg		91	90 - 110

Lab Sample ID: 880-10392-13 MSD — **Client Sample ID: C-13**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 17493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	233		250	491.7		mg/Kg		104	90 - 110	7	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10392-23 MS
Matrix: Solid
Analysis Batch: 17493

Client Sample ID: C-23
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	126	F1	248	341.6	F1	mg/Kg		87	90 - 110		

Lab Sample ID: 880-10392-23 MSD
Matrix: Solid
Analysis Batch: 17493

Client Sample ID: C-23
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	126	F1	248	380.1		mg/Kg		103	90 - 110	11	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

GC VOA

Prep Batch: 17275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	5035	
880-10392-2	C-2	Total/NA	Solid	5035	
880-10392-3	C-3	Total/NA	Solid	5035	
880-10392-4	C-4	Total/NA	Solid	5035	
880-10392-5	C-5	Total/NA	Solid	5035	
880-10392-6	C-6	Total/NA	Solid	5035	
880-10392-7	C-7	Total/NA	Solid	5035	
880-10392-8	C-8	Total/NA	Solid	5035	
880-10392-9	C-9	Total/NA	Solid	5035	
880-10392-10	C-10	Total/NA	Solid	5035	
880-10392-11	C-11	Total/NA	Solid	5035	
880-10392-12	C-12	Total/NA	Solid	5035	
880-10392-13	C-13	Total/NA	Solid	5035	
880-10392-14	C-14	Total/NA	Solid	5035	
880-10392-15	C-15	Total/NA	Solid	5035	
880-10392-16	C-16	Total/NA	Solid	5035	
880-10392-17	C-17	Total/NA	Solid	5035	
880-10392-18	C-18	Total/NA	Solid	5035	
880-10392-19	C-19	Total/NA	Solid	5035	
880-10392-20	C-20	Total/NA	Solid	5035	
MB 880-17275/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17275/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17275/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10392-1 MS	C-1	Total/NA	Solid	5035	
880-10392-1 MSD	C-1	Total/NA	Solid	5035	

Prep Batch: 17283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-17283/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 17417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	8021B	17275
880-10392-2	C-2	Total/NA	Solid	8021B	17275
880-10392-3	C-3	Total/NA	Solid	8021B	17275
880-10392-4	C-4	Total/NA	Solid	8021B	17275
880-10392-5	C-5	Total/NA	Solid	8021B	17275
880-10392-6	C-6	Total/NA	Solid	8021B	17275
880-10392-7	C-7	Total/NA	Solid	8021B	17275
880-10392-8	C-8	Total/NA	Solid	8021B	17275
880-10392-9	C-9	Total/NA	Solid	8021B	17275
880-10392-10	C-10	Total/NA	Solid	8021B	17275
880-10392-11	C-11	Total/NA	Solid	8021B	17275
880-10392-12	C-12	Total/NA	Solid	8021B	17275
880-10392-13	C-13	Total/NA	Solid	8021B	17275
880-10392-14	C-14	Total/NA	Solid	8021B	17275
880-10392-15	C-15	Total/NA	Solid	8021B	17275
880-10392-16	C-16	Total/NA	Solid	8021B	17275
880-10392-17	C-17	Total/NA	Solid	8021B	17275
880-10392-18	C-18	Total/NA	Solid	8021B	17275
880-10392-19	C-19	Total/NA	Solid	8021B	17275

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

GC VOA (Continued)

Analysis Batch: 17417 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-20	C-20	Total/NA	Solid	8021B	17275
MB 880-17275/5-A	Method Blank	Total/NA	Solid	8021B	17275
MB 880-17283/5-A	Method Blank	Total/NA	Solid	8021B	17283
LCS 880-17275/1-A	Lab Control Sample	Total/NA	Solid	8021B	17275
LCSD 880-17275/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17275
880-10392-1 MS	C-1	Total/NA	Solid	8021B	17275
880-10392-1 MSD	C-1	Total/NA	Solid	8021B	17275

Prep Batch: 17525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-21	C-21	Total/NA	Solid	5035	
880-10392-22	C-22	Total/NA	Solid	5035	
880-10392-23	C-23	Total/NA	Solid	5035	
880-10392-24	C-24	Total/NA	Solid	5035	
880-10392-25	C-25	Total/NA	Solid	5035	
MB 880-17525/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17525/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17525/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1841-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-1841-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 17527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-21	C-21	Total/NA	Solid	8021B	17525
880-10392-22	C-22	Total/NA	Solid	8021B	17525
880-10392-23	C-23	Total/NA	Solid	8021B	17525
880-10392-24	C-24	Total/NA	Solid	8021B	17525
880-10392-25	C-25	Total/NA	Solid	8021B	17525
MB 880-17525/5-A	Method Blank	Total/NA	Solid	8021B	17525
LCS 880-17525/1-A	Lab Control Sample	Total/NA	Solid	8021B	17525
LCSD 880-17525/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17525
890-1841-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	17525
890-1841-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17525

Analysis Batch: 17621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	Total BTEX	
880-10392-2	C-2	Total/NA	Solid	Total BTEX	
880-10392-3	C-3	Total/NA	Solid	Total BTEX	
880-10392-4	C-4	Total/NA	Solid	Total BTEX	
880-10392-5	C-5	Total/NA	Solid	Total BTEX	
880-10392-6	C-6	Total/NA	Solid	Total BTEX	
880-10392-7	C-7	Total/NA	Solid	Total BTEX	
880-10392-8	C-8	Total/NA	Solid	Total BTEX	
880-10392-9	C-9	Total/NA	Solid	Total BTEX	
880-10392-10	C-10	Total/NA	Solid	Total BTEX	
880-10392-11	C-11	Total/NA	Solid	Total BTEX	
880-10392-12	C-12	Total/NA	Solid	Total BTEX	
880-10392-13	C-13	Total/NA	Solid	Total BTEX	
880-10392-14	C-14	Total/NA	Solid	Total BTEX	
880-10392-15	C-15	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

GC VOA (Continued)

Analysis Batch: 17621 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-16	C-16	Total/NA	Solid	Total BTEX	
880-10392-17	C-17	Total/NA	Solid	Total BTEX	
880-10392-18	C-18	Total/NA	Solid	Total BTEX	
880-10392-19	C-19	Total/NA	Solid	Total BTEX	
880-10392-20	C-20	Total/NA	Solid	Total BTEX	

Analysis Batch: 17855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-21	C-21	Total/NA	Solid	Total BTEX	
880-10392-22	C-22	Total/NA	Solid	Total BTEX	
880-10392-23	C-23	Total/NA	Solid	Total BTEX	
880-10392-24	C-24	Total/NA	Solid	Total BTEX	
880-10392-25	C-25	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 17333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	8015NM Prep	
880-10392-2	C-2	Total/NA	Solid	8015NM Prep	
880-10392-3	C-3	Total/NA	Solid	8015NM Prep	
880-10392-4	C-4	Total/NA	Solid	8015NM Prep	
880-10392-5	C-5	Total/NA	Solid	8015NM Prep	
880-10392-6	C-6	Total/NA	Solid	8015NM Prep	
880-10392-7	C-7	Total/NA	Solid	8015NM Prep	
MB 880-17333/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17333/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17333/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10392-1 MS	C-1	Total/NA	Solid	8015NM Prep	
880-10392-1 MSD	C-1	Total/NA	Solid	8015NM Prep	

Prep Batch: 17347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-21	C-21	Total/NA	Solid	8015NM Prep	
880-10392-22	C-22	Total/NA	Solid	8015NM Prep	
880-10392-23	C-23	Total/NA	Solid	8015NM Prep	
880-10392-24	C-24	Total/NA	Solid	8015NM Prep	
880-10392-25	C-25	Total/NA	Solid	8015NM Prep	
MB 880-17347/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17347/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17347/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1834-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1834-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	8015B NM	17333
880-10392-2	C-2	Total/NA	Solid	8015B NM	17333
880-10392-3	C-3	Total/NA	Solid	8015B NM	17333
880-10392-4	C-4	Total/NA	Solid	8015B NM	17333
880-10392-5	C-5	Total/NA	Solid	8015B NM	17333

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

GC Semi VOA (Continued)

Analysis Batch: 17443 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-6	C-6	Total/NA	Solid	8015B NM	17333
880-10392-7	C-7	Total/NA	Solid	8015B NM	17333
880-10392-21	C-21	Total/NA	Solid	8015B NM	17347
880-10392-22	C-22	Total/NA	Solid	8015B NM	17347
880-10392-23	C-23	Total/NA	Solid	8015B NM	17347
880-10392-24	C-24	Total/NA	Solid	8015B NM	17347
880-10392-25	C-25	Total/NA	Solid	8015B NM	17347
MB 880-17333/1-A	Method Blank	Total/NA	Solid	8015B NM	17333
MB 880-17347/1-A	Method Blank	Total/NA	Solid	8015B NM	17347
LCS 880-17333/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17333
LCS 880-17347/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17347
LCSD 880-17333/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17333
LCSD 880-17347/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17347
880-10392-1 MS	C-1	Total/NA	Solid	8015B NM	17333
880-10392-1 MSD	C-1	Total/NA	Solid	8015B NM	17333
890-1834-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	17347
890-1834-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	17347

Prep Batch: 17530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-8	C-8	Total/NA	Solid	8015NM Prep	
880-10392-9	C-9	Total/NA	Solid	8015NM Prep	
880-10392-10	C-10	Total/NA	Solid	8015NM Prep	
880-10392-11	C-11	Total/NA	Solid	8015NM Prep	
880-10392-12	C-12	Total/NA	Solid	8015NM Prep	
880-10392-13	C-13	Total/NA	Solid	8015NM Prep	
880-10392-14	C-14	Total/NA	Solid	8015NM Prep	
880-10392-15	C-15	Total/NA	Solid	8015NM Prep	
880-10392-16	C-16	Total/NA	Solid	8015NM Prep	
880-10392-17	C-17	Total/NA	Solid	8015NM Prep	
880-10392-18	C-18	Total/NA	Solid	8015NM Prep	
880-10392-19	C-19	Total/NA	Solid	8015NM Prep	
880-10392-20	C-20	Total/NA	Solid	8015NM Prep	
MB 880-17530/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17530/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17530/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10392-8 MS	C-8	Total/NA	Solid	8015NM Prep	
880-10392-8 MSD	C-8	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-8	C-8	Total/NA	Solid	8015B NM	17530
880-10392-9	C-9	Total/NA	Solid	8015B NM	17530
880-10392-10	C-10	Total/NA	Solid	8015B NM	17530
880-10392-11	C-11	Total/NA	Solid	8015B NM	17530
880-10392-12	C-12	Total/NA	Solid	8015B NM	17530
880-10392-13	C-13	Total/NA	Solid	8015B NM	17530
880-10392-14	C-14	Total/NA	Solid	8015B NM	17530
880-10392-15	C-15	Total/NA	Solid	8015B NM	17530
880-10392-16	C-16	Total/NA	Solid	8015B NM	17530
880-10392-17	C-17	Total/NA	Solid	8015B NM	17530

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

GC Semi VOA (Continued)

Analysis Batch: 17551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-18	C-18	Total/NA	Solid	8015B NM	17530
880-10392-19	C-19	Total/NA	Solid	8015B NM	17530
880-10392-20	C-20	Total/NA	Solid	8015B NM	17530
MB 880-17530/1-A	Method Blank	Total/NA	Solid	8015B NM	17530
LCS 880-17530/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17530
LCSD 880-17530/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17530
880-10392-8 MS	C-8	Total/NA	Solid	8015B NM	17530
880-10392-8 MSD	C-8	Total/NA	Solid	8015B NM	17530

Analysis Batch: 17829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Total/NA	Solid	8015 NM	
880-10392-2	C-2	Total/NA	Solid	8015 NM	
880-10392-3	C-3	Total/NA	Solid	8015 NM	
880-10392-4	C-4	Total/NA	Solid	8015 NM	
880-10392-5	C-5	Total/NA	Solid	8015 NM	
880-10392-6	C-6	Total/NA	Solid	8015 NM	
880-10392-7	C-7	Total/NA	Solid	8015 NM	
880-10392-8	C-8	Total/NA	Solid	8015 NM	
880-10392-9	C-9	Total/NA	Solid	8015 NM	
880-10392-10	C-10	Total/NA	Solid	8015 NM	
880-10392-11	C-11	Total/NA	Solid	8015 NM	
880-10392-12	C-12	Total/NA	Solid	8015 NM	
880-10392-13	C-13	Total/NA	Solid	8015 NM	
880-10392-14	C-14	Total/NA	Solid	8015 NM	
880-10392-15	C-15	Total/NA	Solid	8015 NM	
880-10392-16	C-16	Total/NA	Solid	8015 NM	
880-10392-17	C-17	Total/NA	Solid	8015 NM	
880-10392-18	C-18	Total/NA	Solid	8015 NM	
880-10392-19	C-19	Total/NA	Solid	8015 NM	
880-10392-20	C-20	Total/NA	Solid	8015 NM	
880-10392-21	C-21	Total/NA	Solid	8015 NM	
880-10392-22	C-22	Total/NA	Solid	8015 NM	
880-10392-23	C-23	Total/NA	Solid	8015 NM	
880-10392-24	C-24	Total/NA	Solid	8015 NM	
880-10392-25	C-25	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 17339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Soluble	Solid	DI Leach	
880-10392-2	C-2	Soluble	Solid	DI Leach	
880-10392-3	C-3	Soluble	Solid	DI Leach	
880-10392-4	C-4	Soluble	Solid	DI Leach	
880-10392-5	C-5	Soluble	Solid	DI Leach	
880-10392-6	C-6	Soluble	Solid	DI Leach	
880-10392-7	C-7	Soluble	Solid	DI Leach	
880-10392-8	C-8	Soluble	Solid	DI Leach	
880-10392-9	C-9	Soluble	Solid	DI Leach	
880-10392-10	C-10	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

HPLC/IC (Continued)

Leach Batch: 17339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-11	C-11	Soluble	Solid	DI Leach	
880-10392-12	C-12	Soluble	Solid	DI Leach	
MB 880-17339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10392-3 MS	C-3	Soluble	Solid	DI Leach	
880-10392-3 MSD	C-3	Soluble	Solid	DI Leach	

Leach Batch: 17340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-13	C-13	Soluble	Solid	DI Leach	
880-10392-14	C-14	Soluble	Solid	DI Leach	
880-10392-15	C-15	Soluble	Solid	DI Leach	
880-10392-16	C-16	Soluble	Solid	DI Leach	
880-10392-17	C-17	Soluble	Solid	DI Leach	
880-10392-18	C-18	Soluble	Solid	DI Leach	
880-10392-19	C-19	Soluble	Solid	DI Leach	
880-10392-20	C-20	Soluble	Solid	DI Leach	
880-10392-21	C-21	Soluble	Solid	DI Leach	
880-10392-22	C-22	Soluble	Solid	DI Leach	
880-10392-23	C-23	Soluble	Solid	DI Leach	
880-10392-24	C-24	Soluble	Solid	DI Leach	
880-10392-25	C-25	Soluble	Solid	DI Leach	
MB 880-17340/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17340/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17340/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10392-13 MS	C-13	Soluble	Solid	DI Leach	
880-10392-13 MSD	C-13	Soluble	Solid	DI Leach	
880-10392-23 MS	C-23	Soluble	Solid	DI Leach	
880-10392-23 MSD	C-23	Soluble	Solid	DI Leach	

Analysis Batch: 17452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-1	C-1	Soluble	Solid	300.0	17339
880-10392-2	C-2	Soluble	Solid	300.0	17339
880-10392-3	C-3	Soluble	Solid	300.0	17339
880-10392-4	C-4	Soluble	Solid	300.0	17339
880-10392-5	C-5	Soluble	Solid	300.0	17339
880-10392-6	C-6	Soluble	Solid	300.0	17339
880-10392-7	C-7	Soluble	Solid	300.0	17339
880-10392-8	C-8	Soluble	Solid	300.0	17339
880-10392-9	C-9	Soluble	Solid	300.0	17339
880-10392-10	C-10	Soluble	Solid	300.0	17339
880-10392-11	C-11	Soluble	Solid	300.0	17339
880-10392-12	C-12	Soluble	Solid	300.0	17339
MB 880-17339/1-A	Method Blank	Soluble	Solid	300.0	17339
LCS 880-17339/2-A	Lab Control Sample	Soluble	Solid	300.0	17339
LCSD 880-17339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17339
880-10392-3 MS	C-3	Soluble	Solid	300.0	17339
880-10392-3 MSD	C-3	Soluble	Solid	300.0	17339

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

HPLC/IC

Analysis Batch: 17493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10392-13	C-13	Soluble	Solid	300.0	17340
880-10392-14	C-14	Soluble	Solid	300.0	17340
880-10392-15	C-15	Soluble	Solid	300.0	17340
880-10392-16	C-16	Soluble	Solid	300.0	17340
880-10392-17	C-17	Soluble	Solid	300.0	17340
880-10392-18	C-18	Soluble	Solid	300.0	17340
880-10392-19	C-19	Soluble	Solid	300.0	17340
880-10392-20	C-20	Soluble	Solid	300.0	17340
880-10392-21	C-21	Soluble	Solid	300.0	17340
880-10392-22	C-22	Soluble	Solid	300.0	17340
880-10392-23	C-23	Soluble	Solid	300.0	17340
880-10392-24	C-24	Soluble	Solid	300.0	17340
880-10392-25	C-25	Soluble	Solid	300.0	17340
MB 880-17340/1-A	Method Blank	Soluble	Solid	300.0	17340
LCS 880-17340/2-A	Lab Control Sample	Soluble	Solid	300.0	17340
LCSD 880-17340/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17340
880-10392-13 MS	C-13	Soluble	Solid	300.0	17340
880-10392-13 MSD	C-13	Soluble	Solid	300.0	17340
880-10392-23 MS	C-23	Soluble	Solid	300.0	17340
880-10392-23 MSD	C-23	Soluble	Solid	300.0	17340

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-1

Lab Sample ID: 880-10392-1

Date Collected: 01/19/22 09:00
Matrix: Solid
Date Received: 01/19/22 14:30

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 03:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 13:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 07:30	CH	XEN MID

Client Sample ID: C-2

Lab Sample ID: 880-10392-2

Date Collected: 01/19/22 09:05
Matrix: Solid
Date Received: 01/19/22 14:30

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 03:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 19:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 07:42	CH	XEN MID

Client Sample ID: C-3

Lab Sample ID: 880-10392-3

Date Collected: 01/19/22 09:10
Matrix: Solid
Date Received: 01/19/22 14:30

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 03:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 07:54	CH	XEN MID

Client Sample ID: C-4

Lab Sample ID: 880-10392-4

Date Collected: 01/19/22 09:15
Matrix: Solid
Date Received: 01/19/22 14:30

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 04:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-4

Date Collected: 01/19/22 09:15
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-4

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			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 19:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 08:29	CH	XEN MID

Client Sample ID: C-5

Date Collected: 01/19/22 09:20
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-5

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			5.03 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 04:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 20:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 08:41	CH	XEN MID

Client Sample ID: C-6

Date Collected: 01/19/22 09:25
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-6

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			4.96 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 05:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 20:30	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 09:17	CH	XEN MID

Client Sample ID: C-7

Date Collected: 01/19/22 09:30
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-7

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			5.00 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 05:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17333	01/20/22 08:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/21/22 20:51	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-7

Date Collected: 01/19/22 09:30
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-7
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			5.05 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 09:29	CH	XEN MID

Client Sample ID: C-8

Date Collected: 01/19/22 09:35
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-8
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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 05:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 14:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 09:40	CH	XEN MID

Client Sample ID: C-9

Date Collected: 01/19/22 09:40
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-9
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			4.97 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 06:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 15:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 10:51	CH	XEN MID

Client Sample ID: C-10

Date Collected: 01/19/22 09:45
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-10
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			4.99 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 06:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 11:03	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-11

Date Collected: 01/19/22 09:50
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-11

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 07:46	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 11:15	CH	XEN MID

Client Sample ID: C-12

Date Collected: 01/19/22 09:55
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-12

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	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 08:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 16:29	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	17339	01/20/22 09:25	CH	XEN MID
Soluble	Analysis	300.0		1			17452	01/22/22 11:26	CH	XEN MID

Client Sample ID: C-13

Date Collected: 01/19/22 10:00
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-13

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			4.96 g	5 mL	17275	01/20/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 08:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 16:50	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 20:47	CH	XEN MID

Client Sample ID: C-14

Date Collected: 01/19/22 10:05
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-14

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			4.96 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 08:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-14

Date Collected: 01/19/22 10:05
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-14

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			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 17:12	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:06	CH	XEN MID

Client Sample ID: C-15

Date Collected: 01/19/22 10:10
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-15

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			4.96 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 09:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 17:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:13	CH	XEN MID

Client Sample ID: C-16

Date Collected: 01/19/22 10:15
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-16

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			5.02 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 09:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 17:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:19	CH	XEN MID

Client Sample ID: C-17

Date Collected: 01/19/22 10:20
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-17

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	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 09:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 18:16	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-17

Date Collected: 01/19/22 10:20
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-17

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			4.99 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:25	CH	XEN MID

Client Sample ID: C-18

Date Collected: 01/19/22 10:25
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-18

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			4.99 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 10:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 18:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:45	CH	XEN MID

Client Sample ID: C-19

Date Collected: 01/19/22 10:30
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-19

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			5.00 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 10:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 19:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:51	CH	XEN MID

Client Sample ID: C-20

Date Collected: 01/19/22 10:35
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-20

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			5.05 g	5 mL	17275	01/20/22 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17417	01/22/22 10:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			17621	01/24/22 13:18	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17530	01/24/22 09:22	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17551	01/24/22 19:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 21:57	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-21

Date Collected: 01/19/22 10:40
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-21

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			4.99 g	5 mL	17525	01/24/22 07:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17527	01/24/22 15:34	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			17855	01/26/22 17:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17347	01/20/22 10:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/22/22 10:51	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 22:04	CH	XEN MID

Client Sample ID: C-22

Date Collected: 01/19/22 10:45
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	17525	01/24/22 07:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17527	01/24/22 15:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			17855	01/26/22 17:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17347	01/20/22 10:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/22/22 11:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 22:10	CH	XEN MID

Client Sample ID: C-23

Date Collected: 01/19/22 10:50
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-23

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	17525	01/24/22 07:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17527	01/24/22 16:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			17855	01/26/22 17:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17347	01/20/22 10:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/22/22 11:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 22:17	CH	XEN MID

Client Sample ID: C-24

Date Collected: 01/19/22 10:55
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-24

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	17525	01/24/22 07:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17527	01/24/22 16:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			17855	01/26/22 17:16	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Client Sample ID: C-24

Date Collected: 01/19/22 10:55
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-24

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			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	17347	01/20/22 10:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/22/22 11:55	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 22:36	CH	XEN MID

Client Sample ID: C-25

Date Collected: 01/19/22 11:00
Date Received: 01/19/22 14:30

Lab Sample ID: 880-10392-25

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	17525	01/24/22 07:35	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17527	01/24/22 16:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			17855	01/26/22 17:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17829	01/26/22 16:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	17347	01/20/22 10:33	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17443	01/22/22 12:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	17340	01/20/22 09:26	CH	XEN MID
Soluble	Analysis	300.0		1			17493	01/21/22 22:42	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: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

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: 880-10392-1
Project/Site: SD 24 CTB SDG: 21-0100-23

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 24 CTB

Job ID: 880-10392-1
SDG: 21-0100-23

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-10392-1	C-1	Solid	01/19/22 09:00	01/19/22 14:30
880-10392-2	C-2	Solid	01/19/22 09:05	01/19/22 14:30
880-10392-3	C-3	Solid	01/19/22 09:10	01/19/22 14:30
880-10392-4	C-4	Solid	01/19/22 09:15	01/19/22 14:30
880-10392-5	C-5	Solid	01/19/22 09:20	01/19/22 14:30
880-10392-6	C-6	Solid	01/19/22 09:25	01/19/22 14:30
880-10392-7	C-7	Solid	01/19/22 09:30	01/19/22 14:30
880-10392-8	C-8	Solid	01/19/22 09:35	01/19/22 14:30
880-10392-9	C-9	Solid	01/19/22 09:40	01/19/22 14:30
880-10392-10	C-10	Solid	01/19/22 09:45	01/19/22 14:30
880-10392-11	C-11	Solid	01/19/22 09:50	01/19/22 14:30
880-10392-12	C-12	Solid	01/19/22 09:55	01/19/22 14:30
880-10392-13	C-13	Solid	01/19/22 10:00	01/19/22 14:30
880-10392-14	C-14	Solid	01/19/22 10:05	01/19/22 14:30
880-10392-15	C-15	Solid	01/19/22 10:10	01/19/22 14:30
880-10392-16	C-16	Solid	01/19/22 10:15	01/19/22 14:30
880-10392-17	C-17	Solid	01/19/22 10:20	01/19/22 14:30
880-10392-18	C-18	Solid	01/19/22 10:25	01/19/22 14:30
880-10392-19	C-19	Solid	01/19/22 10:30	01/19/22 14:30
880-10392-20	C-20	Solid	01/19/22 10:35	01/19/22 14:30
880-10392-21	C-21	Solid	01/19/22 10:40	01/19/22 14:30
880-10392-22	C-22	Solid	01/19/22 10:45	01/19/22 14:30
880-10392-23	C-23	Solid	01/19/22 10:50	01/19/22 14:30
880-10392-24	C-24	Solid	01/19/22 10:55	01/19/22 14:30
880-10392-25	C-25	Solid	01/19/22 11:00	01/19/22 14:30

No. 2386

10392

CHAIN-OF-CUSTODY

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

Data Reported to

DATE 1/19 PAGE 1 OF 2

PO# LAB WORK ORDER#

PROJECT LOCATION OR NAME SD 24 CTB

LAI PROJECT # 21-0100-23 COLLECTOR JR

TRRP report? ☐ Yes ☐ No

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

TIME ZONE Time zone/State

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4	NaOH	ICE	UNPRESSERVED	ANALYSES: BTEX 8021B	TRPH 418.1	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	HERB	TCLP VOC	TOTAL METALS (RCRA)	Semi-VOC	LEAD - TOTAL	OTHER LIST	RCI	TOX	TCLP	TDS	TSS	FLASHPOINT	pH	% MOISTURE	EXPLOSIVES	HEXAVALENT CHROMIUM	CHLORIDE 4 ANIONS BY E 300	CYANIDE	PECHLORATE	ALKALINITY	FIELD NOTES
C-1		1/19	9:00	S	1					X		X		X	X	X																							X				
C-2		1/19	9:05	S	1					X		X		X	X	X																							X				
C-3		1/19	9:10	S	1					X		X		X	X	X																							X				
C-4		1/19	9:15	S	1					X		X		X	X	X																							X				
C-5		1/19	9:20	S	1					X		X		X	X	X																							X				
C-6		1/19	9:25	S	1					X		X		X	X	X																							X				
C-7		1/19	9:30	S	1					X		X		X	X	X																							X				
C-8		1/19	9:35	S	1					X		X		X	X	X																							X				
C-9		1/19	9:40	S	1					X		X		X	X	X																							X				
C-10		1/19	9:45	S	1					X		X		X	X	X																							X				
C-11		1/19	9:50	S	1					X		X		X	X	X																							X				
C-12		1/19	9:55	S	1					X		X		X	X	X																							X				
C-13		1/19	10:00	S	1					X		X		X	X	X																							X				
C-14		1/19	10:05	S	1					X		X		X	X	X																							X				
C-15		1/19	10:10	S	1					X		X		X	X	X																							X				
TOTAL																																												

RELINQUISHED BY (Signature) DATE/TIME 1/19 14:30 RECEIVED BY (Signature)

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

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

LABORATORY

880-10392 Chain of Custody

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

LABORATORY USE ONLY:
RECEIVING TEMP 6.8/6.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

No. 2387

10392

CHAIN-OF-CUSTODY

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

Data Reported to

DATE 1/19/22 PAGE 2 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME SD 24 CTB

LAI PROJECT # 21-0100-23 COLLECTOR JR

TRRP report? ☐ Yes ☐ No

TIME ZONE
Time zone/State

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

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐ BY 8021B	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 ☐	BY E300	FIELD NOTES
C-16		1/19/22	10.15	S	1				X		X		X	X	X													X			
C-17		1/19	10.20	S	1				X		X		X	X	X													X			
C-18		1/19	10:25	S	1				X		X		X	X	X													X			
C-19		1/19	10 30	S	1				X		X		X	X	X													X			
C-20		1/19	10:35	S	1				X		X		X	X	X													X			
C-21		1/19	10 40	S	1				X		X		X	X	X													X			
C-22		1/19	10:45	S	1				X		X		X	X	X													X			
C-23		1/19	10'50	S	1				X		X		X	X	X													X			
C-24		1/19	10:55	S	1				X		X		X	X	X													X			
C-25		1/19	11.00	S	1				X		X		X	X	X													X			
TOTAL																															

RELINQUISHED BY (Signature) DATE/TIME 1/19/22 14 30 RECEIVED BY (Signature)

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

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

LABORATORY

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

LABORATORY USE ONLY:
RECEIVING TEMP 4.8/4.9 THERM# IR8
CUSTODY SEALS ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-10392-1
SDG Number: 21-0100-23

Login Number: 10392
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	Received same day of collection; chilling process has begun.
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: 880-10462-1
Laboratory Sample Delivery Group: 21-0100-23
Client Project/Site: SD 24 CTB Hydrovac Piles

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
1/31/2022 1:42:18 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 24 CTB Hydrovac Piles

Laboratory Job ID: 880-10462-1
SDG: 21-0100-23

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

Job ID: 880-10462-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10462-1

Receipt
The sample was received on 1/21/2022 2:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 29.3°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-17733 and analytical batch 880-17662 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.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-17558 and analytical batch 880-17735 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. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

Client Sample ID: SP 1 **Lab Sample ID: 880-10462-1**
Date Collected: 01/21/22 09:52 **Matrix: Solid**
Date Received: 01/21/22 14:02

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 12:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 12:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 12:21	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		01/25/22 07:13	01/25/22 12:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 12:21	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/25/22 07:13	01/25/22 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*01/25/22 07:13*	*01/25/22 12:21*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*01/25/22 07:13*	*01/25/22 12:21*	*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			01/28/22 14:15	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			01/27/22 16:10	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		01/25/22 15:06	01/26/22 03:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/25/22 15:06	01/26/22 03:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/25/22 15:06	01/26/22 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*01/25/22 15:06*	*01/26/22 03:46*	*1*
o-Terphenyl (Surr)	*119*		*70 - 130*	*01/25/22 15:06*	*01/26/22 03:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			01/28/22 21:49	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB Hydrovac Piles

Job ID: 880-10462-1
SDG: 21-0100-23

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)
880-10462-1	SP 1	97	115
880-10483-A-31-D MS	Matrix Spike	103	105
880-10483-A-31-E MSD	Matrix Spike Duplicate	106	99
LCS 880-17651/1-A	Lab Control Sample	96	106
LCSD 880-17651/2-A	Lab Control Sample Dup	101	99
MB 880-17651/5-A	Method Blank	104	90

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)
880-10462-1	SP 1	110	119
890-1857-A-1-F MS	Matrix Spike	90	86
890-1857-A-1-G MSD	Matrix Spike Duplicate	91	87
LCS 880-17733/2-A	Lab Control Sample	106	114
LCSD 880-17733/3-A	Lab Control Sample Dup	121	127
MB 880-17733/1-A	Method Blank	90	101

Surrogate Legend

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

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB Hydrovac Piles

Job ID: 880-10462-1
SDG: 21-0100-23

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17651/5-A
Matrix: Solid
Analysis Batch: 17652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17651

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 10:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 10:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 10:38	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		01/25/22 07:13	01/25/22 10:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/25/22 07:13	01/25/22 10:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/25/22 07:13	01/25/22 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*01/25/22 07:13*	*01/25/22 10:38*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*01/25/22 07:13*	*01/25/22 10:38*	*1*

Lab Sample ID: LCS 880-17651/1-A
Matrix: Solid
Analysis Batch: 17652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17651

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08637		mg/Kg		86	70 - 130		
Toluene			0.100	0.07496		mg/Kg		75	70 - 130		
Ethylbenzene			0.100	0.07679		mg/Kg		77	70 - 130		
m,p-Xylenes			0.200	0.1563		mg/Kg		78	70 - 130		
o-Xylene			0.100	0.07613		mg/Kg		76	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-17651/2-A
Matrix: Solid
Analysis Batch: 17652

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17651

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09341		mg/Kg		93	70 - 130	8	35
Toluene			0.100	0.08777		mg/Kg		88	70 - 130	16	35
Ethylbenzene			0.100	0.08431		mg/Kg		84	70 - 130	9	35
m,p-Xylenes			0.200	0.1758		mg/Kg		88	70 - 130	12	35
o-Xylene			0.100	0.08578		mg/Kg		86	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-10483-A-31-D MS
Matrix: Solid
Analysis Batch: 17652

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 17651

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.101	0.09564		mg/Kg		95	70 - 130		
Toluene	<0.00200	U	0.101	0.08614		mg/Kg		85	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-10483-A-31-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17652 **Prep Batch: 17651**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.101	0.08454		mg/Kg		84	70 - 130
m,p-Xylenes	<0.00400	U	0.202	0.1734		mg/Kg		86	70 - 130
o-Xylene	<0.00200	U	0.101	0.08391		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-10483-A-31-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17652 **Prep Batch: 17651**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.09453		mg/Kg		95	70 - 130	1	35
Toluene	<0.00200	U	0.0994	0.08605		mg/Kg		87	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0994	0.09097		mg/Kg		92	70 - 130	7	35
m,p-Xylenes	<0.00400	U	0.199	0.1887		mg/Kg		95	70 - 130	8	35
o-Xylene	<0.00200	U	0.0994	0.09057		mg/Kg		91	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-17733/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/25/22 15:06	01/25/22 21:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/25/22 15:06	01/25/22 21:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/25/22 15:06	01/25/22 21:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*90*		*70 - 130*	*01/25/22 15:06*	*01/25/22 21:23*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*01/25/22 15:06*	*01/25/22 21:23*	*1*

Lab Sample ID: LCS 880-17733/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	948.6		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1021		mg/Kg		102	70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: LCS 880-17733/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	106		70 - 130
o-Terphenyl (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-17733/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	996.4		mg/Kg		100	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	121		70 - 130
o-Terphenyl (Surr)	127		70 - 130

Lab Sample ID: 890-1857-A-1-F MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

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 F1	997	1370	F1	mg/Kg		137	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	1360	F1	mg/Kg		134	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	90		70 - 130
o-Terphenyl (Surr)	86		70 - 130

Lab Sample ID: 890-1857-A-1-G MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 17662 **Prep Batch: 17733**

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 F1	996	1375	F1	mg/Kg		138	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	996	1357	F1	mg/Kg		134	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	91		70 - 130
o-Terphenyl (Surr)	87		70 - 130

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-17558/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 17735

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/28/22 02:39	1

Lab Sample ID: LCS 880-17558/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 17735

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	265.3		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-17558/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 17735

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	266.1		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 820-3188-A-51-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 17735

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	15300	F1	4950	19160	F1	mg/Kg		78	90 - 110		

Lab Sample ID: 820-3188-A-51-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 17735

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15300	F1	4950	19130	F1	mg/Kg		78	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

GC VOA

Prep Batch: 17651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	5035	
MB 880-17651/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17651/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17651/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10483-A-31-D MS	Matrix Spike	Total/NA	Solid	5035	
880-10483-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 17652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	8021B	17651
MB 880-17651/5-A	Method Blank	Total/NA	Solid	8021B	17651
LCS 880-17651/1-A	Lab Control Sample	Total/NA	Solid	8021B	17651
LCSD 880-17651/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17651
880-10483-A-31-D MS	Matrix Spike	Total/NA	Solid	8021B	17651
880-10483-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17651

Analysis Batch: 18058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 17662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	8015B NM	17733
MB 880-17733/1-A	Method Blank	Total/NA	Solid	8015B NM	17733
LCS 880-17733/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17733
LCSD 880-17733/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17733
890-1857-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	17733
890-1857-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	17733

Prep Batch: 17733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	8015NM Prep	
MB 880-17733/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17733/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17733/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1857-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1857-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 17558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Soluble	Solid	DI Leach	
MB 880-17558/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-17558/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-17558/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

HPLC/IC (Continued)

Leach Batch: 17558 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-3188-A-51-C MS	Matrix Spike	Soluble	Solid	DI Leach	
820-3188-A-51-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 17735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10462-1	SP 1	Soluble	Solid	300.0	17558
MB 880-17558/1-A	Method Blank	Soluble	Solid	300.0	17558
LCS 880-17558/2-A	Lab Control Sample	Soluble	Solid	300.0	17558
LCSD 880-17558/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	17558
820-3188-A-51-C MS	Matrix Spike	Soluble	Solid	300.0	17558
820-3188-A-51-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	17558

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB Hydrovac Piles

Job ID: 880-10462-1
SDG: 21-0100-23

Client Sample ID: SP 1
Date Collected: 01/21/22 09:52
Date Received: 01/21/22 14:02

Lab Sample ID: 880-10462-1
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			4.99 g	5 mL	17651	01/25/22 07:13	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17652	01/25/22 12:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18058	01/28/22 14:15	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			17951	01/27/22 16:10	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17733	01/25/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			17662	01/26/22 03:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	17558	01/24/22 10:26	CH	XEN MID
Soluble	Analysis	300.0		1			17735	01/28/22 21:49	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: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

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: 880-10462-1
Project/Site: SD 24 CTB Hydrovac Piles SDG: 21-0100-23

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 24 CTB Hydrovac Piles

Job ID: 880-10462-1
SDG: 21-0100-23

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-10462-1	SP 1	Solid	01/21/22 09:52	01/21/22 14:02

No. 2389

CHAIN-OF-CUSTODY

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

DATE 1/21/22 PAGE 1 OF 1

PO# _____ LAB WORK ORDER# _____

PROJECT LOCATION OR NAME SD 24 CTB Hydrovac Pits

LAI PROJECT # 21-0100-23 COLLECTOR JR

Data Reported to

TRRP report? ☐ Yes ☐ No

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

TIME ZONE Time zone/State

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ By 8021B 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 ☐ DW 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ CYANIDE ☐ TDS ☐ TSS ☐ % MOISTURE ☐ HEXAVALENT CHROMIUM ☐ pH ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
SP 1		1/21/22	9.52	S	1				X		X	202

TOTAL

RELINQUISHED BY (Signature) _____ DATE/TIME 1/21 1347 RECEIVED BY (Signature) _____

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

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

LABORATORY Xenco (Midland)

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

LABORATORY USE ONLY:
RECEIVING TEMP 2.2/2.3 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☑ HAND DELIVERED

880-10462 Chain of Custody

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-10462-1
SDG Number: 21-0100-23

Login Number: 10462
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	Received same day of collection; chilling process has begun.
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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-10895-1
Laboratory Sample Delivery Group: 21-0100-23
Client Project/Site: SD 24 CTB - Hydrovac Piles

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 8:38:06 AM

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

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Laboratory Job ID: 880-10895-1
SDG: 21-0100-23

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Qualifiers

GC VOA

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

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. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Job ID: 880-10895-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10895-1

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 -8.9°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: S-113 0.5' (880-10895-25), S-14 0.5' (880-10895-26), (CCV 880-18404/53), (LCS 880-18468/1-A), (LCSD 880-18468/2-A) and (MB 880-18468/5-A). 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 880-18468 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.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18465 and analytical batch 880-18466 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: Surrogate recovery for the following samples were outside control limits: S-1 1' (880-10895-1), S-2 1' (880-10895-4) and S-2 2' (880-10895-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-11 0.5' (880-10895-23). 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 880-18627 and analytical batch 880-18625 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 880-18661 and analytical batch 880-18663 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 880-18557 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: 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 samples were outside control limits: S-1 1' (880-10895-1), S-2 1' (880-10895-4), S-2 2' (880-10895-5), S-3 1' (880-10895-7), S-3 2' (880-10895-8), S-3 3' (880-10895-9), S-4 0.5' (880-10895-10), S-6 0.5' (880-10895-12), S-7 0.5' (880-10895-13), S-8 1' (880-10895-14), S-8 2' (880-10895-15), S-8 3' (880-10895-16), S-10 1' (880-10895-20), (880-10895-A-1-F MSD) and (880-10895-A-21-C MS). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

Job ID: 880-10895-1 (Continued)

Laboratory: Eurofins Midland (Continued)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18596 and analytical batch 880-18723 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. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-1 1'
Lab Sample ID: 880-10895-1
Date Collected: 02/01/22 09:58 **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 F1	0.00199		mg/Kg		02/03/22 09:55	02/04/22 12:21	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		02/03/22 09:55	02/04/22 12:21	1
Ethylbenzene	<0.00199	U F2 F1	0.00199		mg/Kg		02/03/22 09:55	02/04/22 12:21	1
m,p-Xylenes	<0.00398	U F2 F1	0.00398		mg/Kg		02/03/22 09:55	02/04/22 12:21	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		02/03/22 09:55	02/04/22 12:21	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		02/03/22 09:55	02/04/22 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*174*	*S1+*	*70 - 130*	*02/03/22 09:55*	*02/04/22 12:21*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/03/22 09:55*	*02/04/22 12:21*	*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 15:11	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 F1	50.0		mg/Kg		02/04/22 11:08	02/06/22 12:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U F2	50.0		mg/Kg		02/04/22 11:08	02/06/22 12:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*02/04/22 11:08*	*02/06/22 12:36*	*1*
o-Terphenyl (Surr)	*65*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 12:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.7**		4.95		mg/Kg			02/12/22 04:52	1

Client Sample ID: S-1 2'
Lab Sample ID: 880-10895-2
Date Collected: 02/01/22 10:00 **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	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 12:42	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 12:42	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 12:42	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		02/03/22 09:55	02/04/22 12:42	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 12:42	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/03/22 09:55	02/04/22 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/03/22 09:55*	*02/04/22 12:42*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/03/22 09:55*	*02/04/22 12:42*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-1 2'
Lab Sample ID: 880-10895-2
Date Collected: 02/01/22 10:00 **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	<0.00396	U	0.00396		mg/Kg			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 13:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 13:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:08*	*02/06/22 13:41*	*1*
o-Terphenyl (Surr)	*83*		*70 - 130*	*02/04/22 11:08*	*02/06/22 13:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.6**		5.04		mg/Kg			02/12/22 05:02	1

Client Sample ID: S-1 3'
Lab Sample ID: 880-10895-3
Date Collected: 02/01/22 10:05 **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	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 13:02	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 13:02	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 13:02	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		02/03/22 09:55	02/04/22 13:02	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 13:02	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/03/22 09:55	02/04/22 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*02/03/22 09:55*	*02/04/22 13:02*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/03/22 09:55*	*02/04/22 13:02*	*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			02/07/22 15:11	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 11:08	02/06/22 14:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 14:02	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-1 3'
Lab Sample ID: 880-10895-3
Date Collected: 02/01/22 10:05 **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)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*89*		*70 - 130*	*02/04/22 11:08*	*02/06/22 14:02*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*02/04/22 11:08*	*02/06/22 14:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.6**		4.99		mg/Kg			02/12/22 05:11	1

Client Sample ID: S-2 1'
Lab Sample ID: 880-10895-4
Date Collected: 02/01/22 10:06 **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 09:55	02/04/22 13:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:23	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 13:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*02/03/22 09:55*	*02/04/22 13:23*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/03/22 09:55*	*02/04/22 13:23*	*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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*74*		*70 - 130*	*02/04/22 11:08*	*02/06/22 14:23*	*1*
o-Terphenyl (Surr)	*68*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 14:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**167**		4.95		mg/Kg			02/12/22 05:21	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-2 2' Lab Sample ID: 880-10895-5

Date Collected: 02/01/22 10:08 **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 09:55	02/04/22 13:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:43	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 13:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 13:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/03/22 09:55*	*02/04/22 13:43*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/03/22 09:55*	*02/04/22 13:43*	*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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*73*		*70 - 130*	*02/04/22 11:08*	*02/06/22 14:45*	*1*
o-Terphenyl (Surr)	*68*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 14:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**121**		5.00		mg/Kg			02/12/22 05:30	1

Client Sample ID: S-2 3' Lab Sample ID: 880-10895-6

Date Collected: 02/01/22 10:12 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:04	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 14:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:04*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:04*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-2 3'
Lab Sample ID: 880-10895-6
Date Collected: 02/01/22 10:12 **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	<0.00399	U	0.00399		mg/Kg			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 15:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 15:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:08*	*02/06/22 15:07*	*1*
o-Terphenyl (Surr)	*85*		*70 - 130*	*02/04/22 11:08*	*02/06/22 15:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**150**		4.98		mg/Kg			02/12/22 05:40	1

Client Sample ID: S-3 1'
Lab Sample ID: 880-10895-7
Date Collected: 02/01/22 10:47 **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 09:55	02/04/22 14:24	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:55	02/04/22 14:24	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:55	02/04/22 14:24	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		02/03/22 09:55	02/04/22 14:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:55	02/04/22 14:24	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/03/22 09:55	02/04/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:24*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:24*	*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 15:11	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 11:08	02/06/22 15:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 15:28	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-3 1'
Lab Sample ID: 880-10895-7
Date Collected: 02/01/22 10:47 **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 11:08	02/06/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*65*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 15:28*	*1*
o-Terphenyl (Surr)	*57*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 15:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			02/08/22 22:45	1

Client Sample ID: S-3 2'
Lab Sample ID: 880-10895-8
Date Collected: 02/01/22 10:48 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:45	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 09:55	02/04/22 14:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 14:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 09:55	02/04/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:45*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/03/22 09:55*	*02/04/22 14:45*	*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 15:11	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 11:08	02/06/22 15:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 15:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*72*		*70 - 130*	*02/04/22 11:08*	*02/06/22 15:50*	*1*
o-Terphenyl (Surr)	*64*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 15:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.94**		5.04		mg/Kg			02/08/22 23:07	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-3 3'
Lab Sample ID: 880-10895-9
Date Collected: 02/01/22 10:49 **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 09:55	02/04/22 15:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 15:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 15:05	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 15:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 15:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*02/03/22 09:55*	*02/04/22 15:05*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/03/22 09:55*	*02/04/22 15:05*	*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 15:11	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 11:08	02/06/22 16:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 16:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*67*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 16:11*	*1*
o-Terphenyl (Surr)	*63*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 16:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**136**		4.98		mg/Kg			02/08/22 23:15	1

Client Sample ID: S-4 0.5'
Lab Sample ID: 880-10895-10
Date Collected: 02/01/22 11:10 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 15:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 15:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 15:26	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 15:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 15:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/03/22 09:55*	*02/04/22 15:26*	*1*
1,4-Difluorobenzene (Surr)	*125*		*70 - 130*	*02/03/22 09:55*	*02/04/22 15:26*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-4 0.5'
Lab Sample ID: 880-10895-10
Date Collected: 02/01/22 11:10 **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	<0.00399	U	0.00399		mg/Kg			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 16:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 16:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*62*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 16:33*	*1*
o-Terphenyl (Surr)	*57*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 16:33*	*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			02/08/22 23:22	1

Client Sample ID: S-5 0.5'
Lab Sample ID: 880-10895-11
Date Collected: 02/01/22 11:11 **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	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 17:16	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 17:16	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 17:16	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		02/03/22 09:55	02/04/22 17:16	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/03/22 09:55	02/04/22 17:16	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/03/22 09:55	02/04/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:16*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:16*	*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			02/07/22 15:11	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 11:08	02/06/22 17:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 17:16	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-5 0.5' Lab Sample ID: 880-10895-11

Date Collected: 02/01/22 11:11 **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 11:08	02/06/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*85*		*70 - 130*	*02/04/22 11:08*	*02/06/22 17:16*	*1*
o-Terphenyl (Surr)	*80*		*70 - 130*	*02/04/22 11:08*	*02/06/22 17:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.91**		4.98		mg/Kg			02/08/22 23:30	1

Client Sample ID: S-6 0.5' Lab Sample ID: 880-10895-12

Date Collected: 02/01/22 11:12 **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 09:55	02/04/22 17:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 17:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 17:36	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 17:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 17:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:36*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:36*	*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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 17:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 17:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*55*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 17:37*	*1*
o-Terphenyl (Surr)	*50*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 17:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.1**		4.95		mg/Kg			02/08/22 23:52	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-7 0.5'
Lab Sample ID: 880-10895-13
Date Collected: 02/01/22 11:13 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 17:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 17:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 17:57	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 17:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 17:57	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:57*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/03/22 09:55*	*02/04/22 17:57*	*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 15:11	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 11:08	02/06/22 17:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 17:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*64*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 17:59*	*1*
o-Terphenyl (Surr)	*60*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 17:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01		mg/Kg			02/09/22 00:00	1

Client Sample ID: S-8 1'
Lab Sample ID: 880-10895-14
Date Collected: 02/01/22 12:30 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:17	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 18:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:55	02/04/22 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:17*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:17*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-8 1'
Lab Sample ID: 880-10895-14
Date Collected: 02/01/22 12:30 **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	<0.00399	U	0.00399		mg/Kg			02/07/22 15:11	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 11:08	02/06/22 18:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 18:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*70*		*70 - 130*	*02/04/22 11:08*	*02/06/22 18:20*	*1*
o-Terphenyl (Surr)	*62*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 18:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**334**		5.04		mg/Kg			02/09/22 00:08	1

Client Sample ID: S-8 2'
Lab Sample ID: 880-10895-15
Date Collected: 02/01/22 12:31 **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	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 18:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 18:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 18:38	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		02/03/22 09:55	02/04/22 18:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 18:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/03/22 09:55	02/04/22 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:38*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:38*	*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			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 18:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 18:42	1

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-8 2'
Lab Sample ID: 880-10895-15
Date Collected: 02/01/22 12:31 **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 11:08	02/06/22 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*71*		*70 - 130*	*02/04/22 11:08*	*02/06/22 18:42*	*1*
o-Terphenyl (Surr)	*68*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 18:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**156**		4.98		mg/Kg			02/09/22 00:15	1

Client Sample ID: S-8 3'
Lab Sample ID: 880-10895-16
Date Collected: 02/01/22 12:32 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:58	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		02/03/22 09:55	02/04/22 18:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 18:58	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/03/22 09:55	02/04/22 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:58*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*02/03/22 09:55*	*02/04/22 18:58*	*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			02/07/22 15:11	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 11:08	02/06/22 19:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 19:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*63*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 19:03*	*1*
o-Terphenyl (Surr)	*61*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 19:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**143**		5.05		mg/Kg			02/09/22 00:23	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-9 1'
Lab Sample ID: 880-10895-17
Date Collected: 02/01/22 12:33 **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 09:55	02/04/22 19:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 19:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 19:18	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 19:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:55	02/04/22 19:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:55	02/04/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 19:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 19:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:08	02/06/22 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*81*		*70 - 130*	*02/04/22 11:08*	*02/06/22 19:24*	*1*
o-Terphenyl (Surr)	*80*		*70 - 130*	*02/04/22 11:08*	*02/06/22 19:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**88.1**	**F1**	5.00		mg/Kg			02/09/22 00:30	1

Client Sample ID: S-9 2'
Lab Sample ID: 880-10895-18
Date Collected: 02/01/22 12:34 **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	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 19:39	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 19:39	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 19:39	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		02/03/22 09:55	02/04/22 19:39	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/03/22 09:55	02/04/22 19:39	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/03/22 09:55	02/04/22 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:39*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:39*	*1*

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-9 2'
Lab Sample ID: 880-10895-18
Date Collected: 02/01/22 12:34 **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			02/07/22 15:11	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 11:08	02/06/22 19:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 19:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*02/04/22 11:08*	*02/06/22 19:46*	*1*
o-Terphenyl (Surr)	*70*		*70 - 130*	*02/04/22 11:08*	*02/06/22 19:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.6**		4.99		mg/Kg			02/09/22 00:53	1

Client Sample ID: S-9 3'
Lab Sample ID: 880-10895-19
Date Collected: 02/01/22 12:35 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 19:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 19:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 19:59	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		02/03/22 09:55	02/04/22 19:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 19:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/03/22 09:55	02/04/22 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:59*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*02/03/22 09:55*	*02/04/22 19:59*	*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			02/07/22 15:11	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 11:08	02/06/22 20:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 20:07	1

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Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-9 3'
Lab Sample ID: 880-10895-19
Date Collected: 02/01/22 12:35 **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 11:08	02/06/22 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:08*	*02/06/22 20:07*	*1*
o-Terphenyl (Surr)	*87*		*70 - 130*	*02/04/22 11:08*	*02/06/22 20:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.9**		4.98		mg/Kg			02/09/22 01:01	1

Client Sample ID: S-10 1'
Lab Sample ID: 880-10895-20
Date Collected: 02/01/22 12:36 **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	<0.00200	U F1 F2	0.00200		mg/Kg		02/03/22 09:55	02/07/22 13:43	1
Toluene	<0.00200	U F1 F2	0.00200		mg/Kg		02/03/22 09:55	02/07/22 13:43	1
Ethylbenzene	<0.00200	U F1 F2	0.00200		mg/Kg		02/03/22 09:55	02/07/22 13:43	1
m,p-Xylenes	<0.00401	U F1 F2	0.00401		mg/Kg		02/03/22 09:55	02/07/22 13:43	1
o-Xylene	<0.00200	U F1 F2	0.00200		mg/Kg		02/03/22 09:55	02/07/22 13:43	1
Xylenes, Total	<0.00401	U F1 F2	0.00401		mg/Kg		02/03/22 09:55	02/07/22 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*02/03/22 09:55*	*02/07/22 13:43*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/03/22 09:55*	*02/07/22 13:43*	*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			02/08/22 14:11	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 11:08	02/06/22 20:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 20:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:08	02/06/22 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*68*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 20:29*	*1*
o-Terphenyl (Surr)	*63*	*S1-*	*70 - 130*	*02/04/22 11:08*	*02/06/22 20:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		5.02		mg/Kg			02/09/22 01:24	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-10 2'
Lab Sample ID: 880-10895-21
Date Collected: 02/01/22 12:37 **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	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 11:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 11:31	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		02/03/22 09:47	02/04/22 11:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:47	02/04/22 11:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/03/22 09:47	02/04/22 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:31*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:31*	*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 15:11	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 F1 F2	50.0		mg/Kg		02/04/22 11:12	02/06/22 22:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1 F2	50.0		mg/Kg		02/04/22 11:12	02/06/22 22:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/06/22 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*02/04/22 11:12*	*02/06/22 22:16*	*1*
o-Terphenyl (Surr)	*75*		*70 - 130*	*02/04/22 11:12*	*02/06/22 22:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**61.5**		4.98		mg/Kg			02/09/22 01:31	1

Client Sample ID: S-10 3'
Lab Sample ID: 880-10895-22
Date Collected: 02/01/22 12:38 **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 11:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:51	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 11:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 11:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:51*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/03/22 09:47*	*02/04/22 11:51*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-10 3'
Lab Sample ID: 880-10895-22
Date Collected: 02/01/22 12:38 **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	<0.00398	U	0.00398		mg/Kg			02/07/22 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/06/22 23:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/06/22 23:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/06/22 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*96*		*70 - 130*	*02/04/22 11:12*	*02/06/22 23:19*	*1*
o-Terphenyl (Surr)	*93*		*70 - 130*	*02/04/22 11:12*	*02/06/22 23:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.4**		5.00		mg/Kg			02/09/22 01:39	1

Client Sample ID: S-11 0.5'
Lab Sample ID: 880-10895-23
Date Collected: 02/01/22 12:39 **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 09:47	02/04/22 12:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:47	02/04/22 12:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:47	02/04/22 12:11	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		02/03/22 09:47	02/04/22 12:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/03/22 09:47	02/04/22 12:11	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/03/22 09:47	02/04/22 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*163*	*S1+*	*70 - 130*	*02/03/22 09:47*	*02/04/22 12:11*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*02/03/22 09:47*	*02/04/22 12:11*	*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			02/07/22 15:11	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	02/06/22 23:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/04/22 11:12	02/06/22 23:39	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-11 0.5' Lab Sample ID: 880-10895-23

Date Collected: 02/01/22 12:39 **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 11:12	02/06/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*90*		*70 - 130*	*02/04/22 11:12*	*02/06/22 23:39*	*1*
o-Terphenyl (Surr)	*89*		*70 - 130*	*02/04/22 11:12*	*02/06/22 23:39*	*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			02/09/22 01:46	1

Client Sample ID: S-12 0.5' Lab Sample ID: 880-10895-24

Date Collected: 02/01/22 12:40 **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 12:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 12:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 12:32	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 12:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 09:47	02/04/22 12:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 09:47	02/04/22 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/03/22 09:47*	*02/04/22 12:32*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/03/22 09:47*	*02/04/22 12:32*	*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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:00*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			02/09/22 01:54	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-113 0.5'
Lab Sample ID: 880-10895-25
Date Collected: 02/01/22 12:41 **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 F1 F2	0.00202		mg/Kg		02/03/22 10:10	02/04/22 17:00	1
Toluene	<0.00202	U F1 F2	0.00202		mg/Kg		02/03/22 10:10	02/04/22 17:00	1
Ethylbenzene	<0.00202	U F1 F2	0.00202		mg/Kg		02/03/22 10:10	02/04/22 17:00	1
m,p-Xylenes	<0.00403	U F1 F2	0.00403		mg/Kg		02/03/22 10:10	02/04/22 17:00	1
o-Xylene	<0.00202	U F1 F2	0.00202		mg/Kg		02/03/22 10:10	02/04/22 17:00	1
Xylenes, Total	<0.00403	U F1 F2	0.00403		mg/Kg		02/03/22 10:10	02/04/22 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*222*	*S1+*	*70 - 130*	*02/03/22 10:10*	*02/04/22 17:00*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/03/22 10:10*	*02/04/22 17:00*	*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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*83*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:20*	*1*
o-Terphenyl (Surr)	*75*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:20*	*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			02/09/22 02:01	1

Client Sample ID: S-14 0.5'
Lab Sample ID: 880-10895-26
Date Collected: 02/01/22 12:42 **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 10:10	02/04/22 17:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:10	02/04/22 17:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:10	02/04/22 17:27	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		02/03/22 10:10	02/04/22 17:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/03/22 10:10	02/04/22 17:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/03/22 10:10	02/04/22 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*213*	*S1+*	*70 - 130*	*02/03/22 10:10*	*02/04/22 17:27*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/03/22 10:10*	*02/04/22 17:27*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

Client Sample ID: S-14 0.5'

Date Collected: 02/01/22 12:42
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10895-26

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 15:11	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			02/07/22 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	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:40	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/04/22 11:12	02/07/22 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:40*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*02/04/22 11:12*	*02/07/22 00:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.24**		4.99		mg/Kg			02/09/22 02:09	1

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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)										
880-10894-A-11-A MS	Matrix Spike	151 S1+	111										
880-10894-A-11-B MSD	Matrix Spike Duplicate	111	95										
880-10895-1	S-1 1'	174 S1+	90										
880-10895-1 MS	S-1 1'	104	77										
880-10895-1 MSD	S-1 1'	118	102										
880-10895-2	S-1 2'	122	97										
880-10895-3	S-1 3'	127	94										
880-10895-4	S-2 1'	141 S1+	102										
880-10895-5	S-2 2'	135 S1+	102										
880-10895-6	S-2 3'	120	96										
880-10895-7	S-3 1'	90	76										
880-10895-8	S-3 2'	112	96										
880-10895-9	S-3 3'	127	107										
880-10895-10	S-4 0.5'	112	125										
880-10895-11	S-5 0.5'	120	109										
880-10895-12	S-6 0.5'	130	103										
880-10895-13	S-7 0.5'	116	91										
880-10895-14	S-8 1'	117	92										
880-10895-15	S-8 2'	127	93										
880-10895-16	S-8 3'	125	99										
880-10895-17	S-9 1'	117	94										
880-10895-18	S-9 2'	126	91										
880-10895-19	S-9 3'	115	82										
880-10895-20	S-10 1'	102	105										
880-10895-20 MS	S-10 1'	114	91										
880-10895-20 MSD	S-10 1'	114	96										
880-10895-21	S-10 2'	119	115										
880-10895-22	S-10 3'	109	104										
880-10895-23	S-11 0.5'	163 S1+	117										
880-10895-24	S-12 0.5'	117	92										
880-10895-25	S-113 0.5'	222 S1+	78										
880-10895-25 MS	S-113 0.5'	182 S1+	95										
880-10895-25 MSD	S-113 0.5'	185 S1+	84										
880-10895-26	S-14 0.5'	213 S1+	77										
890-1903-A-1-C MS	Matrix Spike	108	103										
890-1903-A-1-D MSD	Matrix Spike Duplicate	105	103										
LCS 880-18463/1-A	Lab Control Sample	117	124										
LCS 880-18465/1-A	Lab Control Sample	126	102										
LCS 880-18468/1-A	Lab Control Sample	175 S1+	72										
LCS 880-18627/1-A	Lab Control Sample	106	96										
LCS 880-18661/1-A	Lab Control Sample	129	125										
LCSD 880-18463/2-A	Lab Control Sample Dup	97	87										
LCSD 880-18465/2-A	Lab Control Sample Dup	116	96										
LCSD 880-18468/2-A	Lab Control Sample Dup	183 S1+	81										
LCSD 880-18627/2-A	Lab Control Sample Dup	127	110										
LCSD 880-18661/2-A	Lab Control Sample Dup	117	117										
MB 880-18361/5-A	Method Blank	109	105										
MB 880-18463/5-A	Method Blank	119	102										
MB 880-18464/5-A	Method Blank	122	101										

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
MB 880-18465/5-A	Method Blank	120	97
MB 880-18467/5-A	Method Blank	128	76
MB 880-18468/5-A	Method Blank	143 S1+	71
MB 880-18627/5-A	Method Blank	124	95
MB 880-18661/5-A	Method Blank	111	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)
880-10895-1	S-1 1'	70	65 S1-
880-10895-1 MS	S-1 1'	86	70
880-10895-1 MSD	S-1 1'	65 S1-	62 S1-
880-10895-2	S-1 2'	88	83
880-10895-3	S-1 3'	89	84
880-10895-4	S-2 1'	74	68 S1-
880-10895-5	S-2 2'	73	68 S1-
880-10895-6	S-2 3'	88	85
880-10895-7	S-3 1'	65 S1-	57 S1-
880-10895-8	S-3 2'	72	64 S1-
880-10895-9	S-3 3'	67 S1-	63 S1-
880-10895-10	S-4 0.5'	62 S1-	57 S1-
880-10895-11	S-5 0.5'	85	80
880-10895-12	S-6 0.5'	55 S1-	50 S1-
880-10895-13	S-7 0.5'	64 S1-	60 S1-
880-10895-14	S-8 1'	70	62 S1-
880-10895-15	S-8 2'	71	68 S1-
880-10895-16	S-8 3'	63 S1-	61 S1-
880-10895-17	S-9 1'	81	80
880-10895-18	S-9 2'	75	70
880-10895-19	S-9 3'	88	87
880-10895-20	S-10 1'	68 S1-	63 S1-
880-10895-21	S-10 2'	77	75
880-10895-21 MS	S-10 2'	58 S1-	52 S1-
880-10895-21 MSD	S-10 2'	76	73
880-10895-22	S-10 3'	96	93
880-10895-23	S-11 0.5'	90	89
880-10895-24	S-12 0.5'	88	84
880-10895-25	S-113 0.5'	83	75
880-10895-26	S-14 0.5'	88	84

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO2	OTPH2								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCS 880-18557/2-A	Lab Control Sample	82	81								
LCS 880-18560/2-A	Lab Control Sample	84	89								
LCSD 880-18557/3-A	Lab Control Sample Dup	97	93								
LCSD 880-18560/3-A	Lab Control Sample Dup	98	94								
MB 880-18557/1-A	Method Blank	101	94								
MB 880-18560/1-A	Method Blank	106	108								

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18361/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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 880-18463/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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*

Lab Sample ID: LCS 880-18463/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-18463/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **Prep Batch: 18463**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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-A-11-A MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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-A-11-B MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18462 **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
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 880-18464/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18466 **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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: MB 880-18464/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18466 **Prep Batch: 18464**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
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: MB 880-18465/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18466 **Prep Batch: 18465**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 11:52	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 09:55	02/04/22 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 09:55	02/04/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 09:55	02/04/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/03/22 09:55*	*02/04/22 11:52*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/03/22 09:55*	*02/04/22 11:52*	*1*

Lab Sample ID: LCS 880-18465/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18466 **Prep Batch: 18465**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07568		mg/Kg		76	70 - 130		
Toluene			0.100	0.08382		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.09000		mg/Kg		90	70 - 130		
m,p-Xylenes			0.200	0.1742		mg/Kg		87	70 - 130		
o-Xylene			0.100	0.09145		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-18465/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18466 **Prep Batch: 18465**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07143		mg/Kg		71	70 - 130	6	35
Toluene			0.100	0.07342		mg/Kg		73	70 - 130	13	35
Ethylbenzene			0.100	0.09081		mg/Kg		91	70 - 130	1	35
m,p-Xylenes			0.200	0.1733		mg/Kg		87	70 - 130	1	35
o-Xylene			0.100	0.09053		mg/Kg		91	70 - 130	1	35

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-10895-1 MS — **Client Sample ID: S-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18466 — **Prep Batch: 18465**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.0990	0.02279	F1	mg/Kg		23	70 - 130
Toluene	<0.00199	U F2 F1	0.0990	0.005778	F1	mg/Kg		5	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.01229	F1	mg/Kg		12	70 - 130
m,p-Xylenes	<0.00398	U F2 F1	0.198	0.007516	F1	mg/Kg		4	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0990	0.05469	F1	mg/Kg		54	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

Lab Sample ID: 880-10895-1 MSD — **Client Sample ID: S-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18466 — **Prep Batch: 18465**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.03232	F1	mg/Kg		32	70 - 130	35	35
Toluene	<0.00199	U F2 F1	0.100	0.01263	F2 F1	mg/Kg		12	70 - 130	74	35
Ethylbenzene	<0.00199	U F2 F1	0.100	0.02374	F2 F1	mg/Kg		24	70 - 130	64	35
m,p-Xylenes	<0.00398	U F2 F1	0.200	0.03892	F2 F1	mg/Kg		19	70 - 130	135	35
o-Xylene	<0.00199	U F2 F1	0.100	0.01771	F2 F1	mg/Kg		17	70 - 130	102	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-18467/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18404 — **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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: MB 880-18468/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:10	02/04/22 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:10	02/04/22 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:10	02/04/22 16:33	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/03/22 10:10	02/04/22 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/03/22 10:10	02/04/22 16:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/03/22 10:10	02/04/22 16:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*02/03/22 10:10*	*02/04/22 16:33*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*02/03/22 10:10*	*02/04/22 16:33*	*1*

Lab Sample ID: LCS 880-18468/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07287		mg/Kg		73	70 - 130		
Toluene			0.100	0.08711		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.09301		mg/Kg		93	70 - 130		
m,p-Xylenes			0.200	0.1773		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.09346		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*175*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*

Lab Sample ID: LCSD 880-18468/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08483		mg/Kg		85	70 - 130	15	35
Toluene			0.100	0.09114		mg/Kg		91	70 - 130	5	35
Ethylbenzene			0.100	0.09751		mg/Kg		98	70 - 130	5	35
m,p-Xylenes			0.200	0.1866		mg/Kg		93	70 - 130	5	35
o-Xylene			0.100	0.1005		mg/Kg		101	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*183*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

Lab Sample ID: 880-10895-25 MS **Client Sample ID: S-113 0.5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00202	U F1 F2	0.100	0.03150	F1	mg/Kg		31	70 - 130		
Toluene	<0.00202	U F1 F2	0.100	0.03123	F1	mg/Kg		31	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-10895-25 MS **Client Sample ID: S-113 0.5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00202	U F1 F2	0.100	0.02837	F1	mg/Kg		28	70 - 130
m,p-Xylenes	<0.00403	U F1 F2	0.201	0.06495	F1	mg/Kg		32	70 - 130
o-Xylene	<0.00202	U F1 F2	0.100	0.03725	F1	mg/Kg		37	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*182*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-10895-25 MSD **Client Sample ID: S-113 0.5'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18404 **Prep Batch: 18468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0998	0.006047	F1 F2	mg/Kg		6	70 - 130	136	35
Toluene	<0.00202	U F1 F2	0.0998	0.009180	F1 F2	mg/Kg		9	70 - 130	109	35
Ethylbenzene	<0.00202	U F1 F2	0.0998	0.008343	F1 F2	mg/Kg		8	70 - 130	109	35
m,p-Xylenes	<0.00403	U F1 F2	0.200	0.01930	F1 F2	mg/Kg		10	70 - 130	108	35
o-Xylene	<0.00202	U F1 F2	0.0998	0.01208	F1 F2	mg/Kg		12	70 - 130	102	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*185*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: MB 880-18627/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/05/22 12:11	02/05/22 15:53	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		02/05/22 12:11	02/05/22 15:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/05/22 12:11	02/05/22 15:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/05/22 12:11	02/05/22 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*02/05/22 12:11*	*02/05/22 15:53*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/05/22 12:11*	*02/05/22 15:53*	*1*

Lab Sample ID: LCS 880-18627/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07478		mg/Kg		75	70 - 130
Toluene	0.100	0.07455		mg/Kg		75	70 - 130
Ethylbenzene	0.100	0.07781		mg/Kg		78	70 - 130
m,p-Xylenes	0.200	0.1596		mg/Kg		80	70 - 130

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: LCS 880-18627/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.07931		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-18627/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07497		mg/Kg		75	70 - 130	0	35
Toluene			0.100	0.08063		mg/Kg		81	70 - 130	8	35
Ethylbenzene			0.100	0.08674		mg/Kg		87	70 - 130	11	35
m,p-Xylenes			0.200	0.1773		mg/Kg		89	70 - 130	10	35
o-Xylene			0.100	0.08920		mg/Kg		89	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-1903-A-1-C MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.0998	0.06369	F1	mg/Kg		63	70 - 130		
Toluene	<0.00200	U F1	0.0998	0.06529	F1	mg/Kg		65	70 - 130		
Ethylbenzene	<0.00200	U F1	0.0998	0.06927	F1	mg/Kg		69	70 - 130		
m,p-Xylenes	<0.00399	U F1	0.200	0.1319	F1	mg/Kg		66	70 - 130		
o-Xylene	<0.00200	U	0.0998	0.07255		mg/Kg		72	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-1903-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.100	0.06662	F1	mg/Kg		66	70 - 130	4	35
Toluene	<0.00200	U F1	0.100	0.06699	F1	mg/Kg		66	70 - 130	3	35
Ethylbenzene	<0.00200	U F1	0.100	0.06954	F1	mg/Kg		69	70 - 130	0	35
m,p-Xylenes	<0.00399	U F1	0.200	0.1429		mg/Kg		71	70 - 130	8	35
o-Xylene	<0.00200	U	0.100	0.07154		mg/Kg		70	70 - 130	1	35

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: 890-1903-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18625 **Prep Batch: 18627**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-18661/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/07/22 08:26	02/07/22 12:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/07/22 08:26	02/07/22 12:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/07/22 08:26	02/07/22 12:21	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		02/07/22 08:26	02/07/22 12:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/07/22 08:26	02/07/22 12:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/07/22 08:26	02/07/22 12:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	02/07/22 08:26	02/07/22 12:21	1
1,4-Difluorobenzene (Surr)	76		70 - 130	02/07/22 08:26	02/07/22 12:21	1

Lab Sample ID: LCS 880-18661/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08169		mg/Kg		82	70 - 130		
Toluene			0.100	0.07723		mg/Kg		77	70 - 130		
Ethylbenzene			0.100	0.08888		mg/Kg		89	70 - 130		
m,p-Xylenes			0.200	0.1766		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.08857		mg/Kg		89	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	125		70 - 130

Lab Sample ID: LCSD 880-18661/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07441		mg/Kg		74	70 - 130	9	35
Toluene			0.100	0.07437		mg/Kg		74	70 - 130	4	35
Ethylbenzene			0.100	0.07892		mg/Kg		79	70 - 130	12	35
m,p-Xylenes			0.200	0.1651		mg/Kg		83	70 - 130	7	35
o-Xylene			0.100	0.08156		mg/Kg		82	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-18661/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: 880-10895-20 MS **Client Sample ID: S-10 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1 F2	0.100	0.03124	F1	mg/Kg		31	70 - 130
Toluene	<0.00200	U F1 F2	0.100	0.02937	F1	mg/Kg		29	70 - 130
Ethylbenzene	<0.00200	U F1 F2	0.100	0.03553	F1	mg/Kg		35	70 - 130
m,p-Xylenes	<0.00401	U F1 F2	0.200	0.07088	F1	mg/Kg		35	70 - 130
o-Xylene	<0.00200	U F1 F2	0.100	0.03604	F1	mg/Kg		36	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 880-10895-20 MSD **Client Sample ID: S-10 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18663 **Prep Batch: 18661**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.101	0.05374	F1 F2	mg/Kg		53	70 - 130	53	35
Toluene	<0.00200	U F1 F2	0.101	0.05413	F1 F2	mg/Kg		54	70 - 130	59	35
Ethylbenzene	<0.00200	U F1 F2	0.101	0.05409	F1 F2	mg/Kg		54	70 - 130	41	35
m,p-Xylenes	<0.00401	U F1 F2	0.202	0.1121	F1 F2	mg/Kg		55	70 - 130	45	35
o-Xylene	<0.00200	U F1 F2	0.101	0.06080	F1 F2	mg/Kg		60	70 - 130	51	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-18557/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

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 11:08	02/06/22 11:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/04/22 11:08	02/06/22 11:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/04/22 11:08	02/06/22 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	101		70 - 130	02/04/22 11:08	02/06/22 11:33	1
o-Terphenyl (Surr)	94		70 - 130	02/04/22 11:08	02/06/22 11:33	1

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: LCS 880-18557/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	914.1		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	837.5		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*82*		*70 - 130*
o-Terphenyl (Surr)	*81*		*70 - 130*

Lab Sample ID: LCSD 880-18557/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1008		mg/Kg		101	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	933.7		mg/Kg		93	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*97*		*70 - 130*
o-Terphenyl (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-10895-1 MS **Client Sample ID: S-1 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

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	1000	860.3		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F2	1000	1001		mg/Kg		100	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*86*		*70 - 130*
o-Terphenyl (Surr)	*70*		*70 - 130*

Lab Sample ID: 880-10895-1 MSD **Client Sample ID: S-1 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

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	998	737.6	F1	mg/Kg		69	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<50.0	U F2	998	803.3	F2	mg/Kg		80	70 - 130	22	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*65*	*S1-*	*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-10895-1 MSD **Client Sample ID: S-1 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **Prep Batch: 18557**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	62	S1-	70 - 130

Lab Sample ID: MB 880-18560/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **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
OIl 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 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **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 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18646 **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. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-10895-21 MS **Client Sample ID: S-10 2'**
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: 880-10895-21 MSD **Client Sample ID: S-10 2'**
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*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18596/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 18723

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/08/22 22:22	1

Lab Sample ID: LCS 880-18596/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 18723

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	259.7		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-18596/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 18723

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	257.1		mg/Kg		103	90 - 110	1	20

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-10895-7 MS — **Client Sample ID: S-3 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<4.96	U	248	266.2		mg/Kg		106	90 - 110

Lab Sample ID: 880-10895-7 MSD — **Client Sample ID: S-3 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<4.96	U	248	261.3		mg/Kg		104	90 - 110	2	20

Lab Sample ID: 880-10895-17 MS — **Client Sample ID: S-9 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	88.1	F1	250	415.3	F1	mg/Kg		131	90 - 110

Lab Sample ID: 880-10895-17 MSD — **Client Sample ID: S-9 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	88.1	F1	250	417.3	F1	mg/Kg		132	90 - 110	0	20

Lab Sample ID: MB 880-18573/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18737

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 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18737

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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18737

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

Lab Sample ID: 880-10894-A-13-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18737

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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10894-A-13-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 18737

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

Lab Sample ID: MB 880-18872/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19102

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/12/22 22:07	1

Lab Sample ID: LCS 880-18872/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19102

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	264.5		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-18872/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19102

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	262.5		mg/Kg		105	90 - 110	1	20

Lab Sample ID: 880-10895-17 MS — **Client Sample ID: S-9 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	144		248	409.4		mg/Kg		107	90 - 110		

Lab Sample ID: 880-10895-17 MSD — **Client Sample ID: S-9 1'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19102

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	144		248	408.7		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

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
880-10895-25	S-113 0.5'	Total/NA	Solid	8021B	18468
880-10895-26	S-14 0.5'	Total/NA	Solid	8021B	18468
MB 880-18467/5-A	Method Blank	Total/NA	Solid	8021B	18467
MB 880-18468/5-A	Method Blank	Total/NA	Solid	8021B	18468
LCS 880-18468/1-A	Lab Control Sample	Total/NA	Solid	8021B	18468
LCSD 880-18468/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18468
880-10895-25 MS	S-113 0.5'	Total/NA	Solid	8021B	18468
880-10895-25 MSD	S-113 0.5'	Total/NA	Solid	8021B	18468

Analysis Batch: 18462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-21	S-10 2'	Total/NA	Solid	8021B	18463
880-10895-22	S-10 3'	Total/NA	Solid	8021B	18463
880-10895-23	S-11 0.5'	Total/NA	Solid	8021B	18463
880-10895-24	S-12 0.5'	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-A-11-A MS	Matrix Spike	Total/NA	Solid	8021B	18463
880-10894-A-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18463

Prep Batch: 18463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-21	S-10 2'	Total/NA	Solid	5035	
880-10895-22	S-10 3'	Total/NA	Solid	5035	
880-10895-23	S-11 0.5'	Total/NA	Solid	5035	
880-10895-24	S-12 0.5'	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-A-11-A MS	Matrix Spike	Total/NA	Solid	5035	
880-10894-A-11-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 18464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18464/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 18465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	5035	
880-10895-2	S-1 2'	Total/NA	Solid	5035	
880-10895-3	S-1 3'	Total/NA	Solid	5035	
880-10895-4	S-2 1'	Total/NA	Solid	5035	
880-10895-5	S-2 2'	Total/NA	Solid	5035	
880-10895-6	S-2 3'	Total/NA	Solid	5035	
880-10895-7	S-3 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

GC VOA (Continued)

Prep Batch: 18465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-8	S-3 2'	Total/NA	Solid	5035	
880-10895-9	S-3 3'	Total/NA	Solid	5035	
880-10895-10	S-4 0.5'	Total/NA	Solid	5035	
880-10895-11	S-5 0.5'	Total/NA	Solid	5035	
880-10895-12	S-6 0.5'	Total/NA	Solid	5035	
880-10895-13	S-7 0.5'	Total/NA	Solid	5035	
880-10895-14	S-8 1'	Total/NA	Solid	5035	
880-10895-15	S-8 2'	Total/NA	Solid	5035	
880-10895-16	S-8 3'	Total/NA	Solid	5035	
880-10895-17	S-9 1'	Total/NA	Solid	5035	
880-10895-18	S-9 2'	Total/NA	Solid	5035	
880-10895-19	S-9 3'	Total/NA	Solid	5035	
880-10895-20	S-10 1'	Total/NA	Solid	5035	
MB 880-18465/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18465/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18465/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10895-1 MS	S-1 1'	Total/NA	Solid	5035	
880-10895-1 MSD	S-1 1'	Total/NA	Solid	5035	

Analysis Batch: 18466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	8021B	18465
880-10895-2	S-1 2'	Total/NA	Solid	8021B	18465
880-10895-3	S-1 3'	Total/NA	Solid	8021B	18465
880-10895-4	S-2 1'	Total/NA	Solid	8021B	18465
880-10895-5	S-2 2'	Total/NA	Solid	8021B	18465
880-10895-6	S-2 3'	Total/NA	Solid	8021B	18465
880-10895-7	S-3 1'	Total/NA	Solid	8021B	18465
880-10895-8	S-3 2'	Total/NA	Solid	8021B	18465
880-10895-9	S-3 3'	Total/NA	Solid	8021B	18465
880-10895-10	S-4 0.5'	Total/NA	Solid	8021B	18465
880-10895-11	S-5 0.5'	Total/NA	Solid	8021B	18465
880-10895-12	S-6 0.5'	Total/NA	Solid	8021B	18465
880-10895-13	S-7 0.5'	Total/NA	Solid	8021B	18465
880-10895-14	S-8 1'	Total/NA	Solid	8021B	18465
880-10895-15	S-8 2'	Total/NA	Solid	8021B	18465
880-10895-16	S-8 3'	Total/NA	Solid	8021B	18465
880-10895-17	S-9 1'	Total/NA	Solid	8021B	18465
880-10895-18	S-9 2'	Total/NA	Solid	8021B	18465
880-10895-19	S-9 3'	Total/NA	Solid	8021B	18465
MB 880-18464/5-A	Method Blank	Total/NA	Solid	8021B	18464
MB 880-18465/5-A	Method Blank	Total/NA	Solid	8021B	18465
LCS 880-18465/1-A	Lab Control Sample	Total/NA	Solid	8021B	18465
LCSD 880-18465/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18465
880-10895-1 MS	S-1 1'	Total/NA	Solid	8021B	18465
880-10895-1 MSD	S-1 1'	Total/NA	Solid	8021B	18465

Prep Batch: 18467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18467/5-A	Method Blank	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

GC VOA

Prep Batch: 18468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-25	S-113 0.5'	Total/NA	Solid	5035	
880-10895-26	S-14 0.5'	Total/NA	Solid	5035	
MB 880-18468/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18468/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18468/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10895-25 MS	S-113 0.5'	Total/NA	Solid	5035	
880-10895-25 MSD	S-113 0.5'	Total/NA	Solid	5035	

Analysis Batch: 18625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18627/5-A	Method Blank	Total/NA	Solid	8021B	18627
LCS 880-18627/1-A	Lab Control Sample	Total/NA	Solid	8021B	18627
LCSD 880-18627/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18627
890-1903-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	18627
890-1903-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18627

Prep Batch: 18627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18627/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18627/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18627/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1903-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-1903-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 18661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18661/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18661/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18661/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10895-20 MS	S-10 1'	Total/NA	Solid	5035	
880-10895-20 MSD	S-10 1'	Total/NA	Solid	5035	

Analysis Batch: 18663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-20	S-10 1'	Total/NA	Solid	8021B	18465
MB 880-18661/5-A	Method Blank	Total/NA	Solid	8021B	18661
LCS 880-18661/1-A	Lab Control Sample	Total/NA	Solid	8021B	18661
LCSD 880-18661/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18661
880-10895-20 MS	S-10 1'	Total/NA	Solid	8021B	18661
880-10895-20 MSD	S-10 1'	Total/NA	Solid	8021B	18661

Analysis Batch: 18760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	Total BTEX	
880-10895-2	S-1 2'	Total/NA	Solid	Total BTEX	
880-10895-3	S-1 3'	Total/NA	Solid	Total BTEX	
880-10895-4	S-2 1'	Total/NA	Solid	Total BTEX	
880-10895-5	S-2 2'	Total/NA	Solid	Total BTEX	
880-10895-6	S-2 3'	Total/NA	Solid	Total BTEX	
880-10895-7	S-3 1'	Total/NA	Solid	Total BTEX	
880-10895-8	S-3 2'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

GC VOA (Continued)

Analysis Batch: 18760 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-9	S-3 3'	Total/NA	Solid	Total BTEX	
880-10895-10	S-4 0.5'	Total/NA	Solid	Total BTEX	
880-10895-11	S-5 0.5'	Total/NA	Solid	Total BTEX	
880-10895-12	S-6 0.5'	Total/NA	Solid	Total BTEX	
880-10895-13	S-7 0.5'	Total/NA	Solid	Total BTEX	
880-10895-14	S-8 1'	Total/NA	Solid	Total BTEX	
880-10895-15	S-8 2'	Total/NA	Solid	Total BTEX	
880-10895-16	S-8 3'	Total/NA	Solid	Total BTEX	
880-10895-17	S-9 1'	Total/NA	Solid	Total BTEX	
880-10895-18	S-9 2'	Total/NA	Solid	Total BTEX	
880-10895-19	S-9 3'	Total/NA	Solid	Total BTEX	
880-10895-21	S-10 2'	Total/NA	Solid	Total BTEX	
880-10895-22	S-10 3'	Total/NA	Solid	Total BTEX	
880-10895-23	S-11 0.5'	Total/NA	Solid	Total BTEX	
880-10895-24	S-12 0.5'	Total/NA	Solid	Total BTEX	
880-10895-25	S-113 0.5'	Total/NA	Solid	Total BTEX	
880-10895-26	S-14 0.5'	Total/NA	Solid	Total BTEX	

Analysis Batch: 18770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-20	S-10 1'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	8015NM Prep	
880-10895-2	S-1 2'	Total/NA	Solid	8015NM Prep	
880-10895-3	S-1 3'	Total/NA	Solid	8015NM Prep	
880-10895-4	S-2 1'	Total/NA	Solid	8015NM Prep	
880-10895-5	S-2 2'	Total/NA	Solid	8015NM Prep	
880-10895-6	S-2 3'	Total/NA	Solid	8015NM Prep	
880-10895-7	S-3 1'	Total/NA	Solid	8015NM Prep	
880-10895-8	S-3 2'	Total/NA	Solid	8015NM Prep	
880-10895-9	S-3 3'	Total/NA	Solid	8015NM Prep	
880-10895-10	S-4 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-11	S-5 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-12	S-6 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-13	S-7 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-14	S-8 1'	Total/NA	Solid	8015NM Prep	
880-10895-15	S-8 2'	Total/NA	Solid	8015NM Prep	
880-10895-16	S-8 3'	Total/NA	Solid	8015NM Prep	
880-10895-17	S-9 1'	Total/NA	Solid	8015NM Prep	
880-10895-18	S-9 2'	Total/NA	Solid	8015NM Prep	
880-10895-19	S-9 3'	Total/NA	Solid	8015NM Prep	
880-10895-20	S-10 1'	Total/NA	Solid	8015NM Prep	
MB 880-18557/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18557/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18557/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10895-1 MS	S-1 1'	Total/NA	Solid	8015NM Prep	
880-10895-1 MSD	S-1 1'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

GC Semi VOA

Prep Batch: 18560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-21	S-10 2'	Total/NA	Solid	8015NM Prep	
880-10895-22	S-10 3'	Total/NA	Solid	8015NM Prep	
880-10895-23	S-11 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-24	S-12 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-25	S-113 0.5'	Total/NA	Solid	8015NM Prep	
880-10895-26	S-14 0.5'	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	
880-10895-21 MS	S-10 2'	Total/NA	Solid	8015NM Prep	
880-10895-21 MSD	S-10 2'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	8015B NM	18557
880-10895-2	S-1 2'	Total/NA	Solid	8015B NM	18557
880-10895-3	S-1 3'	Total/NA	Solid	8015B NM	18557
880-10895-4	S-2 1'	Total/NA	Solid	8015B NM	18557
880-10895-5	S-2 2'	Total/NA	Solid	8015B NM	18557
880-10895-6	S-2 3'	Total/NA	Solid	8015B NM	18557
880-10895-7	S-3 1'	Total/NA	Solid	8015B NM	18557
880-10895-8	S-3 2'	Total/NA	Solid	8015B NM	18557
880-10895-9	S-3 3'	Total/NA	Solid	8015B NM	18557
880-10895-10	S-4 0.5'	Total/NA	Solid	8015B NM	18557
880-10895-11	S-5 0.5'	Total/NA	Solid	8015B NM	18557
880-10895-12	S-6 0.5'	Total/NA	Solid	8015B NM	18557
880-10895-13	S-7 0.5'	Total/NA	Solid	8015B NM	18557
880-10895-14	S-8 1'	Total/NA	Solid	8015B NM	18557
880-10895-15	S-8 2'	Total/NA	Solid	8015B NM	18557
880-10895-16	S-8 3'	Total/NA	Solid	8015B NM	18557
880-10895-17	S-9 1'	Total/NA	Solid	8015B NM	18557
880-10895-18	S-9 2'	Total/NA	Solid	8015B NM	18557
880-10895-19	S-9 3'	Total/NA	Solid	8015B NM	18557
880-10895-20	S-10 1'	Total/NA	Solid	8015B NM	18557
880-10895-21	S-10 2'	Total/NA	Solid	8015B NM	18560
880-10895-22	S-10 3'	Total/NA	Solid	8015B NM	18560
880-10895-23	S-11 0.5'	Total/NA	Solid	8015B NM	18560
880-10895-24	S-12 0.5'	Total/NA	Solid	8015B NM	18560
880-10895-25	S-113 0.5'	Total/NA	Solid	8015B NM	18560
880-10895-26	S-14 0.5'	Total/NA	Solid	8015B NM	18560
MB 880-18557/1-A	Method Blank	Total/NA	Solid	8015B NM	18557
MB 880-18560/1-A	Method Blank	Total/NA	Solid	8015B NM	18560
LCS 880-18557/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18557
LCS 880-18560/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18560
LCSD 880-18557/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18557
LCSD 880-18560/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18560
880-10895-1 MS	S-1 1'	Total/NA	Solid	8015B NM	18557
880-10895-1 MSD	S-1 1'	Total/NA	Solid	8015B NM	18557
880-10895-21 MS	S-10 2'	Total/NA	Solid	8015B NM	18560
880-10895-21 MSD	S-10 2'	Total/NA	Solid	8015B NM	18560

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

GC Semi VOA

Analysis Batch: 18700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Total/NA	Solid	8015 NM	
880-10895-2	S-1 2'	Total/NA	Solid	8015 NM	
880-10895-3	S-1 3'	Total/NA	Solid	8015 NM	
880-10895-4	S-2 1'	Total/NA	Solid	8015 NM	
880-10895-5	S-2 2'	Total/NA	Solid	8015 NM	
880-10895-6	S-2 3'	Total/NA	Solid	8015 NM	
880-10895-7	S-3 1'	Total/NA	Solid	8015 NM	
880-10895-8	S-3 2'	Total/NA	Solid	8015 NM	
880-10895-9	S-3 3'	Total/NA	Solid	8015 NM	
880-10895-10	S-4 0.5'	Total/NA	Solid	8015 NM	
880-10895-11	S-5 0.5'	Total/NA	Solid	8015 NM	
880-10895-12	S-6 0.5'	Total/NA	Solid	8015 NM	
880-10895-13	S-7 0.5'	Total/NA	Solid	8015 NM	
880-10895-14	S-8 1'	Total/NA	Solid	8015 NM	
880-10895-15	S-8 2'	Total/NA	Solid	8015 NM	
880-10895-16	S-8 3'	Total/NA	Solid	8015 NM	
880-10895-17	S-9 1'	Total/NA	Solid	8015 NM	
880-10895-18	S-9 2'	Total/NA	Solid	8015 NM	
880-10895-19	S-9 3'	Total/NA	Solid	8015 NM	
880-10895-20	S-10 1'	Total/NA	Solid	8015 NM	
880-10895-21	S-10 2'	Total/NA	Solid	8015 NM	
880-10895-22	S-10 3'	Total/NA	Solid	8015 NM	
880-10895-23	S-11 0.5'	Total/NA	Solid	8015 NM	
880-10895-24	S-12 0.5'	Total/NA	Solid	8015 NM	
880-10895-25	S-113 0.5'	Total/NA	Solid	8015 NM	
880-10895-26	S-14 0.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Soluble	Solid	DI Leach	
880-10895-2	S-1 2'	Soluble	Solid	DI Leach	
880-10895-3	S-1 3'	Soluble	Solid	DI Leach	
880-10895-4	S-2 1'	Soluble	Solid	DI Leach	
880-10895-5	S-2 2'	Soluble	Solid	DI Leach	
880-10895-6	S-2 3'	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-A-13-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10894-A-13-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 18596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-7	S-3 1'	Soluble	Solid	DI Leach	
880-10895-8	S-3 2'	Soluble	Solid	DI Leach	
880-10895-9	S-3 3'	Soluble	Solid	DI Leach	
880-10895-10	S-4 0.5'	Soluble	Solid	DI Leach	
880-10895-11	S-5 0.5'	Soluble	Solid	DI Leach	
880-10895-12	S-6 0.5'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

HPLC/IC (Continued)

Leach Batch: 18596 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-13	S-7 0.5'	Soluble	Solid	DI Leach	
880-10895-14	S-8 1'	Soluble	Solid	DI Leach	
880-10895-15	S-8 2'	Soluble	Solid	DI Leach	
880-10895-16	S-8 3'	Soluble	Solid	DI Leach	
880-10895-17	S-9 1'	Soluble	Solid	DI Leach	
880-10895-18	S-9 2'	Soluble	Solid	DI Leach	
880-10895-19	S-9 3'	Soluble	Solid	DI Leach	
880-10895-20	S-10 1'	Soluble	Solid	DI Leach	
880-10895-21	S-10 2'	Soluble	Solid	DI Leach	
880-10895-22	S-10 3'	Soluble	Solid	DI Leach	
880-10895-23	S-11 0.5'	Soluble	Solid	DI Leach	
880-10895-24	S-12 0.5'	Soluble	Solid	DI Leach	
880-10895-25	S-113 0.5'	Soluble	Solid	DI Leach	
880-10895-26	S-14 0.5'	Soluble	Solid	DI Leach	
MB 880-18596/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18596/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18596/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10895-7 MS	S-3 1'	Soluble	Solid	DI Leach	
880-10895-7 MSD	S-3 1'	Soluble	Solid	DI Leach	
880-10895-17 MS	S-9 1'	Soluble	Solid	DI Leach	
880-10895-17 MSD	S-9 1'	Soluble	Solid	DI Leach	

Analysis Batch: 18723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-7	S-3 1'	Soluble	Solid	300.0	18596
880-10895-8	S-3 2'	Soluble	Solid	300.0	18596
880-10895-9	S-3 3'	Soluble	Solid	300.0	18596
880-10895-10	S-4 0.5'	Soluble	Solid	300.0	18596
880-10895-11	S-5 0.5'	Soluble	Solid	300.0	18596
880-10895-12	S-6 0.5'	Soluble	Solid	300.0	18596
880-10895-13	S-7 0.5'	Soluble	Solid	300.0	18596
880-10895-14	S-8 1'	Soluble	Solid	300.0	18596
880-10895-15	S-8 2'	Soluble	Solid	300.0	18596
880-10895-16	S-8 3'	Soluble	Solid	300.0	18596
880-10895-17	S-9 1'	Soluble	Solid	300.0	18596
880-10895-18	S-9 2'	Soluble	Solid	300.0	18596
880-10895-19	S-9 3'	Soluble	Solid	300.0	18596
880-10895-20	S-10 1'	Soluble	Solid	300.0	18596
880-10895-21	S-10 2'	Soluble	Solid	300.0	18596
880-10895-22	S-10 3'	Soluble	Solid	300.0	18596
880-10895-23	S-11 0.5'	Soluble	Solid	300.0	18596
880-10895-24	S-12 0.5'	Soluble	Solid	300.0	18596
880-10895-25	S-113 0.5'	Soluble	Solid	300.0	18596
880-10895-26	S-14 0.5'	Soluble	Solid	300.0	18596
MB 880-18596/1-A	Method Blank	Soluble	Solid	300.0	18596
LCS 880-18596/2-A	Lab Control Sample	Soluble	Solid	300.0	18596
LCSD 880-18596/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18596
880-10895-7 MS	S-3 1'	Soluble	Solid	300.0	18596
880-10895-7 MSD	S-3 1'	Soluble	Solid	300.0	18596
880-10895-17 MS	S-9 1'	Soluble	Solid	300.0	18596
880-10895-17 MSD	S-9 1'	Soluble	Solid	300.0	18596

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

HPLC/IC

Analysis Batch: 18737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10895-1	S-1 1'	Soluble	Solid	300.0	18573
880-10895-2	S-1 2'	Soluble	Solid	300.0	18573
880-10895-3	S-1 3'	Soluble	Solid	300.0	18573
880-10895-4	S-2 1'	Soluble	Solid	300.0	18573
880-10895-5	S-2 2'	Soluble	Solid	300.0	18573
880-10895-6	S-2 3'	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
880-10894-A-13-D MS	Matrix Spike	Soluble	Solid	300.0	18573
880-10894-A-13-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18573

Leach Batch: 18872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18872/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18872/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18872/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10895-17 MS	S-9 1'	Soluble	Solid	DI Leach	
880-10895-17 MSD	S-9 1'	Soluble	Solid	DI Leach	

Analysis Batch: 19102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18872/1-A	Method Blank	Soluble	Solid	300.0	18872
LCS 880-18872/2-A	Lab Control Sample	Soluble	Solid	300.0	18872
LCSD 880-18872/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18872
880-10895-17 MS	S-9 1'	Soluble	Solid	300.0	18872
880-10895-17 MSD	S-9 1'	Soluble	Solid	300.0	18872

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-1 1'
Lab Sample ID: 880-10895-1
Date Collected: 02/01/22 09:58 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 12:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 12:36	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		1			18737	02/12/22 04:52	SC	XEN MID

Client Sample ID: S-1 2'
Lab Sample ID: 880-10895-2
Date Collected: 02/01/22 10:00 **Matrix: Solid**
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			5.05 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 12:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 13:41	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		1			18737	02/12/22 05:02	SC	XEN MID

Client Sample ID: S-1 3'
Lab Sample ID: 880-10895-3
Date Collected: 02/01/22 10:05 **Matrix: Solid**
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			5.04 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 13:02	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 14:02	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 05:11	SC	XEN MID

Client Sample ID: S-2 1'
Lab Sample ID: 880-10895-4
Date Collected: 02/01/22 10:06 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 13:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-2 1' — Lab Sample ID: 880-10895-4

Date Collected: 02/01/22 10:06 **Matrix: Solid**
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			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 14:23	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		1			18737	02/12/22 05:21	SC	XEN MID

Client Sample ID: S-2 2' — Lab Sample ID: 880-10895-5

Date Collected: 02/01/22 10:08 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 13:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 14:45	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 05:30	SC	XEN MID

Client Sample ID: S-2 3' — Lab Sample ID: 880-10895-6

Date Collected: 02/01/22 10:12 **Matrix: Solid**
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			5.01 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 14:04	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 15:07	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 05:40	SC	XEN MID

Client Sample ID: S-3 1' — Lab Sample ID: 880-10895-7

Date Collected: 02/01/22 10:47 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 14:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 15:28	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-3 1'
Lab Sample ID: 880-10895-7
Date Collected: 02/01/22 10:47 **Matrix: Solid**
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			5.04 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 22:45	CH	XEN MID

Client Sample ID: S-3 2'
Lab Sample ID: 880-10895-8
Date Collected: 02/01/22 10:48 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 14:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 15:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 23:07	CH	XEN MID

Client Sample ID: S-3 3'
Lab Sample ID: 880-10895-9
Date Collected: 02/01/22 10:49 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 15:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 16:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 23:15	CH	XEN MID

Client Sample ID: S-4 0.5'
Lab Sample ID: 880-10895-10
Date Collected: 02/01/22 11:10 **Matrix: Solid**
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			5.01 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 15:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 16:33	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 23:22	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-5 0.5' Lab Sample ID: 880-10895-11

Date Collected: 02/01/22 11:11 **Matrix: Solid**
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			5.04 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 17:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 17:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 23:30	CH	XEN MID

Client Sample ID: S-6 0.5' Lab Sample ID: 880-10895-12

Date Collected: 02/01/22 11:12 **Matrix: Solid**
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 17:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 17:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/08/22 23:52	CH	XEN MID

Client Sample ID: S-7 0.5' Lab Sample ID: 880-10895-13

Date Collected: 02/01/22 11:13 **Matrix: Solid**
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			5.01 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 17:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 17:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:00	CH	XEN MID

Client Sample ID: S-8 1' Lab Sample ID: 880-10895-14

Date Collected: 02/01/22 12:30 **Matrix: Solid**
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			5.01 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 18:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

Client Sample ID: S-8 1'
Date Collected: 02/01/22 12:30
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10895-14
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			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 18:20	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:08	CH	XEN MID

Client Sample ID: S-8 2'
Date Collected: 02/01/22 12:31
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10895-15
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			4.97 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 18:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 18:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:15	CH	XEN MID

Client Sample ID: S-8 3'
Date Collected: 02/01/22 12:32
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10895-16
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 18:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:23	CH	XEN MID

Client Sample ID: S-9 1'
Date Collected: 02/01/22 12:33
Date Received: 02/02/22 11:10

Lab Sample ID: 880-10895-17
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			5.03 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 19:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 19:24	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

Client Sample ID: S-9 1'

Lab Sample ID: 880-10895-17
Matrix: Solid
Date Collected: 02/01/22 12:33
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	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:30	CH	XEN MID

Client Sample ID: S-9 2'

Lab Sample ID: 880-10895-18
Matrix: Solid
Date Collected: 02/01/22 12:34
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	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 19:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 00:53	CH	XEN MID

Client Sample ID: S-9 3'

Lab Sample ID: 880-10895-19
Matrix: Solid
Date Collected: 02/01/22 12:35
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			4.99 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18466	02/04/22 19:59	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 20:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:01	CH	XEN MID

Client Sample ID: S-10 1'

Lab Sample ID: 880-10895-20
Matrix: Solid
Date Collected: 02/01/22 12:36
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			4.99 g	5 mL	18465	02/03/22 09:55	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18663	02/07/22 13:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/08/22 14:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18557	02/04/22 11:08	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 20:29	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:24	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-10 2' Lab Sample ID: 880-10895-21

Date Collected: 02/01/22 12:37 **Matrix: Solid**
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			5.01 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 11:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	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	02/06/22 22:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:31	CH	XEN MID

Client Sample ID: S-10 3' Lab Sample ID: 880-10895-22

Date Collected: 02/01/22 12:38 **Matrix: Solid**
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 11:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18560	02/04/22 11:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/06/22 23:19	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:39	CH	XEN MID

Client Sample ID: S-11 0.5' Lab Sample ID: 880-10895-23

Date Collected: 02/01/22 12:39 **Matrix: Solid**
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	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 12:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	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	02/06/22 23:39	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:46	CH	XEN MID

Client Sample ID: S-12 0.5' Lab Sample ID: 880-10895-24

Date Collected: 02/01/22 12:40 **Matrix: Solid**
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	18463	02/03/22 09:47	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18462	02/04/22 12:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

Client Sample ID: S-12 0.5' Lab Sample ID: 880-10895-24

Date Collected: 02/01/22 12:40 **Matrix: Solid**
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			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18560	02/04/22 11:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/07/22 00:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 01:54	CH	XEN MID

Client Sample ID: S-113 0.5' Lab Sample ID: 880-10895-25

Date Collected: 02/01/22 12:41 **Matrix: Solid**
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	18468	02/03/22 10:10	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 17:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18560	02/04/22 11:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/07/22 00:20	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 02:01	CH	XEN MID

Client Sample ID: S-14 0.5' Lab Sample ID: 880-10895-26

Date Collected: 02/01/22 12:42 **Matrix: Solid**
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	18468	02/03/22 10:10	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18404	02/04/22 17:27	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18760	02/07/22 15:11	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18700	02/07/22 11:51	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18560	02/04/22 11:12	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18646	02/07/22 00:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18596	02/04/22 13:40	SC	XEN MID
Soluble	Analysis	300.0		1			18723	02/09/22 02:09	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: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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: 880-10895-1
Project/Site: SD 24 CTB - Hydrovac Piles SDG: 21-0100-23

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 24 CTB - Hydrovac Piles

Job ID: 880-10895-1
SDG: 21-0100-23

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-10895-1	S-1 1'	Solid	02/01/22 09:58	02/02/22 11:10
880-10895-2	S-1 2'	Solid	02/01/22 10:00	02/02/22 11:10
880-10895-3	S-1 3'	Solid	02/01/22 10:05	02/02/22 11:10
880-10895-4	S-2 1'	Solid	02/01/22 10:06	02/02/22 11:10
880-10895-5	S-2 2'	Solid	02/01/22 10:08	02/02/22 11:10
880-10895-6	S-2 3'	Solid	02/01/22 10:12	02/02/22 11:10
880-10895-7	S-3 1'	Solid	02/01/22 10:47	02/02/22 11:10
880-10895-8	S-3 2'	Solid	02/01/22 10:48	02/02/22 11:10
880-10895-9	S-3 3'	Solid	02/01/22 10:49	02/02/22 11:10
880-10895-10	S-4 0.5'	Solid	02/01/22 11:10	02/02/22 11:10
880-10895-11	S-5 0.5'	Solid	02/01/22 11:11	02/02/22 11:10
880-10895-12	S-6 0.5'	Solid	02/01/22 11:12	02/02/22 11:10
880-10895-13	S-7 0.5'	Solid	02/01/22 11:13	02/02/22 11:10
880-10895-14	S-8 1'	Solid	02/01/22 12:30	02/02/22 11:10
880-10895-15	S-8 2'	Solid	02/01/22 12:31	02/02/22 11:10
880-10895-16	S-8 3'	Solid	02/01/22 12:32	02/02/22 11:10
880-10895-17	S-9 1'	Solid	02/01/22 12:33	02/02/22 11:10
880-10895-18	S-9 2'	Solid	02/01/22 12:34	02/02/22 11:10
880-10895-19	S-9 3'	Solid	02/01/22 12:35	02/02/22 11:10
880-10895-20	S-10 1'	Solid	02/01/22 12:36	02/02/22 11:10
880-10895-21	S-10 2'	Solid	02/01/22 12:37	02/02/22 11:10
880-10895-22	S-10 3'	Solid	02/01/22 12:38	02/02/22 11:10
880-10895-23	S-11 0.5'	Solid	02/01/22 12:39	02/02/22 11:10
880-10895-24	S-12 0.5'	Solid	02/01/22 12:40	02/02/22 11:10
880-10895-25	S-113 0.5'	Solid	02/01/22 12:41	02/02/22 11:10
880-10895-26	S-14 0.5'	Solid	02/01/22 12:42	02/02/22 11:10

No. 2449

10895

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 24 CTB - Hydrovac Piles

LAI PROJECT #: 21-D100-23 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 | 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	MTBE	TRPH 418.1	GASOLINE MOD 8015	DIESEL - MOD 8015	OIL - MOD 8015	VOC 8260	SVOC 8270	8081 PESTICIDES	8082 PCBS	TCLP - METALS (RCRA)	TCLP - PEST	TOTAL METALS (RCRA)	LEAD - TOTAL	RCI	TDS	pH	EXPLOSIVES	CHLORIDE	FIELD NOTES
S-1 1'		2/1/22	0958	S	1				X		X		X	X	X														X	
S-1 2'			1000																											
S-1 3'			1005																											
S-2 1'			1006																											
S-2 2'			1008																											
S-2 3'			1012																											
S-3 1'			1047																											
S-3 2'			1048																											
S-3 3'			1049																											
S-4 0.5'			1110																											
S-5 0.5'			1111																											
S-6 0.5'			1112																											
S-7 0.5'			1113																											
S-8 1'			1230																											
S-8 2'			1231																											
TOTAL 15																														

880-10895 Chain of Custody

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

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: -8.8/-8.9 THERM#: 128
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

No. 2450

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 2/2/2022 PAGE 2 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: SD 24 CTB - Hydrovac Piles

LAI PROJECT #: 21-0100-23 COLLECTOR: DSG/RN

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	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	TOTAL METALS (RCRA)	Semi-VOC	OTHER LIST	LEAD - TOTAL	D.W. 200.8	TCLP	RCI	TOX	TDS	TSS	FLASHPOINT	pH	% MOISTURE	CYANIDE	HEXAVALENT CHROMIUM	EXPLOSIVES	PECHLORATE	CHLORIDE	ANIONS	ALKALINITY	FIELD NOTES
S-8 3'		2/1/22	1232	S	1				X		X		X	X	X																																		
S-9 1'			1233																																														
S-9 2'			1234																																													
S-9 3'			1235																																													
S-10 1'			1236																																													
S-10 2'			1237																																													
S-10 3'			1238																																													
S-11 0.5'			1239																																													
S-12 0.5'			1240																																													
S-13 0.5'			1241																																													
S-14 0.5'			1242																																													

TOTAL 11

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	2/2/2022	[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: 880-10895-1
SDG Number: 21-0100-23

Login Number: 10895
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: 880-11895-1
Laboratory Sample Delivery Group: 21-0100-23
Client Project/Site: Salado Draw 24 CTB hydron Vac Piles

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
3/10/2022 11:01:56 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: Salado Draw 24 CTB hydron Vac Piles

Laboratory Job ID: 880-11895-1
SDG: 21-0100-23

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low 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.
F2	MS/MSD RPD 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. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Job ID: 880-11895-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-11895-1

Receipt
The samples were received on 3/1/2022 3:54 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 1.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-20605 and analytical batch 880-20710 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
No 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. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Client Sample ID: C-12

Lab Sample ID: 880-11895-1
Date Collected: 02/21/22 15:15
Matrix: Solid
Date Received: 03/01/22 15:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 06:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 06:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 06:31	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		03/02/22 16:00	03/03/22 06:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/03/22 06:31	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/02/22 16:00	03/03/22 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*03/02/22 16:00*	*03/03/22 06:31*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*03/02/22 16:00*	*03/03/22 06:31*	*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			03/03/22 08:50	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			03/03/22 10:15	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 F1 F2	50.0		mg/Kg		03/02/22 15:27	03/03/22 04:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0		mg/Kg		03/02/22 15:27	03/03/22 04:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*103*		*70 - 130*	*03/02/22 15:27*	*03/03/22 04:58*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*03/02/22 15:27*	*03/03/22 04:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.8**		5.04		mg/Kg			03/07/22 19:54	1

Client Sample ID: C-7

Lab Sample ID: 880-11895-2
Date Collected: 02/21/22 15:00
Matrix: Solid
Date Received: 03/01/22 15:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:45	03/04/22 12:33	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:45	03/04/22 12:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:45	03/04/22 12:33	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		03/04/22 07:45	03/04/22 12:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/04/22 07:45	03/04/22 12:33	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/04/22 07:45	03/04/22 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/04/22 07:45*	*03/04/22 12:33*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/04/22 07:45*	*03/04/22 12:33*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Client Sample ID: C-7 **Lab Sample ID: 880-11895-2**
Date Collected: 02/21/22 15:00 **Matrix: Solid**
Date Received: 03/01/22 15:54

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			03/03/22 08:50	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			03/03/22 10:15	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		03/02/22 15:27	03/03/22 05:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 05:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*119*		*70 - 130*	*03/02/22 15:27*	*03/03/22 05:59*	*1*
o-Terphenyl (Surr)	*120*		*70 - 130*	*03/02/22 15:27*	*03/03/22 05:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	147		4.95		mg/Kg			03/07/22 20:12	1

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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)
880-11741-A-1-H MS	Matrix Spike	105	102
880-11741-A-1-I MSD	Matrix Spike Duplicate	104	102
880-11895-1	C-12	66 S1-	78
880-11895-2	C-7	102	98
880-11907-A-1-B MS	Matrix Spike	98	106
880-11907-A-1-C MSD	Matrix Spike Duplicate	94	98
CB MB	Method Blank	51 S1-	99
LCS 880-20605/1-A	Lab Control Sample	101	124
LCS 880-20668/1-A	Lab Control Sample	97	101
LCSD 880-20605/2-A	Lab Control Sample Dup	97	102
LCSD 880-20668/2-A	Lab Control Sample Dup	99	102
MB 880-20605/5-A	Method Blank	49 S1-	101
MB 880-20668/5-A	Method Blank	104	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-11895-1	C-12	103	98
880-11895-1 MS	C-12	108	101
880-11895-1 MSD	C-12	114	107
880-11895-2	C-7	119	120
LCS 880-20708/2-A	Lab Control Sample	114	105
LCSD 880-20708/3-A	Lab Control Sample Dup	123	114
MB 880-20708/1-A	Method Blank	120	127

Surrogate Legend

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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20605/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/02/22 20:20	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/02/22 16:00	03/02/22 20:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 16:00	03/02/22 20:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 16:00	03/02/22 20:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*49*	*S1-*	*70 - 130*	*03/02/22 16:00*	*03/02/22 20:20*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/02/22 16:00*	*03/02/22 20:20*	*1*

Lab Sample ID: LCS 880-20605/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1224		mg/Kg		122	70 - 130		
Toluene			0.100	0.1044		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1072		mg/Kg		107	70 - 130		
m,p-Xylenes			0.200	0.2201		mg/Kg		110	70 - 130		
o-Xylene			0.100	0.1072		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

Lab Sample ID: LCSD 880-20605/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1058		mg/Kg		106	70 - 130	15	35
Toluene			0.100	0.09560		mg/Kg		96	70 - 130	9	35
Ethylbenzene			0.100	0.1004		mg/Kg		100	70 - 130	6	35
m,p-Xylenes			0.200	0.2080		mg/Kg		104	70 - 130	6	35
o-Xylene			0.100	0.09996		mg/Kg		100	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-11907-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.101	0.07733		mg/Kg		77	70 - 130		
Toluene	<0.00200	U F1	0.101	0.06553	F1	mg/Kg		65	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-11907-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene	<0.00200	U F1	0.101	0.06954	F1	mg/Kg		69	70 - 130		
m,p-Xylenes	<0.00401	U	0.201	0.1418		mg/Kg		70	70 - 130		
o-Xylene	<0.00200	U	0.101	0.07034		mg/Kg		70	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-11907-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710 **Prep Batch: 20605**

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	0.07748		mg/Kg		77	70 - 130	0	35
Toluene	<0.00200	U F1	0.100	0.06554	F1	mg/Kg		65	70 - 130	0	35
Ethylbenzene	<0.00200	U F1	0.100	0.07098		mg/Kg		71	70 - 130	2	35
m,p-Xylenes	<0.00401	U	0.201	0.1454		mg/Kg		72	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.07552		mg/Kg		75	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-20668/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/04/22 07:45	03/04/22 11:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/04/22 07:45	03/04/22 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/04/22 07:45*	*03/04/22 11:31*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/04/22 07:45*	*03/04/22 11:31*	*1*

Lab Sample ID: LCS 880-20668/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1062		mg/Kg		106	70 - 130		
Toluene			0.100	0.1031		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.09905		mg/Kg		99	70 - 130		
m,p-Xylenes			0.200	0.2035		mg/Kg		102	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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

Lab Sample ID: LCS 880-20668/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
o-Xylene			0.100	0.09826		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-20668/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1116		mg/Kg		112	70 - 130	5	35
Toluene			0.100	0.1082		mg/Kg		108	70 - 130	5	35
Ethylbenzene			0.100	0.1035		mg/Kg		104	70 - 130	4	35
m,p-Xylenes			0.200	0.2121		mg/Kg		106	70 - 130	4	35
o-Xylene			0.100	0.1025		mg/Kg		102	70 - 130	4	35

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

Lab Sample ID: 880-11741-A-1-H MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0988	0.09517		mg/Kg		96	70 - 130		
Toluene	<0.00199	U	0.0988	0.09286		mg/Kg		94	70 - 130		
Ethylbenzene	<0.00199	U	0.0988	0.08880		mg/Kg		90	70 - 130		
m,p-Xylenes	<0.00398	U	0.198	0.1824		mg/Kg		92	70 - 130		
o-Xylene	<0.00199	U	0.0988	0.08865		mg/Kg		90	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-11741-A-1-I MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09169		mg/Kg		92	70 - 130	4	35
Toluene	<0.00199	U	0.100	0.08797		mg/Kg		87	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.100	0.08420		mg/Kg		84	70 - 130	5	35
m,p-Xylenes	<0.00398	U	0.200	0.1735		mg/Kg		87	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.08423		mg/Kg		84	70 - 130	5	35

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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

Lab Sample ID: 880-11741-A-1-I MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20854 **Prep Batch: 20668**

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: CB MB **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20710

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Toluene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg			03/02/22 17:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			03/02/22 17:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			03/02/22 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	51	S1-	70 - 130		03/02/22 17:14	1
1,4-Difluorobenzene (Surr)	99		70 - 130		03/02/22 17:14	1

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

Lab Sample ID: MB 880-20708/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20650 **Prep Batch: 20708**

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		03/02/22 15:27	03/03/22 03:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 03:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/02/22 15:27	03/03/22 03:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	120		70 - 130	03/02/22 15:27	03/03/22 03:56	1
o-Terphenyl (Surr)	127		70 - 130	03/02/22 15:27	03/03/22 03:56	1

Lab Sample ID: LCS 880-20708/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20650 **Prep Batch: 20708**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	911.8		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.5		mg/Kg		95	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	114		70 - 130
o-Terphenyl (Surr)	105		70 - 130

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-20708/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20650 **Prep Batch: 20708**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1167	*1	mg/Kg		117	70 - 130	25	20
Diesel Range Organics (Over C10-C28)			1000	1002		mg/Kg		100	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*123*		*70 - 130*
o-Terphenyl (Surr)	*114*		*70 - 130*

Lab Sample ID: 880-11895-1 MS **Client Sample ID: C-12**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20650 **Prep Batch: 20708**

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 F1 F2	1000	<50.0	U F1	mg/Kg		-0.4	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	<50.0	U F1	mg/Kg		0	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*108*		*70 - 130*
o-Terphenyl (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-11895-1 MSD **Client Sample ID: C-12**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 20650 **Prep Batch: 20708**

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 F1 F2	998	<49.9	U F1 F2	mg/Kg		0.2	70 - 130	31	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	<49.9	U F1	mg/Kg		0	70 - 130	NC	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*114*		*70 - 130*
o-Terphenyl (Surr)	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20806/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20936

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/07/22 19:36	1

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-20806/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20936

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			200	201.4		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-20806/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20936

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			200	203.3		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-11895-1 MS **Client Sample ID: C-12**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	12.8		252	254.5		mg/Kg		96	90 - 110		

Lab Sample ID: 880-11895-1 MSD **Client Sample ID: C-12**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 20936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12.8		252	257.9		mg/Kg		97	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

GC VOA

Prep Batch: 20605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	5035	
MB 880-20605/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20605/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20605/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11907-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-11907-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 20668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-2	C-7	Total/NA	Solid	5035	
MB 880-20668/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11741-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
880-11741-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	8021B	20605
CB MB	Method Blank	Total/NA	Solid	8021B	
MB 880-20605/5-A	Method Blank	Total/NA	Solid	8021B	20605
LCS 880-20605/1-A	Lab Control Sample	Total/NA	Solid	8021B	20605
LCSD 880-20605/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20605
880-11907-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	20605
880-11907-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20605

Analysis Batch: 20772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	Total BTEX	
880-11895-2	C-7	Total/NA	Solid	Total BTEX	

Analysis Batch: 20854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-2	C-7	Total/NA	Solid	8021B	20668
MB 880-20668/5-A	Method Blank	Total/NA	Solid	8021B	20668
LCS 880-20668/1-A	Lab Control Sample	Total/NA	Solid	8021B	20668
LCSD 880-20668/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20668
880-11741-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	20668
880-11741-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20668

GC Semi VOA

Analysis Batch: 20650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	8015B NM	20708
880-11895-2	C-7	Total/NA	Solid	8015B NM	20708
MB 880-20708/1-A	Method Blank	Total/NA	Solid	8015B NM	20708
LCS 880-20708/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20708
LCSD 880-20708/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20708
880-11895-1 MS	C-12	Total/NA	Solid	8015B NM	20708
880-11895-1 MSD	C-12	Total/NA	Solid	8015B NM	20708

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

GC Semi VOA

Prep Batch: 20708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	8015NM Prep	
880-11895-2	C-7	Total/NA	Solid	8015NM Prep	
MB 880-20708/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20708/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20708/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11895-1 MS	C-12	Total/NA	Solid	8015NM Prep	
880-11895-1 MSD	C-12	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Total/NA	Solid	8015 NM	
880-11895-2	C-7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Soluble	Solid	DI Leach	
880-11895-2	C-7	Soluble	Solid	DI Leach	
MB 880-20806/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20806/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20806/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11895-1 MS	C-12	Soluble	Solid	DI Leach	
880-11895-1 MSD	C-12	Soluble	Solid	DI Leach	

Analysis Batch: 20936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11895-1	C-12	Soluble	Solid	300.0	20806
880-11895-2	C-7	Soluble	Solid	300.0	20806
MB 880-20806/1-A	Method Blank	Soluble	Solid	300.0	20806
LCS 880-20806/2-A	Lab Control Sample	Soluble	Solid	300.0	20806
LCSD 880-20806/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20806
880-11895-1 MS	C-12	Soluble	Solid	300.0	20806
880-11895-1 MSD	C-12	Soluble	Solid	300.0	20806

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

Client Sample ID: C-12 Lab Sample ID: 880-11895-1

Date Collected: 02/21/22 15:15 **Matrix: Solid**
Date Received: 03/01/22 15:54

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	20605	03/02/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20710	03/03/22 06:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20772	03/03/22 08:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20793	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 04:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	20806	03/03/22 12:05	CH	XEN MID
Soluble	Analysis	300.0		1			20936	03/07/22 19:54	CH	XEN MID

Client Sample ID: C-7 Lab Sample ID: 880-11895-2

Date Collected: 02/21/22 15:00 **Matrix: Solid**
Date Received: 03/01/22 15:54

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	20668	03/04/22 07:45	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20854	03/04/22 12:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			20772	03/03/22 08:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20793	03/03/22 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	20708	03/02/22 15:27	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20650	03/03/22 05:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	20806	03/03/22 12:05	CH	XEN MID
Soluble	Analysis	300.0		1			20936	03/07/22 20:12	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: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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: 880-11895-1
Project/Site: Salado Draw 24 CTB hydron Vac Piles SDG: 21-0100-23

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: Salado Draw 24 CTB hydron Vac Piles

Job ID: 880-11895-1
SDG: 21-0100-23

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-11895-1	C-12	Solid	02/21/22 15:15	03/01/22 15:54
880-11895-2	C-7	Solid	02/21/22 15:00	03/01/22 15:54

No. 2405

11895 CHAIN-OF-CUSTODY

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

Data Reported to

DATE 3-1-2022 PAGE 1 OF 1

PO# LAB WORK ORDER#

PROJECT LOCATION OR NAME Salado Draw 24 CTB hydroVac Piles

LAI PROJECT # 21-0100-23 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 ☐ TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☑ DIESEL MOD 8015 ☑ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 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 ☐ CYANIDE ☐ TDS ☐ TSS ☐ % MOISTURE ☐ HEXAVALENT CHROMIUM ☐ pH ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☑ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
C-12		2/21/22	1515	S	1				X		X	
C-7		2/21/22	1500	S	1				X		X	

880-11895 Chain of Custody

TOTAL 2

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	3-1-22 15:54	
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 1.1/1.0 THERM# IR2
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-11895-1
SDG Number: 21-0100-23

Login Number: 11895
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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 880-12606-1
Laboratory Sample Delivery Group: 21-0100-23
Client Project/Site: Hydrovac piles

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
3/28/2022 10:42:21 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: Hydrovac piles

Laboratory Job ID: 880-12606-1
SDG: 21-0100-23

Table of Contents

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Hydrovac piles

Job ID: 880-12606-1
SDG: 21-0100-23

Job ID: 880-12606-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-12606-1

Receipt
The sample was received on 3/18/2022 3:20 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 18.7°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22004 and analytical batch 880-22110 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: Surrogate recovery for the following sample was outside control limits: (LCSD 880-22118/3-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.

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: Hydrovac piles

Job ID: 880-12606-1
SDG: 21-0100-23

Client Sample ID: BF-1

Date Collected: 03/18/22 11:25
Date Received: 03/18/22 15:20

Lab Sample ID: 880-12606-1

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		03/21/22 10:00	03/23/22 03:33	1
Toluene	**0.00335**		0.00200		mg/Kg		03/21/22 10:00	03/23/22 03:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 03:33	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/21/22 10:00	03/23/22 03:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 03:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/21/22 10:00	03/23/22 03:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/21/22 10:00*	*03/23/22 03:33*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/21/22 10:00*	*03/23/22 03:33*	*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			03/23/22 14:31	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			03/23/22 12:25	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		03/22/22 14:00	03/22/22 17:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/22/22 14:00	03/22/22 17:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/22/22 14:00	03/22/22 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*89*		*70 - 130*	*03/22/22 14:00*	*03/22/22 17:32*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*03/22/22 14:00*	*03/22/22 17:32*	*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			03/25/22 21:39	1

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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)
880-12440-A-1-G MS	Matrix Spike	106	102
880-12440-A-1-H MSD	Matrix Spike Duplicate	87	103
880-12606-1	BF-1	104	102
LCS 880-22004/1-A	Lab Control Sample	96	100
LCSD 880-22004/2-A	Lab Control Sample Dup	96	100
MB 880-21824/5-A	Method Blank	97	100
MB 880-22004/5-A	Method Blank	98	101

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)
880-12606-1	BF-1	89	86
880-12698-A-1-D MS	Matrix Spike	99	90
880-12698-A-1-E MSD	Matrix Spike Duplicate	99	90
LCS 880-22118/2-A	Lab Control Sample	108	113
LCSD 880-22118/3-A	Lab Control Sample Dup	125	133 S1+
MB 880-22118/1-A	Method Blank	93	98

Surrogate Legend

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

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21824/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 21824**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/22 08:30	03/22/22 11:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/22 08:30	03/22/22 11:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/22/22 08:30	03/22/22 11:48	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/22/22 08:30	03/22/22 11:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/22/22 08:30	03/22/22 11:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/22/22 08:30	03/22/22 11:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/22/22 08:30*	*03/22/22 11:48*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*03/22/22 08:30*	*03/22/22 11:48*	*1*

Lab Sample ID: MB 880-22004/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 01:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 01:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 01:02	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		03/21/22 10:00	03/23/22 01:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/21/22 10:00	03/23/22 01:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/21/22 10:00	03/23/22 01:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/21/22 10:00*	*03/23/22 01:02*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/21/22 10:00*	*03/23/22 01:02*	*1*

Lab Sample ID: LCS 880-22004/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08758		mg/Kg		88	70 - 130		
Toluene			0.100	0.08691		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08634		mg/Kg		86	70 - 130		
m,p-Xylenes			0.200	0.2017		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.1019		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-22004/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09033		mg/Kg		90	70 - 130	3	35

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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

Lab Sample ID: LCSD 880-22004/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.08751		mg/Kg		88	70 - 130	1	35
Ethylbenzene			0.100	0.08792		mg/Kg		88	70 - 130	2	35
m,p-Xylenes			0.200	0.2047		mg/Kg		102	70 - 130	1	35
o-Xylene			0.100	0.1016		mg/Kg		102	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-12440-A-1-G MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F2 F1	0.101	0.03063	F1	mg/Kg		30	70 - 130
Toluene	<0.00200	U F2 F1	0.101	0.02283	F1	mg/Kg		23	70 - 130
Ethylbenzene	<0.00200	U F1	0.101	0.01899	F1	mg/Kg		19	70 - 130
m,p-Xylenes	<0.00399	U F1	0.202	0.04635	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00200	U F1	0.101	0.02589	F1	mg/Kg		26	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-12440-A-1-H MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22110 **Prep Batch: 22004**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0996	0.01738	F2 F1	mg/Kg		17	70 - 130	55	35
Toluene	<0.00200	U F2 F1	0.0996	0.01586	F2 F1	mg/Kg		16	70 - 130	36	35
Ethylbenzene	<0.00200	U F1	0.0996	0.01597	F1	mg/Kg		16	70 - 130	17	35
m,p-Xylenes	<0.00399	U F1	0.199	0.03356	F1	mg/Kg		17	70 - 130	32	35
o-Xylene	<0.00200	U F1	0.0996	0.01979	F1	mg/Kg		20	70 - 130	27	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-22118/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

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		03/22/22 08:37	03/22/22 10:58	1

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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

Lab Sample ID: MB 880-22118/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/22/22 08:37	03/22/22 10:58	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/22/22 08:37	03/22/22 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*03/22/22 08:37*	*03/22/22 10:58*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*03/22/22 08:37*	*03/22/22 10:58*	*1*

Lab Sample ID: LCS 880-22118/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	985.6		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1101		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*108*		*70 - 130*
o-Terphenyl (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-22118/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1058		mg/Kg		106	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1284		mg/Kg		128	70 - 130	15	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*125*		*70 - 130*
o-Terphenyl (Surr)	*133*	*S1+*	*70 - 130*

Lab Sample ID: 880-12698-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

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	1149		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	1090		mg/Kg		108	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*99*		*70 - 130*
o-Terphenyl (Surr)	*90*		*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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

Lab Sample ID: 880-12698-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 22112 **Prep Batch: 22118**

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	999	1181		mg/Kg		118	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1098		mg/Kg		108	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*99*		*70 - 130*
o-Terphenyl (Surr)	*90*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22263/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 22386

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/25/22 19:53	1

Lab Sample ID: LCS 880-22263/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 22386

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	249.9		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-22263/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 22386

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	248.2		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-12550-A-8-K MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 22386

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	5.71		249	250.1		mg/Kg		98	90 - 110		

Lab Sample ID: 880-12550-A-8-L MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 22386

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.71		249	255.7		mg/Kg		100	90 - 110	2	20

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

GC VOA

Prep Batch: 21824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-21824/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 22004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	5035	
MB 880-22004/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22004/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22004/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12440-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-12440-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	8021B	22004
MB 880-21824/5-A	Method Blank	Total/NA	Solid	8021B	21824
MB 880-22004/5-A	Method Blank	Total/NA	Solid	8021B	22004
LCS 880-22004/1-A	Lab Control Sample	Total/NA	Solid	8021B	22004
LCSD 880-22004/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22004
880-12440-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	22004
880-12440-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22004

Analysis Batch: 22216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	8015B NM	22118
MB 880-22118/1-A	Method Blank	Total/NA	Solid	8015B NM	22118
LCS 880-22118/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22118
LCSD 880-22118/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22118
880-12698-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	22118
880-12698-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22118

Prep Batch: 22118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	8015NM Prep	
MB 880-22118/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22118/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22118/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-12698-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-12698-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 22199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Larson & Associates, Inc. Job ID: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

HPLC/IC

Leach Batch: 22263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Soluble	Solid	DI Leach	
MB 880-22263/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22263/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22263/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12550-A-8-K MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12550-A-8-L MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 22386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-12606-1	BF-1	Soluble	Solid	300.0	22263
MB 880-22263/1-A	Method Blank	Soluble	Solid	300.0	22263
LCS 880-22263/2-A	Lab Control Sample	Soluble	Solid	300.0	22263
LCSD 880-22263/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22263
880-12550-A-8-K MS	Matrix Spike	Soluble	Solid	300.0	22263
880-12550-A-8-L MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22263

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Hydrovac piles

Job ID: 880-12606-1
SDG: 21-0100-23

Client Sample ID: BF-1

Date Collected: 03/18/22 11:25
Date Received: 03/18/22 15:20

Lab Sample ID: 880-12606-1

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	22004	03/21/22 10:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	22110	03/23/22 03:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			22216	03/23/22 14:31	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			22199	03/23/22 12:25	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	22118	03/22/22 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			22112	03/22/22 17:32	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	22263	03/24/22 10:27	SC	XEN MID
Soluble	Analysis	300.0		1			22386	03/25/22 21:39	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: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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: 880-12606-1
Project/Site: Hydrovac piles SDG: 21-0100-23

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: Hydrovac piles

Job ID: 880-12606-1
SDG: 21-0100-23

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-12606-1	BF-1	Solid	03/18/22 11:25	03/18/22 15:20

No. 2482

126606 CHAIN-OF-CUSTODY

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

DATE 3/18/2022 PAGE 1 OF 1

PO#. LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Hydrovac Pits

LAI PROJECT #. 21-0100-23 COLLECTOR: DSG

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

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 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
BF-1		3/18/22	1125	S	1				X		X		X	X	X												X		202
TOTAL	1																												

RELINQUISHED BY (Signature) DATE/TIME 3/18/2022 15:20 RECEIVED BY (Signature)

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

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

LABORATORY

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

LABORATORY USE ONLY:
RECEIVING TEMP 18.8 18.1 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL #
☑ HAND DELIVERED

880-12606 Chain of Custody

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-12606-1
SDG Number: 21-0100-23

Login Number: 12606
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	Received same day of collection; chilling process has begun.
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

BLM Communications

From: Amos, James A
To: Robert Nelson
Subject: Re: [EXTERNAL] RE: BLM Excavation Approval Request
Date: Friday, October 29, 2021 11:10:51 AM
Attachments: image001.png

Robert, You can go ahead and proceed with the excavation, and closure. If any issues, get back to me. thanks

From: Robert Nelson <rnelson@laenvironmental.com>
Sent: Friday, October 29, 2021 7:12 AM
To: Amos, James A <jamos@blm.gov>
Cc: Barnhill, Amy D. <ABarnhill@chevron.com>; Mark Larson <Mark@laenvironmental.com>
Subject: [EXTERNAL] RE: BLM Excavation Approval Request

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Jim,

I'm following up on an email I sent on Tuesday October 26, 2021, regarding excavation and removal of contaminated soil on BLM land. If you could provide approval of this excavation area as the excavators are currently scheduled to begin remediation activities on Tuesday November 2, 2021. Your help is greatly appreciated.

Thank you,

Robert Nelson
Sr. Geologist
Office – 432-687-0901
Cell – 432-664-4804
rnelson@laenvironmental.com

From: Robert Nelson
Sent: Tuesday, October 26, 2021 10:54 AM
To: jamos@blm.gov
Cc: 'Barnhill, Amy D.' <ABarnhill@chevron.com>; Mark Larson <Mark@laenvironmental.com>
Subject: BLM Excavation Approval Request

Hello Jim,

Per our conversation, while Larson & Associates, Inc. (LAI) personnel were supervising the excavation of contaminated soil at the Salado Draw 24 CTB Line (Site) in Unit L (NW ¼ of SW ¼) Section 24, Township 26S, Range 32E in Lea County, New Mexico, we observed two (2) hydrovac spill areas. The GPS coordinates of the two releases are 32.025617, -103.634242 (Hydrovac Spill Area #1) and 32.023360, -103.633531 (Hydrovac Spill Area #2). The cause of this spilled media is believed to have occurred in 2019 while Chevron contractors were hydrovaccing pipeline where a produced water release occurred, and disposed of the media adjacent to the pipeline ROW. LAI on behalf of Chevron requests approval from BLM as landowner to excavate these two (2) locations to a depth of approximately one (1) foot below ground surface (bgs) in order to recover the hydrovac media and replace the soil beneath the hydrovac media. Soil samples will be collected from the bottom and sidewall of the excavation no more than every 200 square feet. The excavation will be backfilled with clean soil according to NMOCD requirements (19.15.29.13D(1)) assuming concentrations of benzene, BTEX, TPH and chloride ae below the remediation standards in Table 1 of 19.15.29 NMAC, and seed the area with BLM mix #2. Please see attached photos depicting the two hydrovac spill areas and an aerial maps showing the spill areas. Please call Amy Barnhill with Chevron at (432) 687-7108 or ABarnhill@chevron.com, Mark Larson at (432)687-0901 or mark@laenvironmental.com , or me if you have any questions.

Thank you,

Robert Nelson
Sr. Geologist
Office – 432-687-0901
Cell – 432-664-4804
rnelson@laenvironmental.com

Larson & Associates, Inc.
Environmental Consultants

Appendix F

NMOCD Communications

From:	Robert Nelson
To:	Hamlet, Robert, EMNRD; victoria.venegas@state.nm.us
Cc:	Barnhill, Amy D.; Mark Larson
Subject:	Chevron USA - Salado Draw 24 CTB (nAPP2203347230) Excavation Backfill Notice
Date:	Wednesday, March 9, 2022 2:10:00 PM
Attachments:	image001.png Table 2 Confirmation Soil Sample Analytical Data Summary.pdf Figure 3a - Focused Aerial Map Showing Hydrovac 1 and Confirmation Samples.pdf Figure 3b - Focused Aerial Map Showing Hydrovac 2 and Excavation Location.pdf

Hello Mr. Hamlet and Ms. Venegas,

Larson & Associates, Inc. (LAI), on behalf of Chevron USA, submits the attached confirmation (post remediation) laboratory analytical data and sample location map to the New Mexico Oil Conservation Division (OCD) District I to provide two (2) business days notification prior to backfilling the excavation at the Salado Draw 24 CTB (Hydrovac Piles) (nAPP2203347230) in Lea County, New Mexico. Please feel free to contact Amy Barnhill with Chevron at (432) 687-7108 or ABarnhill@chevron.com, Mark Larson (432) 556-8656 or mark@laenvironmental.com, or me with any questions or concerns.

Thank you,

Robert Nelson
Sr. Geologist
Office – 432-687-0901
Cell – 432-664-4804
rnelson@laenvironmental.com

Appendix G

Waste Manifests

CHEVRON
MCBU

Carlsbad, NM

NO #CAR- 4112 **NON-HAZARDOUS WASTE MANIFEST** 1. PAGE 1 OF 1 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.	3/24/22
PHONE NO. 575-887-5676	CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Sand Dirty Soil	1		20 yds		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: Salado Draw Maelstrom API # 3002545127

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD

24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Ben Perez PZOE 575-361-9608	[signature]	3-24-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME	PRINTED/TYPED NAME
SIGNATURE [signature] DATE	SIGNATURE [signature] DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:

PERMIT NO.	20. COMMENTS

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU

Carlsbad, NM

NO #CAR- 4113 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE 1 OF | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	3/24/22 6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Sand Dirty Soil &	1		20yds		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: Mabhorn API # 3002545127

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Ben Perez FACT 575-361-9029		3-24-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME	PRINTED/TYPED NAME
SIGNATURE DATE	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4114 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE 1 OF 1 | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	3/24/22 6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Sand, Dirty Soil	1		20yds		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
Sandia Dirty Mountain AOI # 30-025-45127

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
CHEVRON CARLSBAD
24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Ben Pope FTOI 575-361-9628		3-24-22

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER** (1): Acknowledgment of receipt of material	19. **TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME	PRINTED/TYPED NAME
SIGNATURE DATE	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:

PERMIT NO.	20. COMMENTS

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4115 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

SD Mackrom API# 3002545127

PRINTED TYPED NAME Micah Fenero — SIGNATURE — DATE 3-25-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

TRANSPORTER: COPY 2

DISPOSAL SITE: COPY 3 &

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4116 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Mackrom API # - 30025451[illegible]

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD

24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Micah Ferrero SIGNATURE [signature] DATE 3-25-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4117 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY CARLSBAD, STATE NM, ZIP 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Maelstrom API 3000545127

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Miah Ferrer — SIGNATURE [signature] — DATE 3-25-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

TRANSPORTER: COPY 2 — DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4118 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Mackstrom API # 30025457 | 13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT** | 24-HOUR EMERGENCY NO.
CHEVRON CARLSBAD | 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Micah Ferro | SIGNATURE | DATE 3/25/22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 | TRANSPORTER: COPY 2 | DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4119 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS			5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.			6.
PHONE NO. 575-887-5676	CITY CARLSBAD, NM 88220	STATE	ZIP	

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a.					
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Maelstrom API 3002545127

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD

24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Micah Ferro

SIGNATURE [signature] DATE 3-25-22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU

Carlsbad, NM

NO #CAR- 4120 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE __OF__ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.	3/28/22
PHONE NO. 575-887-5676	CITY / STATE / ZIP: CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Oil, produced water + sand	1		100	Bbls	
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: Salado Draw Sat 14 - nCpK9109X

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Josue Banda 575-988-4860	Josue Banda	3/28/22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME Royal +	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE: 713-941-2700	EMERGENCY PHONE:

18. **TRANSPORTER** (1): Acknowledgment of receipt of material	19. **TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME Lazaro Terry	PRINTED/TYPED NAME
SIGNATURE [signature] DATE 03/28/22	SIGNATURE DATE

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2

LARSON & Associates
Tatum Peters
432-210-3639

CHEVRON MCBU

Carlsbad, NM

NO #CAR- 4121 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.	3/24/22
PHONE NO. 575-887-5676	CITY CARLSBAD, STATE NM, ZIP 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Dirty Soil, Contaminated Dirt	1		20 yd		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
SD Manifest is Void - CC: 4RPK9L03X

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
CHEVRON CARLSBAD
24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Josue Banda 575-988-4560 JRZN		3/28/22

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. **TRANSPORTER** (1): Acknowledgment of receipt of material	19. **TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4122 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO. 3/28/22

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Contaminated Soil		1	20 yd		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Mainstream Island cc: nCPK9L03X

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
JBZN Jesse Banta 575-988-4860		3/28/22

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4123 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___ OF ___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD PHONE NO. 575-887-5676	5301 LOMAS DR. CITY CARLSBAD, STATE NM, ZIP 88220	3/28/22 6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	8. CONTAINERS Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Contaminated Soil		1	20 yrd		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD Maelstrom 15-1 Sand CC: WCPK91032

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD — 24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Josue Rios 575-988-4866 JRZN		3/28/22

TRANSPORTERS

16. TRANSPORTER (1)	17. TRANSPORTER (2)
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME _____	PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU

Carlsbad, NM

NO #CAR- 4124 **NON-HAZARDOUS WASTE MANIFEST** | 1. PAGE ___OF___ | 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.	3/28/22
PHONE NO. 575-887-5676	CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Contaminated Soil		1	20 yrd		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
[illegible]	

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD

24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
[illegible]	[illegible]	3/28/22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME __________	PRINTED/TYPED NAME __________
SIGNATURE __________ DATE _____	SIGNATURE __________ DATE _____

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

CHEVRON
MCBU
Carlsbad, NM

NO #CAR- 4125 **NON-HAZARDOUS WASTE MANIFEST** 1. PAGE ___ OF ___ 2. TRAILER NO.

GENERATOR

3. COMPANY NAME	4. ADDRESS	5. PICK-UP DATE
CHEVRON CARLSBAD	5301 LOMAS DR.	3/29/22
PHONE NO. 575-887-5676	CITY STATE ZIP CARLSBAD, NM 88220	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Contaminated soil		1	20 yd		
b.					
c.					
d.					

12. COMMENTS OR SPECIAL INSTRUCTIONS: SD [illegible] 15-15 [illegible] CC: UCPKQ L03X

13. WASTE PROFILE NO.

14. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

CHEVRON CARLSBAD

24-HOUR EMERGENCY NO. 575-887-5676

15. **GENERATOR'S CERTIFICATION:** Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME	SIGNATURE	DATE
Jessie Banda JBZN 575-988-4860	[signature]	3/29/22

TRANSPORTERS

16. **TRANSPORTER (1)**	17. **TRANSPORTER (2)**
NAME	NAME
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:
18. TRANSPORTER (1): Acknowledgment of receipt of material	**19. TRANSPORTER** (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME ____________	PRINTED/TYPED NAME ____________
SIGNATURE ____________ DATE ______	SIGNATURE ____________ DATE ______

DISPOSAL FACILITY

	ADDRESS:	PHONE:
PERMIT NO.	20. COMMENTS	

21. **DISPOSAL FACILITY'S CERTIFICATION:** I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

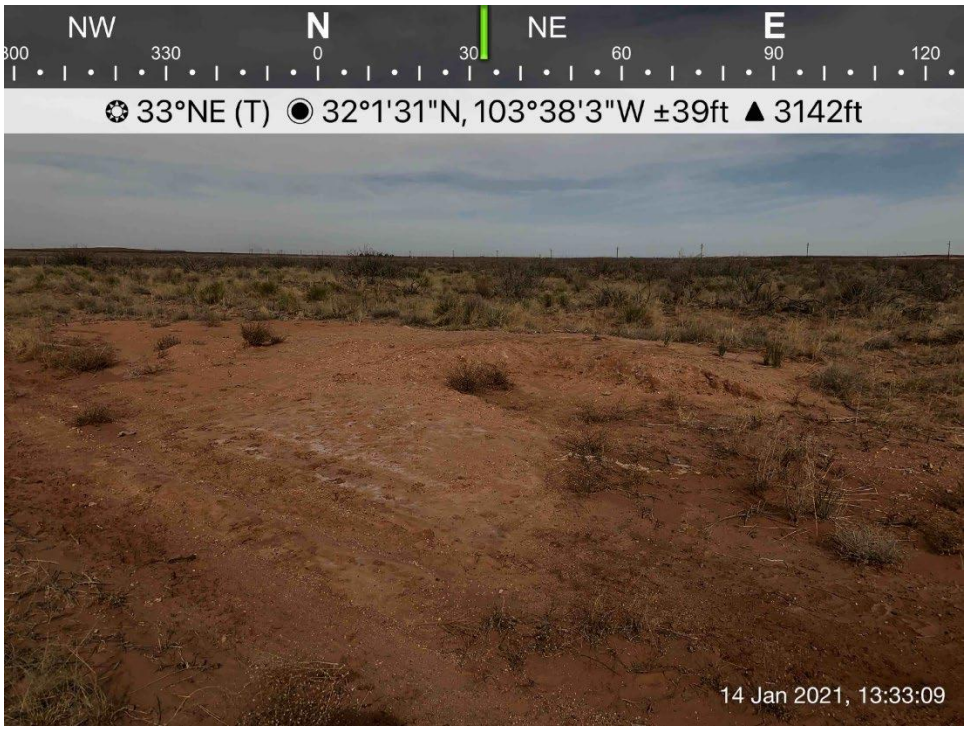
AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Carlsbad 5301 Lomas Dr., Carlsbad, NM 88220

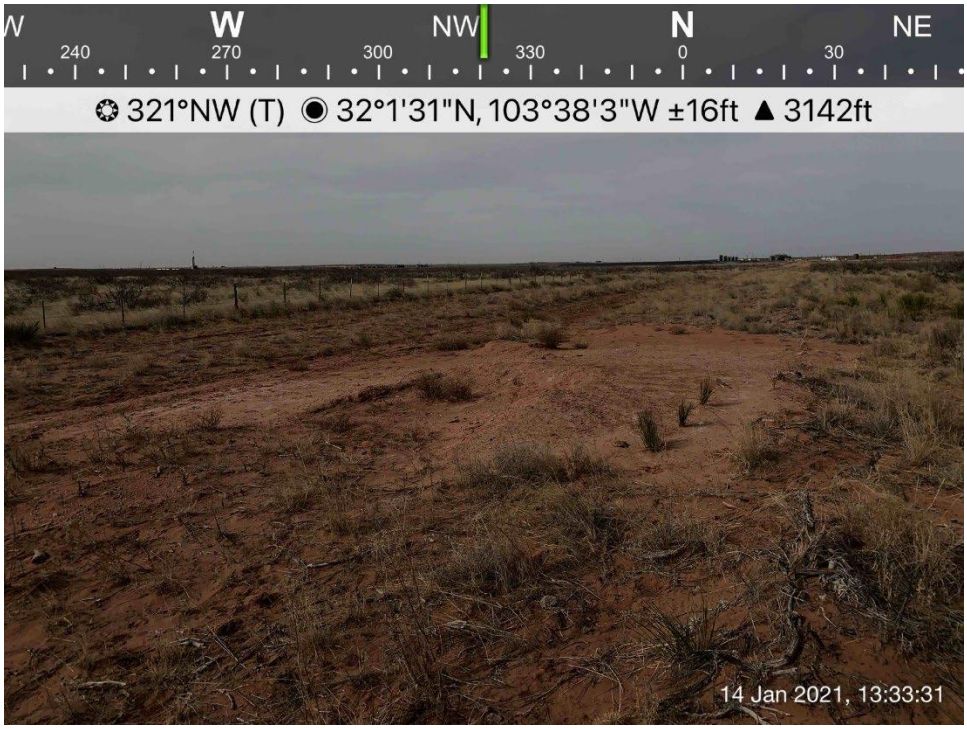
GENERATOR: COPY 1 TRANSPORTER: COPY 2 DISPOSAL SITE: COPY 3 & 4

Appendix H

Photographs

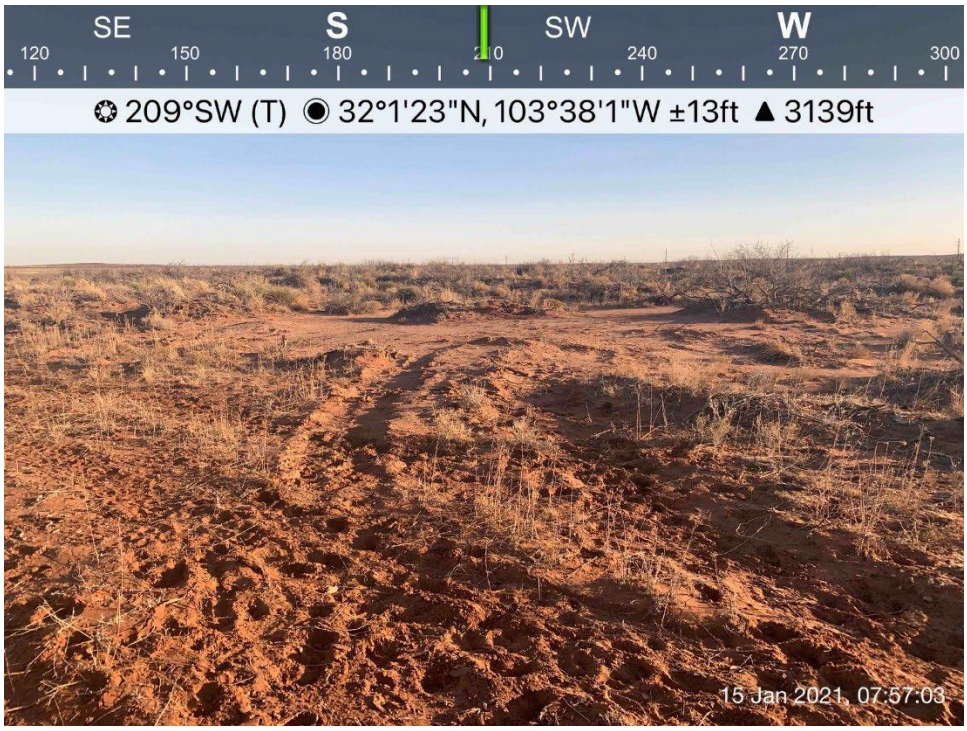


Impacted area (Hydrovac-1) viewing northeast

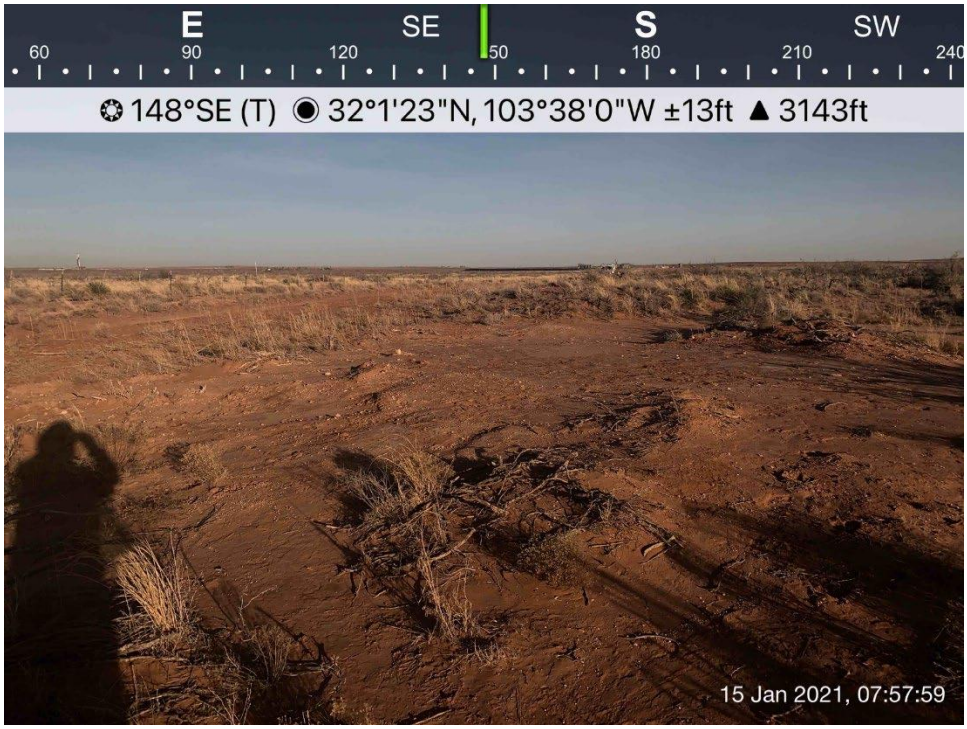


Impacted area (Hydrovac-1) viewing northwest

Tracking Number: nAPP2203347230
Closure Report
Salado Draw CTB 24 (Hydrovac Piles), Lea County, New Mexico
May 5, 2022

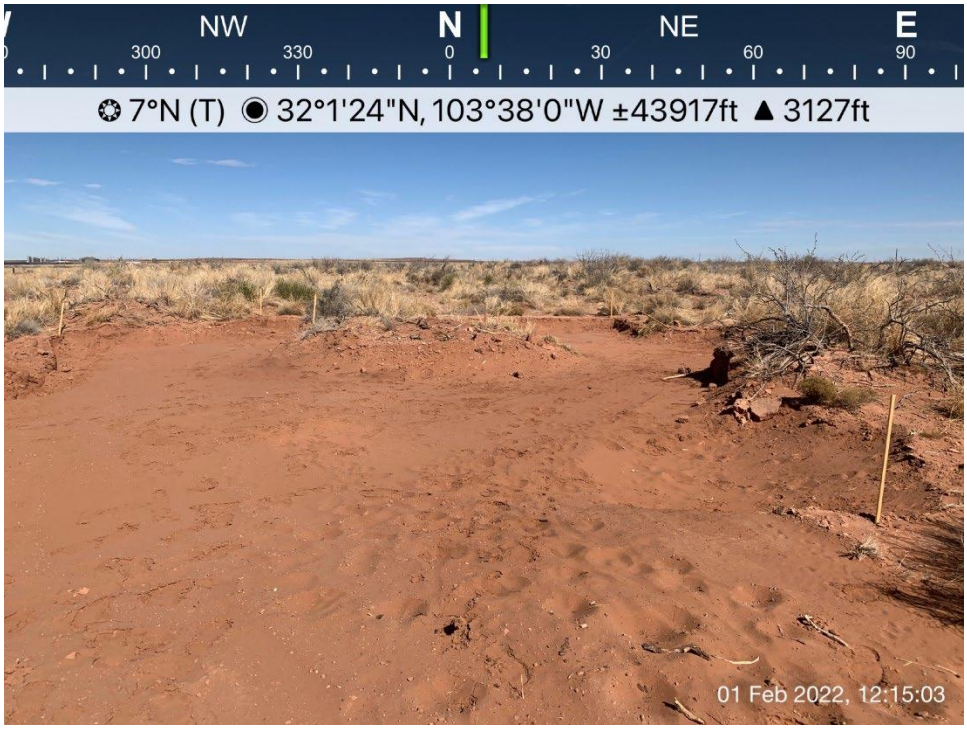


Impacted area (Hydrovac-2) viewing southwest



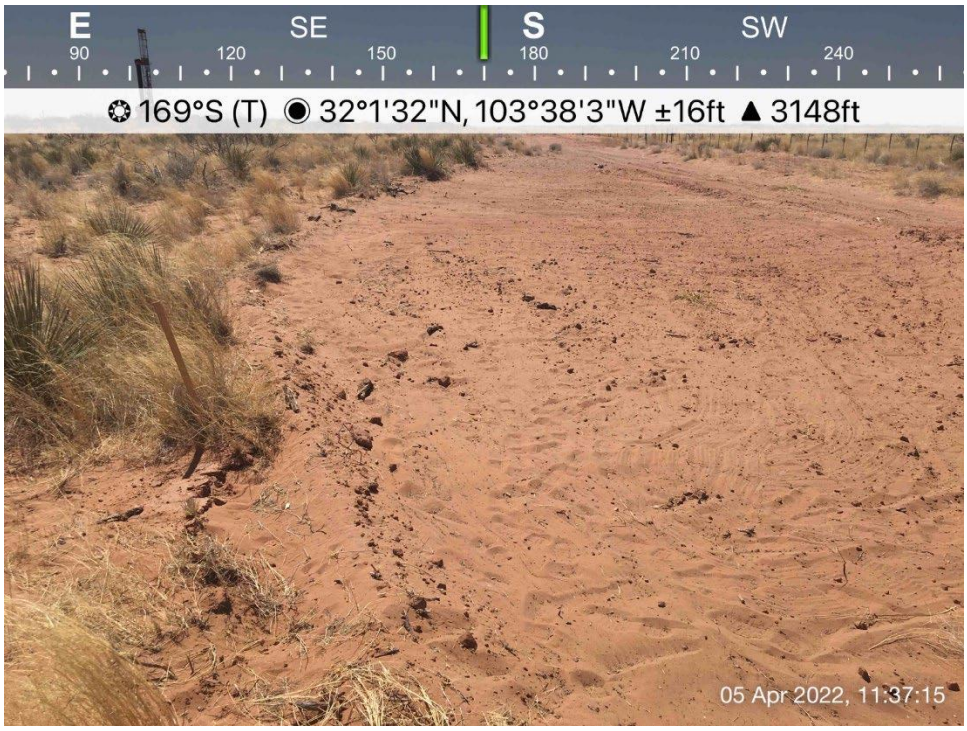
Impacted area (Hydrovac-2) viewing southeast

Hydrovac-1 excavated soil viewing northeast



Hydrovac-2 excavated soil viewing north

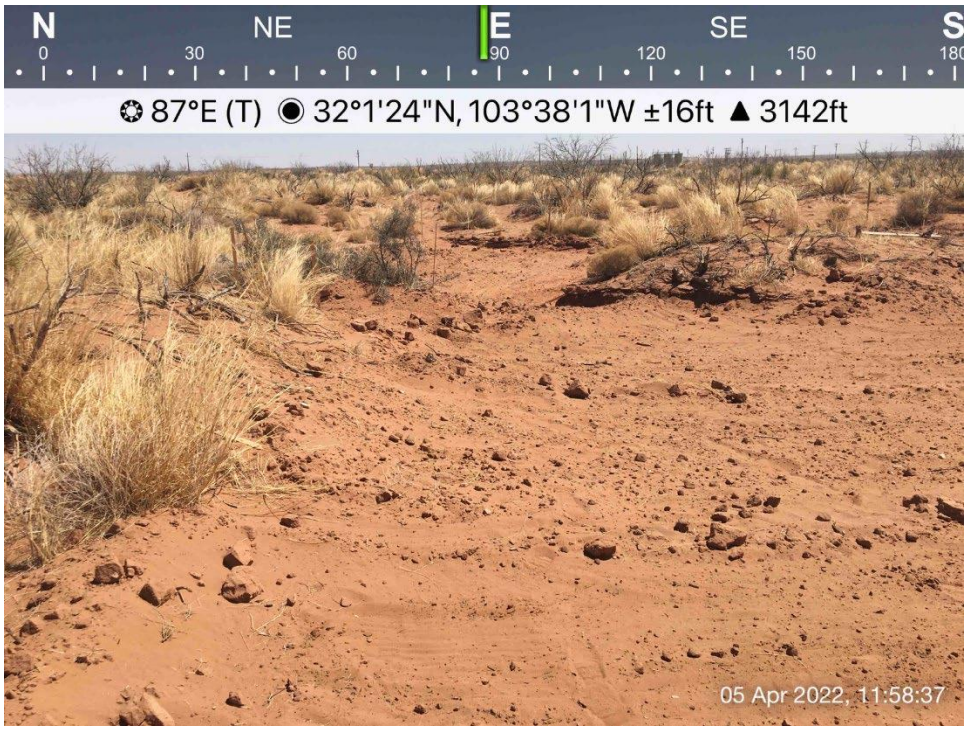
Tracking Number: nAPP2203347230
Closure Report
Salado Draw CTB 24 (Hydrovac Piles), Lea County, New Mexico
May 5, 2022



Hydrovac-1 backfilled and seeded excavation viewing south

Hydrovac-2 backfilled and seeded excavation viewing south

Tracking Number: nAPP2203347230
Closure Report
Salado Draw CTB 24 (Hydrovac Piles), Lea County, New Mexico
May 5, 2022



Hydrovac-2 backfilled and seeded excavation area viewing east

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 109421

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 109421
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/1/2022