

Incident ID	nCS2003553676
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?	<u>>101.5</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

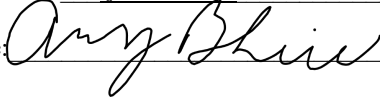
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Oil Conservation Division

Incident ID	nCS2003553676
District RP	
Facility ID	
Application ID	

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 11-2-21

email: ABarnhill@chevron.com

Telephone: 432-687-7108

OCD Only

Received by: _____ Date: _____

Incident ID	nCS2003553676
District RP	
Facility ID	
Application ID	

Remediation Plan

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

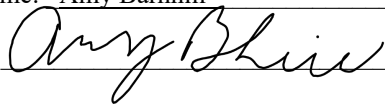
- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note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

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

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

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 11-2-21

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

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Incident ID	nCS2003553676
District RP	
Facility ID	
Application ID	

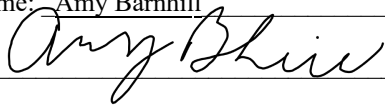
Closure

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.*

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

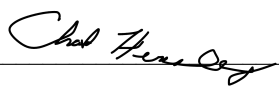
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist
Signature:  Date: 11-2-21
email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Chad Hensley Date: 12/06/2021

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

Closure Approved by:  Date: 12/06/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Tracking Number: nCS2003553676
Closure Report
Salado Draw 13 E Frac Pond
Produced Water Release
Lea County, New Mexico

Latitude: N 32.036746°
Longitude: W -103.636582°

LAI Project No. 20-0107-14

October 19, 2021

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
Certified Professional Geologist #10490



Robert Nelson
Sr. Geologist

This Page Intentionally Left Blank

Table of Contents

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Physical Setting	1
1.3	Remediation Action Levels.....	1
2.0	DELINEATION	2
3.0	REMEDICATION	2
4.0	CLOSURE REQUEST.....	3

Tables

Table 1	Delineation Soil Sample Analytical Data Summary
Table 2	Confirmation Soil Sample Analytical Data Summary

Figures

Figure 1	Topographic Map
Figure 2	Aerial Map Showing Spill Area and Sample Locations
Figure 3	Aerial Map Showing location of Groundwater Borehole and Site
Figure 4	Aerial Map Showing Confirmation Sample and Excavation Locations

Appendices

Appendix A	Initial C-141
Appendix B	NMCOD Communications
Appendix C	Laboratory Reports
Appendix D	Photographs

nCS2003553676
Closure Report
Chevron USA, Inc., Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021

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 (NMOCD) District 2 for a produced water release at the Salado Draw 13 E Frac Pond (Site) located in Unit M (SW/4, SW/4), Section 13, Township 26 South, Range 32 East, in Lea County, New Mexico. The geodetic position is North 32.0366639° and West - 103.6365611°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The release was discovered on November 26, 2019, due to high winds that removed the transfer line from the pond. Chevron reported that approximately 6.5 barrels (bbls) of produced water was released. The affected area measures approximately 16,836 square feet. Chevron submitted the initial C-141 to OCD District II and it was assigned incident number nCS2003553676. Appendix A presents Chevron's spill documentation.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,169 feet above mean sea level (msl).
- The surface topography gradually slopes to the southwest.
- There are no surface water features within 1,000 feet of the Site.
- Karst data provided by the USGS describes the Site as "Medium Risk" potential.
- The soils are designated as "Pyote and Maljamar fine sands", consisting of 0 to 30 inches of fine sand, underlain by 30 to 60 inches of fine sandy loam.
- The geology consists of the Quaternary age eolian sand deposited as dune, dune ridges, and sheets undivided (USGS).
- Groundwater occurs greater than 101.5 feet below ground surface (bgs) based on depth to groundwater measurements 72 hours after installing a temporary monitor well (SB-1) on April 14, 2020. Figure 3 presents an aerial map of site and borehole location.

1.3 Remediation Action 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 10,000 mg/Kg

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

nCS2003553676
Closure Report
Chevron USA, Inc., Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021

2.0 DELINEATION

The release was fully delineated between October 30, 2019, and September 1, 2020. The delineation was reported to NMOCD in the document titled "nCS2003553676, Delineation Report and Remediation Plan, Salado Draw 13 E Frac Pond Produced Water Release, Lea County, New Mexico, December 11, 2020", and recommended the following remediation:

- Excavate soil from an area measuring approximately 4,366 square feet, encompassing S-5 and S-12 to approximately 1-foot bgs.
- Excavate soil from an area measuring approximately 3,127 square feet, encompassing S-6 to approximately 2 feet bgs.
- Excavate soil from an area measuring approximately 3,881 square feet, encompassing S-3 to approximately 3 feet bgs.
- Excavate soil from an area measuring approximately 8,242 square feet, encompassing S-1, S-2, S-9, and S-10 to approximately 4.1 feet bgs.
- Collect five (5) point composite bottom and sidewall confirmation soil samples every 200 square feet of excavation and analyze for BTEX, TPH and chloride.
- Backfill excavations with non-waste containing uncontaminated clean caliche with chloride concentrations less than 600 mg/Kg, assuming achievement of OCD remediation levels; and
- Prepare report with photographs for submittal to OCD District II.

NMOCD approved the remediation plan on March 11, 2021. Table 1 presents the delineation soil sample analytical data summary. Appendix B presents NMOCD communications.

3.0 REMEDIATION

Between June 7, 2021, and August 30, 2021, Rocky Peak Inc. and Hydrotech, under supervision of LAI, excavated soil encompassing sample locations S-1 through S-3, and S-9 through S-10, to 4.1 feet bgs from an area measuring 8250 square feet. Soil was removed to about three (3) feet bgs from an area measuring approximately 3,480 square feet between sample locations S-3, S-4, and S-6. Soil was removed to about two (2) feet bgs from an area measuring 5,296 square feet encompassing S-6 and S-5. Soil was removed to about one (1) foot bgs from an area measuring 1,360 square feet from the ramp leading to the frac ponds to the north of the pad encompassing sample locations S-6 and S-5. Contaminated soil was initially stockpiled on a liner adjacent to the excavation and later transported to the R360 Half-Way Facility located between Hobbs and Carlsbad, New Mexico.

Between June 16, 2021, and August 30, 2021, LAI personnel collected ninety-one (91) confirmation samples from the bottom and sidewalls of the excavation. The soil samples were delivered under chain of custody and preservation to Eurofins-Xenco Laboratories (Xenco) in Midland, Texas. The laboratory analyzed the samples for BTEX, TPH, and chloride by EPA SW-846 Methods 8021B, 8015M, and 300.0, respectively. Benzene and BTEX were reported below NMOCD remediation standards in all confirmation composite soil samples. Chloride and/or TPH were reported above NMOCD remediation standard of 600 mg/Kg and 100 mg/Kg respectively in the following composite samples:

nCS2003553676
 Closure Report
 Chevron USA, Inc., Salado Draw 13E Frac Pond
 Produced Water Release
 October 19, 2021

Sample ID	Date	Location	Depth	TPH (mg/Kg)	Chloride (mg/Kg)
C-13	6/16/21	Sidewall	0 – 4.1	-	3,420
C-17	6/24/21	Bottom	3	-	1,080
C-41	6/24/21	Bottom	1	-	3620
C-42	6/24/21	Bottom	1	510	-
C-43	6/24/21	Bottom	1	247	2,400
C-44	6/24/21	Bottom	1	169	1,180
C-45	6/24/21	Bottom	1	143	784
C-46	6/24/21	Bottom	1	131	1,330
C-47	6/24/21	Sidewall	0-1	240	2,080
C-49	6/24/21	Sidewall	0-1	135	759
C-85	7/12/21	Sidewall	0 – 4.1	-	1,170

Between August 24, 2021, and August 30, 2021, Rocky Peak and Hydrotech excavated soil from the above locations to 1-foot bgs and excavated 1 foot from the sidewalls depending on the constituent and concentration. The contaminated soil was transported to the R360 Half-Way Facility. Subsequent confirmation soil samples were collected and delivered to Eurofins-Xenco (Xenco) in Midland, Texas. The laboratory reported chloride, benzene, BTEX, and TPH below NMOCD remediation standards in Table 1 of 19.15.29 NMAC.

Between September 20, 2021, and October 1, 2021, Rocky Peak backfilled the excavation with clean topsoil. LAI personnel collected nine (9) composite samples (BF-1 through BF-9) of clean topsoil from the Pipeline Road Pit, which is located about 15 miles from the site. Xenco analyzed the samples for benzene, BTEX, TPH and chloride. BTEX and TPH were below the analytical method reporting limits (RLs). Chloride was less than 600 mg/Kg. Approximately 2,600 cubic yards of topsoil was used to backfill the excavation. Figure 4 presents the soil excavation areas and confirmation sample locations. Table 2 presents the confirmation and backfill sample analytical data summary. Appendix C presents the laboratory reports. Appendix D presents photographs.

4.0 CLOSURE REQUEST

Chevron requests no further action for this release.

Table 1
Soil Sample Analytical Data Summary
Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

Page 1 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)	
Remediation Level:				10	50	100 / 2,500					600 / 10,000
SP-1	0.5	7/24/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	86.0	
	1	7/24/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	80.8	
SP-2	0.5	7/24/2020	In-Situ	<0.00201	<0.00201	<49.9	87.4	<49.9	87.4	12,000	
	1	7/24/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	4,020	
	1	9/1/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	3,380	
	3	9/1/2020	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	1,720	
	5	9/1/2020	In-Situ	--	--	--	--	--	--	79.8	
	10	9/1/2020	In-Situ	--	--	--	--	--	--	36.7	
SP-3	0.5	7/24/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	7,550	
	1	7/24/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	4,650	
	1	9/1/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	3,960	
	3	9/1/2020	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	104	
	5	9/1/2020	In-Situ	--	--	--	--	--	--	26.9	
	10	9/1/2020	In-Situ	--	--	--	--	--	--	43.5	
SP-4	0.5	7/24/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	287	
	1	7/24/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	116	
SP-5	0.5	7/24/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	1,000	
	1	7/24/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	235	
SP-6	0.5	7/24/2020	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	6,000	
	1	7/24/2020	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	900	

Table 1
Soil Sample Analytical Data Summary
Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

Page 2 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50				100 / 2,500	600 / 10,000
	1	9/1/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	647
	3	9/1/2020	In-Situ	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	191
	5	9/1/2020	In-Situ	--	--	--	--	--	--	11.5
	10	9/1/2020	In-Situ	--	--	--	--	--	--	24.4
S-7	0.5	7/24/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	348
	1	7/24/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	177
S-8	0.5	7/24/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	255
	1	7/24/2020	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	29.8
S-9	0.5	7/24/2020	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	6,440
	1	7/24/2020	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	3,900
	1	9/1/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	2,230
	3	9/1/2020	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	3,740
	5	9/1/2020	In-Situ	--	--	--	--	--	--	4,340
	10	9/1/2020	In-Situ	--	--	--	--	--	--	548
S-10	1	9/1/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	882
	3	9/1/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	1,080
	5	9/1/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	5,020
	10	9/1/2020	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	199
S-11	0.5	9/1/2020	In-Situ	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	22.9

Table 1
Soil Sample Analytical Data Summary
Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

Page 3 of 3

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50				100 / 2,500	600 / 10,000
	1	9/1/2020	In-Situ	<0.00198	<0.000198	<50.0	<50.0	<50.0	<50.0	43.2
S-12	0.5	10/30/2020	In-Situ	<0.00200	0.05170	<50.0	<50.0	<50.0	<50.0	848
	1	11/29/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	16.2
S-13	0.5	10/30/2020	In-Situ	<0.00201	0.00822	<49.9	<49.9	<49.9	<49.9	52.8

Notes: Analysis performed by Xenco Laboratories

Depth in feet below ground surface (bgs)

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

<: denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation action limits

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

Sample ID	Location	Depth (feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)	
RAL:					10	50	100 / 2,500					600 / 20,000
C-1	Bottom	4.1	6/16/2021	In-Situ	<0.00198	<0.00397	<49.7	<49.7	<49.7	<49.7	44.8	
C-2	Bottom	4.1	6/16/2021	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	147	
C-3	Bottom	4.1	6/16/2021	In-Situ	<0.00202	<0.00403	60.3	<50.0	<50.0	60.3	284	
C-4	Bottom	4.1	6/16/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	39.3	
C-5	Bottom	4.1	6/16/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	524	
C-6	Bottom	4.1	6/16/2021	In-Situ	<0.00200	<0.00399	<50.0	100	69.2	169	634	
C-7	Bottom	4.1	6/16/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	200	
C-8	Bottom	4.1	6/16/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	82.3	
C-9	Bottom	4.1	6/16/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	60.1	
C-10	Bottom	4.1	6/16/2021	In-Situ	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	43.1	
C-11	Bottom	4.1	6/16/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	16.7	
C-12	Bottom	4.1	6/16/2021	In-Situ	0.00201	<0.00398	<50.0	<50.0	<50.0	<50.0	44.5	
C-13	Sidewall	0 - 4.1	6/16/2021	Excavated	0.00318	<0.00404	<49.9	<49.9	<49.9	<49.9	3,420	
			8/26/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	40.7	
C-14	Sidewall	0 - 4.1	6/16/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	61.7	
C-15	Sidewall	0 - 4.1	6/16/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	146	
C-16	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	421	
C-17	Bottom	3	6/24/2021	Excavated	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	1,080	
		4.1	8/24/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	11.7	
C-18	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	453	
C-19	Bottom	3	6/24/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	308	
C-20	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	479	
C-21	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	404	
C-22	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	334	
C-23	Bottom	3	6/24/2021	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	159	
C-24	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	203	
C-25	Bottom	3	6/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	73.6	
C-26	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	107	
C-27	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	92.4	
C-28	Bottom	3	6/24/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	96.2	

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

C-29	Bottom	3	6/24/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	121
C-30	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	217
C-31	Bottom	3	6/24/2021	In-Situ	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	209
C-32	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	123
C-33	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	183
C-34	Bottom	3	6/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	250
C-35	Bottom	3	6/24/2021	In-Situ	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	182
C-36	Sidewall	0-3	6/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	331
C-37	Sidewall	0-3	6/24/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	179
C-38	Sidewall	0-3	6/24/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	120
C-39	Sidewall	0-3	6/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	500
C-40	Bottom	1	6/24/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	140
C-41	Bottom	1	6/24/2021	Excavated	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	3,620
		2	8/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	12.0
C-42	Bottom	1	6/24/2021	Excavated	<0.00199	<0.00398	75.2	199	236	510	413
		2	8/24/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	13.9
C-43	Bottom	1	6/24/2021	Excavated	<0.00200	<0.00401	<50.0	134	113	247	284
		2	8/24/2021	In-Situ	<0.00403	<0.00806	<49.9	<49.9	<49.9	<49.9	15.7
C-44	Bottom	1	6/24/2021	Excavated	<0.00201	<0.00402	72.9	95.9	<50.0	169	447
		2	8/24/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	12.1
C-45	Bottom	1	6/24/2021	Excavated	<0.00200	<0.00399	73.7	69.0	<49.8	143	353
		2	8/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	13.7
C-46	Bottom	1	6/24/2021	Excavated	<0.00199	<0.00398	69.2	61.7	<50.0	131	1,330
		2	8/24/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	13.1
C-47	Sidewall	0-1	6/24/2021	Excavated	<0.00199	<0.00398	240	<49.9	<49.9	240	136
			8/24/2021	In-Situ	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	13.8
C-48	Sidewall	0-1	6/24/2021	In-Situ	<0.00200	<0.00401	72.6	<49.9	<49.9	72.6	152
C-49	Sidewall	0-1	6/24/2021	Excavated	<0.00200	<0.00399	135	<49.8	<49.8	135	759
			8/24/2021	In-Situ	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	177
C-50	Bottom	2	7/9/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	9.66
C-51	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<4.97
C-52	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	193
C-53	Bottom	2	7/9/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<4.95
C-54	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<5.04
C-55	Bottom	2	7/9/2021	In-Situ	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	39.1
C-56	Bottom	2	7/9/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	7.39

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

C-57	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	6.13
C-58	Bottom	2	7/9/2021	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	9.57
C-59	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	47.9
C-60	Bottom	2	7/9/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	8.84
C-61	Bottom	2	7/9/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10.7
C-62	Bottom	4.1	7/12/2021	In-Situ	<0.00202	0.0336	<50.0	<50.0	<50.0	<50.0	213
C-63	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	5,520
C-64	Bottom	4.1	7/12/2021	In-Situ	0.00300	<0.00400	<50.0	<50.0	<50.0	<50.0	1,370
C-65	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	11,900
C-66	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	347
C-67	Bottom	4.1	7/12/2021	In-Situ	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	751
C-68	Bottom	4.1	7/12/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	16.2
C-69	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	28.3
C-70	Bottom	4.1	7/12/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	17.8
C-71	Bottom	4.1	7/12/2021	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	19.2
C-72	Bottom	4.1	7/12/2021	In-Situ	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	15.9
C-73	Bottom	4.1	7/12/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	12.6
C-74	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	13.5
C-75	Bottom	4.1	7/12/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	49.9
C-76	Bottom	4.1	7/12/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	7.51
C-77	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	8.11
C-78	Bottom	4.1	7/12/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	32.1
C-79	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	13.2
C-80	Bottom	4.1	7/12/2021	In-Situ	0.00229	<0.00399	<49.9	<49.9	<49.9	<49.9	20.9
C-81	Bottom	4.1	7/12/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	14.2
C-82	Bottom	0 - 4.1	7/12/2021	In-Situ	<0.00201	0.00647	<50.0	<50.0	<50.0	<50.0	27.8
C-83	Sidewall	0 - 2	7/12/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	16.0
C-84	Sidewall	0 - 2	7/12/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	10.4
C-85	Sidewall	0 - 4.1	7/12/2021	Excavated	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	1,170
			8/27/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	176
C-86	Bottom	1	7/13/2021	In-Situ	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	127
C-87	Bottom	1	7/13/2021	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	164
C-88	Sidewall	0 - 1	7/13/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	163
C-89	Bottom	4.1	8/30/2021	In-Situ	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	132
C-90	Bottom	4.1	8/30/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	64.4
C-91	Bottom	4.1	8/30/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	133

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

BF-1	soilpille	-	9/3/2021	-	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	26.7
BF-2	soilpille	-	9/3/2021	-	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	27.7
BF-3	soilpille	-	9/3/2021	-	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	39.7
BF-4	soilpille	-	9/3/2021	-	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	38.3
BF-5	soilpille	-	9/3/2021	-	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	43.4
BF-6	soilpille	-	9/3/2021	-	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	33.8
BF-7	soilpille	-	9/3/2021	-	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	26.1
BF-8	soilpille	-	9/3/2021	-	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	45.5
BF-9	soilpille	-	9/3/2021	-	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	28.1

Notes: analysis performed by Xenco Laboratories (Xenco), Midland, Texas 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

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Salado Draw 13 E Frac Pond
Lea County, New Mexico
North 32.036285, West -103.636507

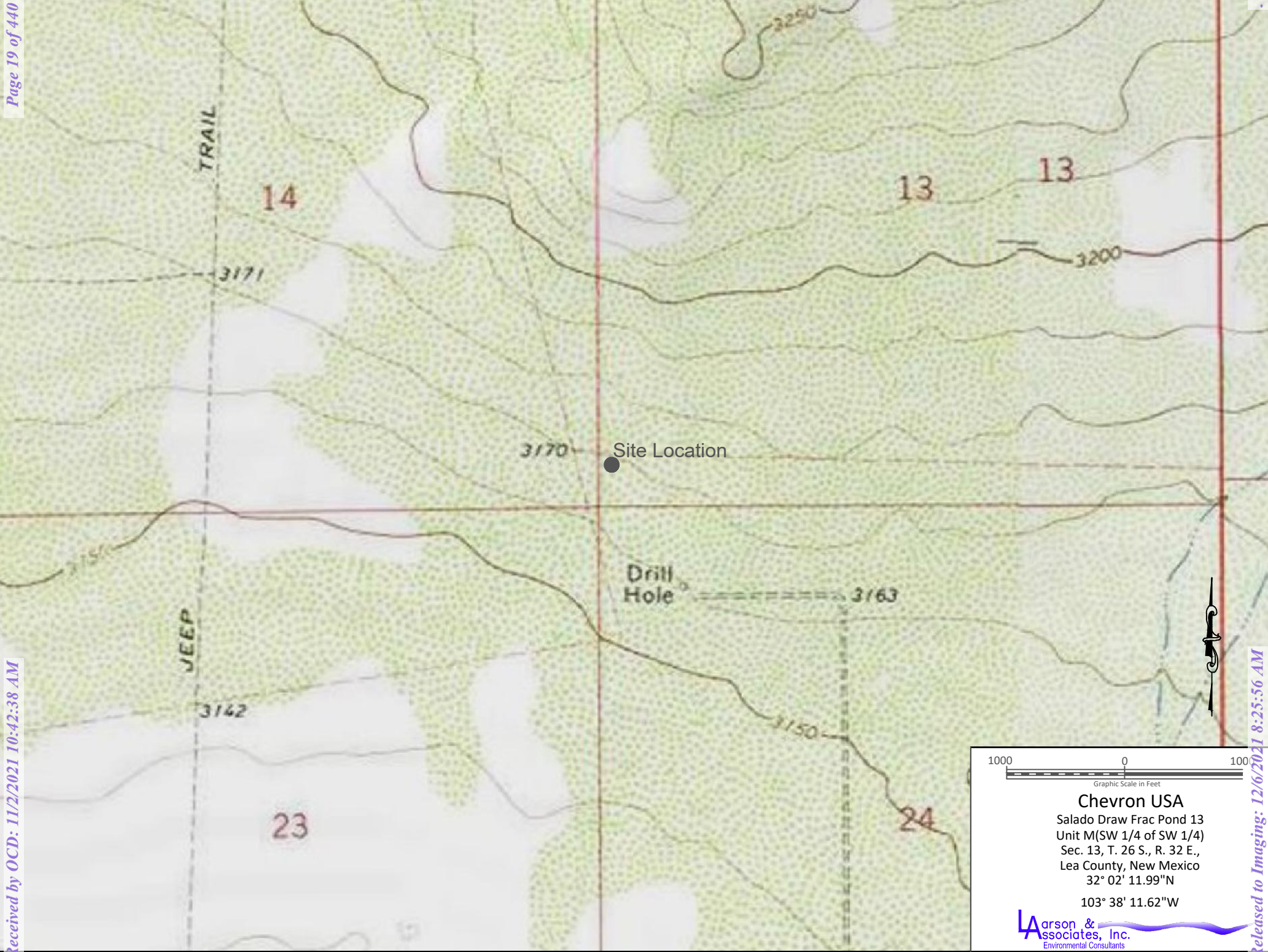


Figure 1 - Topographic Map



Legend

- Spill Area
- Soil Sample Location
- Proposed Soil Sample Location

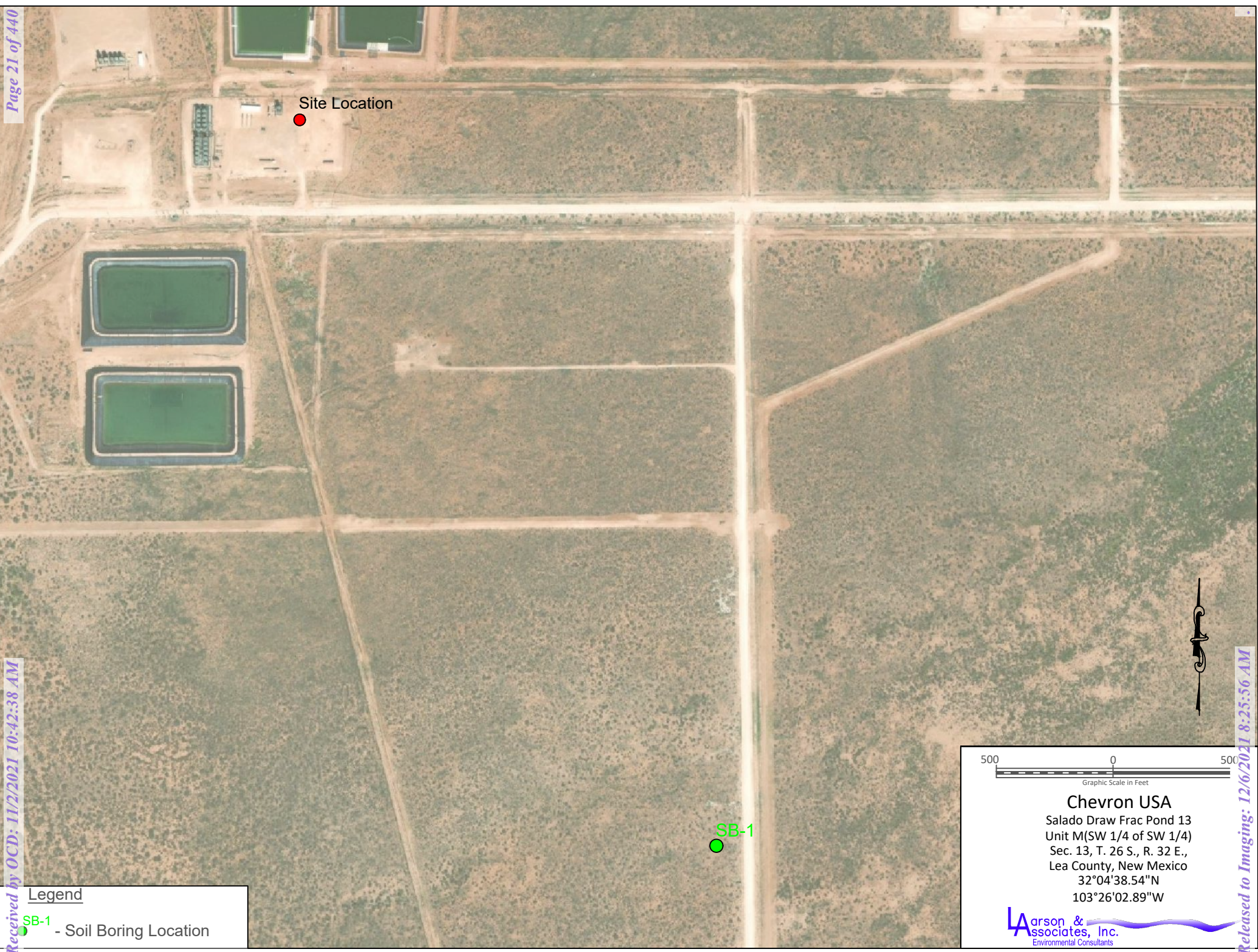
Graphic Scale in Feet

75 0 75

Chevron USA
Salado Draw Frac Pond 13
Unit M(SW 1/4 of SW 1/4)
Sec. 13, T. 26 S., R. 32 E.,
Lea County, New Mexico
32° 02' 11.99"N
103° 38' 11.62"W

Larson & Associates, Inc.
Environmental Consultants

Figure 2 - Aerial Map Showing Proposed Soil Sample Locations

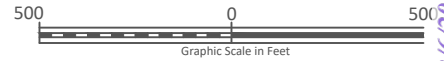


Site Location

SB-1

Legend

SB-1 - Soil Boring Location



Chevron USA

Salado Draw Frac Pond 13
Unit M(SW 1/4 of SW 1/4)
Sec. 13, T. 26 S., R. 32 E.,
Lea County, New Mexico
32°04'38.54"N
103°26'02.89"W



Figure 4 - Aerial Map Showing Soil Boring Location

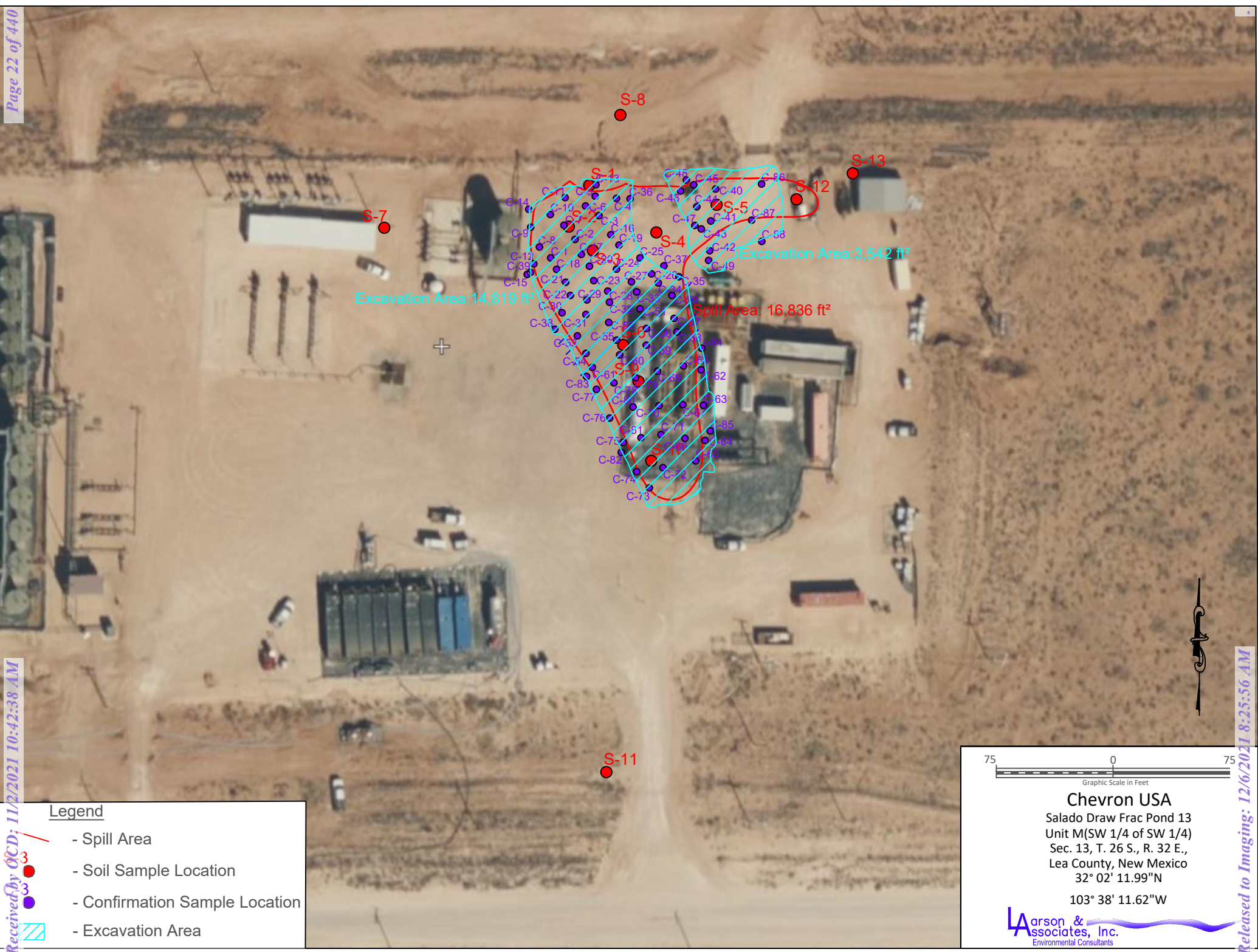


Figure 3 - Aerial Map Showing Excavation Locations and Confirmation Samples

Appendix A

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Chevron USA, Inc.	OGRID: 4323
Contact Name: Josepha DeLeon	Contact Telephone: 432-425-1528
Contact email: jdx@chevron.com	Incident # (assigned by OCD)
Contact mailing address: 1616 E. Bender Blvd., Hobbs, NM 88240	

Location of Release Source

Latitude 32.0399203 **Longitude** -103.6713960

(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Salado Draw 13 E Frac Pond	Site Type: Frac Water Pond
Date Release Discovered: 11/26/2019	API# (if applicable): N/A

Unit Letter	Section	Township	Range	County
F	16	26S	32E	Eddy

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

Cause of Release:
Heavy winds blew transfer line out of pond and water was released to ground.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Signature: 	Date: November 28 , 2019
Printed Name: Josepha DeLeon	Title: Environmental Compliance Specialist
email: jdx@chevron.com	Telephone: 432-425-1528
<u>OCD Only</u>	
Received by: _____ Date: _____	

State of New Mexico
Oil Conservation Division

Page 3

Incident ID	
District RP	
Facility ID	
Application ID	

Shape	Area #	length/diameter	width	Depth / Depth-Soil Penetration	Total Volume of Fluid in Soil Pore Space (15%) in barrels
circle	1	15	n/a	0.04167	0.20
rectangle	2	90	12	0.04167	1.20
rectangle	3	210	11	0.04167	2.57
circle	4	52	n/a	0.04167	2.36
circle	5	3		0.16667	0.21
Total Volume					6.54

Appendix B
NMOCD Communications

From: [Barnhill, Amy D.](#)
To: [Robert Nelson](#)
Cc: [Visairo, Omar](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 13497
Date: Thursday, March 11, 2021 9:13:26 AM
Attachments: [image001.png](#)

Robert,

The workplan for the SD 13E Frac Pond Discharge Line has been approved with the following condition below.

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nCS2003553676, with the following conditions:

Closure due 06/10/2021

**Thank you,
Amy Barnhill**

Lead Environmental Specialist - Water
Water Compliance Advisor
ABarnhill@chevron.com
Tel +1 432 687 7108
Mobile +1 432 940 8524

Mid-Continent Business Unit

Chevron North America Exploration and Production Company
6301 Deauville Blvd
Midland, Texas 79706

#OurEnvironmentMatters

"The highest performance you can expect is the lowest standard you set"



CONFIDENTIALITY NOTICE: This message is confidential and may be privileged. If you believe that this email has been sent to you in error, please reply to the sender that you received the message; then please delete this email.

• |

Appendix C
Laboratory Reports

Certificate of Analysis Summary 668222

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 13 E Frac Pond

Project Id: 20-0107-14

Contact: Mark Larson

Project Location:

Date Received in Lab: Mon 07.27.2020 08:56

Report Date: 07.31.2020 17:42

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	668222-001	668222-002	668222-003	668222-004	668222-005	668222-006
	<i>Field Id:</i>	S-1 .5	S-1 1	S-2 .5	S2 1	S-3 .5	S-3 1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.24.2020 11:25	07.24.2020 11:26	07.24.2020 11:30	07.24.2020 11:31	07.24.2020 11:35	07.24.2020 11:36
BTEX by EPA 8021B	<i>Extracted:</i>	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30
	<i>Analyzed:</i>	07.29.2020 23:43	07.30.2020 00:03	07.30.2020 00:24	07.30.2020 00:44	07.30.2020 02:07	07.30.2020 02:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Toluene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Ethylbenzene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
m,p-Xylenes		<0.00397 0.00397	<0.00400 0.00400	<0.00402 0.00402	<0.00398 0.00398	<0.00397 0.00397	<0.00399 0.00399
o-Xylene		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Total Xylenes		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Total BTEX		<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00198 0.00198	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	07.27.2020 12:00	07.27.2020 12:00	07.28.2020 14:20	07.28.2020 14:20	07.28.2020 14:20	07.28.2020 14:20
	<i>Analyzed:</i>	07.27.2020 13:38	07.27.2020 13:43	07.29.2020 02:49	07.29.2020 02:56	07.29.2020 03:02	07.29.2020 03:08
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		86.0 5.00	80.8 5.00	12000 101	4020 49.8	7550 50.0	4650 50.5
TPH by SW8015 Mod	<i>Extracted:</i>	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00
	<i>Analyzed:</i>	07.27.2020 12:01	07.27.2020 12:58	07.27.2020 13:17	07.27.2020 13:36	07.27.2020 13:55	07.27.2020 14:14
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	87.4 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	87.4 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit



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

Certificate of Analysis Summary 668222



Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 13 E Frac Pond

Project Id: 20-0107-14

Date Received in Lab: Mon 07.27.2020 08:56

Contact: Mark Larson

Report Date: 07.31.2020 17:42

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	668222-007	668222-008	668222-009	668222-010	668222-011	668222-012
	<i>Field Id:</i>	S-4 .5	S-4 1	S-5 .5	S-5 1	S-6 .5	S-6 1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.24.2020 11:42	07.24.2020 11:43	07.24.2020 11:30	07.24.2020 11:32	07.24.2020 12:00	07.24.2020 12:01
BTEX by EPA 8021B	<i>Extracted:</i>	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30	07.29.2020 16:30
	<i>Analyzed:</i>	07.30.2020 02:48	07.30.2020 03:09	07.30.2020 03:29	07.30.2020 03:49	07.30.2020 04:10	07.30.2020 04:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00398 0.00398	<0.00398 0.00398	<0.00401 0.00401	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40
	<i>Analyzed:</i>	07.29.2020 11:11	07.29.2020 11:18	07.29.2020 11:24	07.29.2020 11:42	07.29.2020 11:48	07.29.2020 12:07
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		287 5.05	116 5.05	1000 X 5.05	235 4.97	6000 49.5	900 25.2
TPH by SW8015 Mod	<i>Extracted:</i>	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00
	<i>Analyzed:</i>	07.27.2020 14:33	07.27.2020 14:52	07.27.2020 15:12	07.27.2020 15:31	07.27.2020 16:09	07.27.2020 16:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 668222

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 13 E Frac Pond

Project Id: 20-0107-14

Contact: Mark Larson

Project Location:

Date Received in Lab: Mon 07.27.2020 08:56

Report Date: 07.31.2020 17:42

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	668222-013	668222-014	668222-015	668222-016	668222-017	668222-018
	<i>Field Id:</i>	S-7 .5	S-7 1	S-8 .5	S-8 1	S-9 .5	S-9 1
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	07.24.2020 11:46	07.24.2020 11:47	07.24.2020 11:36	07.24.2020 11:38	07.24.2020 12:35	07.24.2020 12:36
BTEX by EPA 8021B	<i>Extracted:</i>	07.29.2020 16:30	07.29.2020 16:30	07.30.2020 08:00	07.30.2020 17:15	07.30.2020 17:15	07.30.2020 17:15
	<i>Analyzed:</i>	07.30.2020 04:51	07.30.2020 05:11	07.30.2020 10:14	07.31.2020 03:42	07.31.2020 04:03	07.31.2020 04:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00398 0.00398	<0.00397 0.00397	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200
Chloride by EPA 300	<i>Extracted:</i>	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.29.2020 08:40	07.27.2020 16:00
	<i>Analyzed:</i>	07.29.2020 12:13	07.29.2020 12:19	07.29.2020 12:25	07.29.2020 12:31	07.29.2020 12:38	07.27.2020 17:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		348 4.98	177 5.00	255 4.96	29.8 4.99	6440 50.0	3900 50.4
TPH by SW8015 Mod	<i>Extracted:</i>	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00	07.27.2020 11:00
	<i>Analyzed:</i>	07.27.2020 16:47	07.27.2020 17:07	07.27.2020 17:26	07.27.2020 17:45	07.27.2020 18:04	07.27.2020 18:23
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8

BRL - Below Reporting Limit



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

Analytical Report 668222

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado Draw 13 E Frac Pond

20-0107-14

07.31.2020

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.31.2020

Project Manager: **Mark Larson**

Larson and Associates, Inc.

P. O. Box 50685

Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **668222**

Salado Draw 13 E Frac Pond

Project Address:

Mark Larson :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 668222. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 668222 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Holly Taylor
Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 668222****Larson and Associates, Inc., Midland, TX**

Salado Draw 13 E Frac Pond

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 .5	S	07.24.2020 11:25		668222-001
S-1 1	S	07.24.2020 11:26		668222-002
S-2 .5	S	07.24.2020 11:30		668222-003
S2 1	S	07.24.2020 11:31		668222-004
S-3 .5	S	07.24.2020 11:35		668222-005
S-3 1	S	07.24.2020 11:36		668222-006
S-4 .5	S	07.24.2020 11:42		668222-007
S-4 1	S	07.24.2020 11:43		668222-008
S-5 .5	S	07.24.2020 11:30		668222-009
S-5 1	S	07.24.2020 11:32		668222-010
S-6 .5	S	07.24.2020 12:00		668222-011
S-6 1	S	07.24.2020 12:01		668222-012
S-7 .5	S	07.24.2020 11:46		668222-013
S-7 1	S	07.24.2020 11:47		668222-014
S-8 .5	S	07.24.2020 11:36		668222-015
S-8 1	S	07.24.2020 11:38		668222-016
S-9 .5	S	07.24.2020 12:35		668222-017
S-9 1	S	07.24.2020 12:36		668222-018



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado Draw 13 E Frac Pond

Project ID: 20-0107-14
Work Order Number(s): 668222

Report Date: 07.31.2020
Date Received: 07.27.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3132893 Chloride by EPA 300

Lab Sample ID 668318-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 668222-007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017.

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



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-1.5
Lab Sample Id: 668222-001

Matrix: Soil
Date Collected: 07.24.2020 11:25

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.27.2020 12:00

Basis: Wet Weight

Seq Number: 3132744

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	86.0	5.00	mg/kg	07.27.2020 13:38		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 12:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 12:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 12:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 12:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	07.27.2020 12:01	
o-Terphenyl	84-15-1	111	%	70-130	07.27.2020 12:01	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-1 .5
Lab Sample Id: 668222-001

Matrix: Soil
Date Collected: 07.24.2020 11:25

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.29.2020 23:43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.29.2020 23:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.29.2020 23:43	
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.29.2020 23:43	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-1 1
Lab Sample Id: 668222-002

Matrix: Soil
Date Collected: 07.24.2020 11:26

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.27.2020 12:00

Basis: Wet Weight

Seq Number: 3132744

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	80.8	5.00	mg/kg	07.27.2020 13:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 12:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 12:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 12:58	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 12:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	07.27.2020 12:58	
o-Terphenyl	84-15-1	115	%	70-130	07.27.2020 12:58	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-1 1**
Lab Sample Id: 668222-002

Matrix: Soil
Date Collected: 07.24.2020 11:26

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.30.2020 00:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.30.2020 00:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.30.2020 00:03		
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.30.2020 00:03		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-2.5
Lab Sample Id: 668222-003

Matrix: Soil
Date Collected: 07.24.2020 11:30

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.28.2020 14:20

Basis: Wet Weight

Seq Number: 3132874

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12000	101	mg/kg	07.29.2020 02:49		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.27.2020 13:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	87.4	49.9	mg/kg	07.27.2020 13:17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.27.2020 13:17	U	1
Total TPH	PHC635	87.4	49.9	mg/kg	07.27.2020 13:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-130	07.27.2020 13:17	
o-Terphenyl	84-15-1	130	%	70-130	07.27.2020 13:17	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-2 .5
Lab Sample Id: 668222-003

Matrix: Soil
Date Collected: 07.24.2020 11:30

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.30.2020 00:24	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.30.2020 00:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.30.2020 00:24		
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 00:24		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S2 1
Lab Sample Id: 668222-004

Matrix: Soil
Date Collected: 07.24.2020 11:31

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.28.2020 14:20

Basis: Wet Weight

Seq Number: 3132874

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4020	49.8	mg/kg	07.29.2020 02:56		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.27.2020 13:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.27.2020 13:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.27.2020 13:36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.27.2020 13:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-130	07.27.2020 13:36	
o-Terphenyl	84-15-1	129	%	70-130	07.27.2020 13:36	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S2 1
Lab Sample Id: 668222-004

Matrix: Soil
Date Collected: 07.24.2020 11:31

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 00:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 00:44	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.30.2020 00:44		
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 00:44		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-3.5
Lab Sample Id: 668222-005

Matrix: Soil
Date Collected: 07.24.2020 11:35

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.28.2020 14:20

Basis: Wet Weight

Seq Number: 3132874

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7550	50.0	mg/kg	07.29.2020 03:02		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 13:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 13:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 13:55	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 13:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	07.27.2020 13:55	
o-Terphenyl	84-15-1	118	%	70-130	07.27.2020 13:55	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-3.5
Lab Sample Id: 668222-005

Matrix: Soil
Date Collected: 07.24.2020 11:35

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.30.2020 02:07	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.30.2020 02:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.30.2020 02:07		
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 02:07		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-3 1**
Lab Sample Id: 668222-006

Matrix: Soil
Date Collected: 07.24.2020 11:36

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.28.2020 14:20

Basis: Wet Weight

Seq Number: 3132874

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4650	50.5	mg/kg	07.29.2020 03:08		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 14:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 14:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	07.27.2020 14:14	
o-Terphenyl	84-15-1	123	%	70-130	07.27.2020 14:14	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-3 1**
Lab Sample Id: 668222-006

Matrix: Soil
Date Collected: 07.24.2020 11:36

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.30.2020 02:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.30.2020 02:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.30.2020 02:28	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.30.2020 02:28	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-4.5
Lab Sample Id: 668222-007

Matrix: Soil
Date Collected: 07.24.2020 11:42

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	287	5.05	mg/kg	07.29.2020 11:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.27.2020 14:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.27.2020 14:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.27.2020 14:33	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.27.2020 14:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	07.27.2020 14:33	
o-Terphenyl	84-15-1	107	%	70-130	07.27.2020 14:33	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-4.5
Lab Sample Id: 668222-007

Matrix: Soil
Date Collected: 07.24.2020 11:42

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	07.30.2020 02:48	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.30.2020 02:48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 02:48	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.30.2020 02:48	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-4 1**
Lab Sample Id: 668222-008

Matrix: Soil
Date Collected: 07.24.2020 11:43

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	116	5.05	mg/kg	07.29.2020 11:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.27.2020 14:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.27.2020 14:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.27.2020 14:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.27.2020 14:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	07.27.2020 14:52	
o-Terphenyl	84-15-1	112	%	70-130	07.27.2020 14:52	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-4 1**
Lab Sample Id: 668222-008

Matrix: Soil
Date Collected: 07.24.2020 11:43

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 03:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 03:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.30.2020 03:09		
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.30.2020 03:09		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-5.5
Lab Sample Id: 668222-009

Matrix: Soil
Date Collected: 07.24.2020 11:30

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1000	5.05	mg/kg	07.29.2020 11:24	X	1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 15:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 15:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 15:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 15:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	07.27.2020 15:12	
o-Terphenyl	84-15-1	127	%	70-130	07.27.2020 15:12	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-5 .5
Lab Sample Id: 668222-009

Matrix: Soil
Date Collected: 07.24.2020 11:30

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 03:29	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 03:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.30.2020 03:29	
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 03:29	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-5 1
Lab Sample Id: 668222-010

Matrix: Soil
Date Collected: 07.24.2020 11:32

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	235	4.97	mg/kg	07.29.2020 11:42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 15:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 15:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 15:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	07.27.2020 15:31	
o-Terphenyl	84-15-1	119	%	70-130	07.27.2020 15:31	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-5 1**
Lab Sample Id: 668222-010

Matrix: Soil
Date Collected: 07.24.2020 11:32

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	07.30.2020 03:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.30.2020 03:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.30.2020 03:49		
4-Bromofluorobenzene	460-00-4	101	%	70-130	07.30.2020 03:49		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-6.5
Lab Sample Id: 668222-011

Matrix: Soil
Date Collected: 07.24.2020 12:00

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6000	49.5	mg/kg	07.29.2020 11:48		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.27.2020 16:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.27.2020 16:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.27.2020 16:09	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.27.2020 16:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	07.27.2020 16:09	
o-Terphenyl	84-15-1	110	%	70-130	07.27.2020 16:09	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-6 .5**
Lab Sample Id: 668222-011

Matrix: Soil
Date Collected: 07.24.2020 12:00

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.30.2020 04:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.30.2020 04:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 04:10		
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.30.2020 04:10		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-6 1**
Lab Sample Id: 668222-012

Matrix: Soil
Date Collected: 07.24.2020 12:01

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	900	25.2	mg/kg	07.29.2020 12:07		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.27.2020 16:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.27.2020 16:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.27.2020 16:28	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.27.2020 16:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-130	07.27.2020 16:28	
o-Terphenyl	84-15-1	126	%	70-130	07.27.2020 16:28	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-6 1**
Lab Sample Id: 668222-012

Matrix: Soil
Date Collected: 07.24.2020 12:01

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 04:30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 04:30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.30.2020 04:30		
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.30.2020 04:30		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-7.5
Lab Sample Id: 668222-013

Matrix: Soil
Date Collected: 07.24.2020 11:46

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	348	4.98	mg/kg	07.29.2020 12:13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 16:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 16:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 16:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 16:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	07.27.2020 16:47	
o-Terphenyl	84-15-1	120	%	70-130	07.27.2020 16:47	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-7.5
Lab Sample Id: 668222-013

Matrix: Soil
Date Collected: 07.24.2020 11:46

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 04:51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 04:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.30.2020 04:51		
1,4-Difluorobenzene	540-36-3	104	%	70-130	07.30.2020 04:51		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-7 1
Lab Sample Id: 668222-014

Matrix: Soil
Date Collected: 07.24.2020 11:47

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	177	5.00	mg/kg	07.29.2020 12:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 17:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 17:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 17:07	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 17:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	07.27.2020 17:07	
o-Terphenyl	84-15-1	112	%	70-130	07.27.2020 17:07	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: S-7 1
Lab Sample Id: 668222-014

Matrix: Soil
Date Collected: 07.24.2020 11:47

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.29.2020 16:30

Basis: Wet Weight

Seq Number: 3133018

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.30.2020 05:11	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.30.2020 05:11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.30.2020 05:11		
1,4-Difluorobenzene	540-36-3	104	%	70-130	07.30.2020 05:11		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-8 .5**
Lab Sample Id: 668222-015

Matrix: Soil
Date Collected: 07.24.2020 11:36

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	255	4.96	mg/kg	07.29.2020 12:25		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.27.2020 17:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.27.2020 17:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.27.2020 17:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.27.2020 17:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	07.27.2020 17:26	
o-Terphenyl	84-15-1	113	%	70-130	07.27.2020 17:26	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-8 .5**
Lab Sample Id: 668222-015

Matrix: Soil
Date Collected: 07.24.2020 11:36

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.30.2020 08:00

Basis: Wet Weight

Seq Number: 3133086

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	07.30.2020 10:14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
Total BTEX		<0.00198	0.00198	mg/kg	07.30.2020 10:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	07.30.2020 10:14		
4-Bromofluorobenzene	460-00-4	113	%	70-130	07.30.2020 10:14		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-8 1**
Lab Sample Id: 668222-016

Matrix: Soil
Date Collected: 07.24.2020 11:38

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.8	4.99	mg/kg	07.29.2020 12:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	07.27.2020 17:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	07.27.2020 17:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.27.2020 17:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.27.2020 17:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	07.27.2020 17:45	
o-Terphenyl	84-15-1	122	%	70-130	07.27.2020 17:45	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-8 1**
Lab Sample Id: 668222-016

Matrix: Soil
Date Collected: 07.24.2020 11:38

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.30.2020 17:15

Basis: Wet Weight

Seq Number: 3133159

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	07.31.2020 03:42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	07.31.2020 03:42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.31.2020 03:42		
4-Bromofluorobenzene	460-00-4	106	%	70-130	07.31.2020 03:42		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-9.5**
Lab Sample Id: 668222-017

Matrix: Soil
Date Collected: 07.24.2020 12:35

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.29.2020 08:40

Basis: Wet Weight

Seq Number: 3132893

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6440	50.0	mg/kg	07.29.2020 12:38		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	07.27.2020 18:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	07.27.2020 18:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.27.2020 18:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.27.2020 18:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	07.27.2020 18:04	
o-Terphenyl	84-15-1	116	%	70-130	07.27.2020 18:04	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-9.5**
Lab Sample Id: 668222-017

Matrix: Soil
Date Collected: 07.24.2020 12:35

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.30.2020 17:15

Basis: Wet Weight

Seq Number: 3133159

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.31.2020 04:03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.31.2020 04:03	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	07.31.2020 04:03		
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.31.2020 04:03		



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-9 1**
Lab Sample Id: 668222-018

Matrix: Soil
Date Collected: 07.24.2020 12:36

Date Received: 07.27.2020 08:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.27.2020 16:00

Basis: Wet Weight

Seq Number: 3132746

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3900	50.4	mg/kg	07.27.2020 17:34		10

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.27.2020 11:00

Basis: Wet Weight

Seq Number: 3132793

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	07.27.2020 18:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	07.27.2020 18:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.27.2020 18:23	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.27.2020 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-130	07.27.2020 18:23	
o-Terphenyl	84-15-1	126	%	70-130	07.27.2020 18:23	



Certificate of Analytical Results 668222

Larson and Associates, Inc., Midland, TX

Salado Draw 13 E Frac Pond

Sample Id: **S-9 1**
Lab Sample Id: 668222-018

Matrix: Soil
Date Collected: 07.24.2020 12:36

Date Received: 07.27.2020 08:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.30.2020 17:15

Basis: Wet Weight

Seq Number: 3133159

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.31.2020 04:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.31.2020 04:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.31.2020 04:23		
4-Bromofluorobenzene	460-00-4	107	%	70-130	07.31.2020 04:23		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Larson and Associates, Inc.
Salado Draw 13 E Frac Pond

Analytical Method: Chloride by EPA 300

Seq Number: 3132744

MB Sample Id: 7708123-1-BLK

Matrix: Solid

LCS Sample Id: 7708123-1-BKS

Prep Method: E300P

Date Prep: 07.27.2020

LCSD Sample Id: 7708123-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	247	99	247	99	90-110	0	20	mg/kg	07.27.2020 12:32	

Analytical Method: Chloride by EPA 300

Seq Number: 3132746

MB Sample Id: 7708160-1-BLK

Matrix: Solid

LCS Sample Id: 7708160-1-BKS

Prep Method: E300P

Date Prep: 07.27.2020

LCSD Sample Id: 7708160-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	263	105	264	106	90-110	0	20	mg/kg	07.27.2020 16:43	

Analytical Method: Chloride by EPA 300

Seq Number: 3132874

MB Sample Id: 7708211-1-BLK

Matrix: Solid

LCS Sample Id: 7708211-1-BKS

Prep Method: E300P

Date Prep: 07.28.2020

LCSD Sample Id: 7708211-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	241	96	241	96	90-110	0	20	mg/kg	07.29.2020 00:04	

Analytical Method: Chloride by EPA 300

Seq Number: 3132893

MB Sample Id: 7708262-1-BLK

Matrix: Solid

LCS Sample Id: 7708262-1-BKS

Prep Method: E300P

Date Prep: 07.29.2020

LCSD Sample Id: 7708262-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	236	94	236	94	90-110	0	20	mg/kg	07.29.2020 09:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3132744

Parent Sample Id: 668226-001

Matrix: Soil

MS Sample Id: 668226-001 S

Prep Method: E300P

Date Prep: 07.27.2020

MSD Sample Id: 668226-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	110	250	430	128	433	129	90-110	1	20	mg/kg	07.27.2020 13:02	X

Analytical Method: Chloride by EPA 300

Seq Number: 3132746

Parent Sample Id: 668223-001

Matrix: Soil

MS Sample Id: 668223-001 S

Prep Method: E300P

Date Prep: 07.27.2020

MSD Sample Id: 668223-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	454	250	694	96	693	96	90-110	0	20	mg/kg	07.27.2020 17:02	

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

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

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

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



Larson and Associates, Inc.
Salado Draw 13 E Frac Pond

Analytical Method: Chloride by EPA 300

Seq Number: 3132746

Parent Sample Id: 668264-006

Matrix: Soil

MS Sample Id: 668264-006 S

Prep Method: E300P

Date Prep: 07.27.2020

MSD Sample Id: 668264-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	57.0	251	312	102	326	107	90-110	4	20	mg/kg	07.27.2020 18:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3132874

Parent Sample Id: 668296-006

Matrix: Soil

MS Sample Id: 668296-006 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668296-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.18	250	256	100	255	100	90-110	0	20	mg/kg	07.29.2020 00:23	

Analytical Method: Chloride by EPA 300

Seq Number: 3132874

Parent Sample Id: 668305-012

Matrix: Soil

MS Sample Id: 668305-012 S

Prep Method: E300P

Date Prep: 07.28.2020

MSD Sample Id: 668305-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	23.9	248	269	99	269	99	90-110	0	20	mg/kg	07.29.2020 01:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3132893

Parent Sample Id: 668222-009

Matrix: Soil

MS Sample Id: 668222-009 S

Prep Method: E300P

Date Prep: 07.29.2020

MSD Sample Id: 668222-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1000	253	1210	83	1210	83	90-110	0	20	mg/kg	07.29.2020 11:30	X

Analytical Method: Chloride by EPA 300

Seq Number: 3132893

Parent Sample Id: 668318-001

Matrix: Soil

MS Sample Id: 668318-001 S

Prep Method: E300P

Date Prep: 07.29.2020

MSD Sample Id: 668318-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	86.5	252	334	98	330	97	90-110	1	20	mg/kg	07.29.2020 10:04	

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

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

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

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



Larson and Associates, Inc.
Salado Draw 13 E Frac Pond

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132793

MB Sample Id: 7708142-1-BLK

Matrix: Solid

LCS Sample Id: 7708142-1-BKS

Prep Method: SW8015P

Date Prep: 07.27.2020

LCSD Sample Id: 7708142-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	907	91	902	90	70-130	1	20	mg/kg	07.27.2020 11:23	
Diesel Range Organics (DRO)	<50.0	1000	973	97	885	89	70-130	9	20	mg/kg	07.27.2020 11:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		130		128		70-130	%	07.27.2020 11:23
o-Terphenyl	118		130		122		70-130	%	07.27.2020 11:23

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132793

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.27.2020

MB Sample Id: 7708142-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.27.2020 11:04	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3132793

Matrix: Soil

Prep Method: SW8015P

Date Prep: 07.27.2020

Parent Sample Id: 668222-001

MS Sample Id: 668222-001 S

MSD Sample Id: 668222-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	815	82	816	82	70-130	0	20	mg/kg	07.27.2020 12:20	
Diesel Range Organics (DRO)	<49.9	997	833	84	831	83	70-130	0	20	mg/kg	07.27.2020 12:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		116		70-130	%	07.27.2020 12:20
o-Terphenyl	106		108		70-130	%	07.27.2020 12:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133018

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.29.2020

MB Sample Id: 7708367-1-BLK

LCS Sample Id: 7708367-1-BKS

LCSD Sample Id: 7708367-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0988	99	0.103	103	70-130	4	35	mg/kg	07.29.2020 19:37	
Toluene	<0.00200	0.100	0.0920	92	0.0998	100	70-130	8	35	mg/kg	07.29.2020 19:37	
Ethylbenzene	<0.00200	0.100	0.0951	95	0.100	100	70-130	5	35	mg/kg	07.29.2020 19:37	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.205	103	70-130	5	35	mg/kg	07.29.2020 19:37	
o-Xylene	<0.00200	0.100	0.0945	95	0.0996	100	70-130	5	35	mg/kg	07.29.2020 19:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		98		99		70-130	%	07.29.2020 19:37
4-Bromofluorobenzene	102		98		101		70-130	%	07.29.2020 19:37

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

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

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

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



Larson and Associates, Inc.
Salado Draw 13 E Frac Pond

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133086

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.30.2020

MB Sample Id: 7708399-1-BLK

LCS Sample Id: 7708399-1-BKS

LCSD Sample Id: 7708399-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.112	112	0.114	114	70-130	2	35	mg/kg	07.30.2020 07:52	
Toluene	<0.00200	0.100	0.112	112	0.112	112	70-130	0	35	mg/kg	07.30.2020 07:52	
Ethylbenzene	<0.00200	0.100	0.110	110	0.109	109	70-130	1	35	mg/kg	07.30.2020 07:52	
m,p-Xylenes	<0.00400	0.200	0.218	109	0.215	108	70-130	1	35	mg/kg	07.30.2020 07:52	
o-Xylene	<0.00200	0.100	0.108	108	0.106	106	70-130	2	35	mg/kg	07.30.2020 07:52	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	105		94		95		70-130			%	07.30.2020 07:52	
4-Bromofluorobenzene	98		110		110		70-130			%	07.30.2020 07:52	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133159

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.30.2020

MB Sample Id: 7708470-1-BLK

LCS Sample Id: 7708470-1-BKS

LCSD Sample Id: 7708470-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0957	96	0.100	100	70-130	4	35	mg/kg	07.30.2020 19:28	
Toluene	<0.00200	0.100	0.0810	81	0.0852	85	70-130	5	35	mg/kg	07.30.2020 19:28	
Ethylbenzene	<0.00200	0.100	0.0912	91	0.0959	96	70-130	5	35	mg/kg	07.30.2020 19:28	
m,p-Xylenes	<0.00400	0.200	0.186	93	0.196	98	70-130	5	35	mg/kg	07.30.2020 19:28	
o-Xylene	<0.00200	0.100	0.0911	91	0.0954	95	70-130	5	35	mg/kg	07.30.2020 19:28	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	102		98		99		70-130			%	07.30.2020 19:28	
4-Bromofluorobenzene	103		97		99		70-130			%	07.30.2020 19:28	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133018

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.29.2020

Parent Sample Id: 668222-001

MS Sample Id: 668222-001 S

MSD Sample Id: 668222-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.103	103	0.0904	91	70-130	13	35	mg/kg	07.29.2020 20:17	
Toluene	<0.00200	0.100	0.102	102	0.0900	90	70-130	13	35	mg/kg	07.29.2020 20:17	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0881	88	70-130	14	35	mg/kg	07.29.2020 20:17	
m,p-Xylenes	<0.00400	0.200	0.207	104	0.181	91	70-130	13	35	mg/kg	07.29.2020 20:17	
o-Xylene	<0.00200	0.100	0.0997	100	0.0878	88	70-130	13	35	mg/kg	07.29.2020 20:17	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene			98		99		70-130			%	07.29.2020 20:17	
4-Bromofluorobenzene			101		101		70-130			%	07.29.2020 20:17	

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

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

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

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



Larson and Associates, Inc.
Salado Draw 13 E Frac Pond

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133086

Parent Sample Id: 668222-015

Matrix: Soil

MS Sample Id: 668222-015 S

Prep Method: SW5035A

Date Prep: 07.30.2020

MSD Sample Id: 668222-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0964	97	0.0727	73	70-130	28	35	mg/kg	07.30.2020 08:33	
Toluene	<0.00198	0.0992	0.0919	93	0.0742	75	70-130	21	35	mg/kg	07.30.2020 08:33	
Ethylbenzene	<0.00198	0.0992	0.0901	91	0.0742	75	70-130	19	35	mg/kg	07.30.2020 08:33	
m,p-Xylenes	<0.00397	0.198	0.178	90	0.148	75	70-130	18	35	mg/kg	07.30.2020 08:33	
o-Xylene	<0.00198	0.0992	0.0897	90	0.0756	76	70-130	17	35	mg/kg	07.30.2020 08:33	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		95		70-130	%	07.30.2020 08:33
4-Bromofluorobenzene	114		113		70-130	%	07.30.2020 08:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133159

Parent Sample Id: 668264-007

Matrix: Soil

MS Sample Id: 668264-007 S

Prep Method: SW5035A

Date Prep: 07.30.2020

MSD Sample Id: 668264-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0952	96	0.0927	93	70-130	3	35	mg/kg	07.30.2020 20:09	
Toluene	0.0423	0.0990	0.114	72	0.107	65	70-130	6	35	mg/kg	07.30.2020 20:09	X
Ethylbenzene	0.0324	0.0990	0.109	77	0.105	73	70-130	4	35	mg/kg	07.30.2020 20:09	
m,p-Xylenes	0.109	0.198	0.246	69	0.236	64	70-130	4	35	mg/kg	07.30.2020 20:09	X
o-Xylene	0.0326	0.0990	0.107	75	0.104	72	70-130	3	35	mg/kg	07.30.2020 20:09	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		97		70-130	%	07.30.2020 20:09
4-Bromofluorobenzene	104		103		70-130	%	07.30.2020 20:09

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

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

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

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 07.27.2020 08.56.00 AM

Work Order #: 668222

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes BTEX was in bulk container
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 07.27.2020

Checklist reviewed by:



Holly Taylor

Date: 07.28.2020

Certificate of Analysis Summary 671554

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac 13 E

Project Id: 20-0107-14

Contact: Mark Larson

Project Location:

Date Received in Lab: Wed 09.02.2020 08:31

Report Date: 09.04.2020 08:55

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	671554-001	671554-002	671554-003	671554-004	671554-005	671554-006
	<i>Field Id:</i>	S-10 1'	S-10 2'	S-10 5'	S-10 10'	S-9 1'	S-9 3'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 12:50	08.31.2020 12:52	08.31.2020 12:55	08.31.2020 12:57	08.31.2020 13:45	08.31.2020 13:47
BTEX by EPA 8021B	<i>Extracted:</i>	09.02.2020 16:00	09.02.2020 16:00	09.02.2020 16:00	09.02.2020 16:00	09.02.2020 16:00	09.02.2020 16:00
	<i>Analyzed:</i>	09.03.2020 05:35	09.03.2020 05:56	09.03.2020 06:16	09.03.2020 06:37	09.03.2020 06:57	09.03.2020 07:18
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00397 0.00397	<0.00398 0.00398	<0.00400 0.00400	<0.00397 0.00397	<0.00399 0.00399	<0.00402 0.00402
o-Xylene		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30
	<i>Analyzed:</i>	09.02.2020 17:07	09.02.2020 17:13	09.02.2020 17:28	09.02.2020 17:34	09.02.2020 17:49	09.02.2020 17:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		882 25.0	1080 25.0	5020 50.0	199 5.00	2230 25.0	3740 25.0
TPH by SW8015 Mod	<i>Extracted:</i>	09.02.2020 17:00	09.02.2020 17:00	09.02.2020 17:00	09.02.2020 17:00	09.02.2020 17:00	09.02.2020 17:00
	<i>Analyzed:</i>	09.02.2020 23:18	09.03.2020 00:26	09.03.2020 00:49	09.03.2020 01:12	09.03.2020 01:35	09.03.2020 01:57
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit



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

Certificate of Analysis Summary 671554



Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac 13 E

Project Id: 20-0107-14

Date Received in Lab: Wed 09.02.2020 08:31

Contact: Mark Larson

Report Date: 09.04.2020 08:55

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	671554-007	671554-008	671554-009	671554-010	671554-011	671554-012
	<i>Field Id:</i>	S-9 5'	S-9 10'	S-6 1'	S-6 3'	S-6 5'	S-6 10'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.31.2020 13:50	08.31.2020 13:52	09.01.2020 09:15	09.01.2020 09:17	09.01.2020 09:20	09.01.2020 09:23
BTEX by EPA 8021B	<i>Extracted:</i>			09.02.2020 11:00	09.02.2020 11:00		
	<i>Analyzed:</i>			09.02.2020 14:18	09.02.2020 14:38		
	<i>Units/RL:</i>			mg/kg RL	mg/kg RL		
Benzene				<0.00199 0.00199	<0.00202 0.00202		
Toluene				<0.00199 0.00199	<0.00202 0.00202		
Ethylbenzene				<0.00199 0.00199	<0.00202 0.00202		
m,p-Xylenes				<0.00398 0.00398	<0.00403 0.00403		
o-Xylene				<0.00199 0.00199	<0.00202 0.00202		
Total Xylenes				<0.00199 0.00199	<0.00202 0.00202		
Total BTEX				<0.00199 0.00199	<0.00202 0.00202		
Chloride by EPA 300	<i>Extracted:</i>	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 15:30	09.02.2020 16:51
	<i>Analyzed:</i>	09.02.2020 18:00	09.02.2020 18:05	09.02.2020 18:10	09.02.2020 18:15	09.02.2020 18:21	09.02.2020 18:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4340 25.0	548 5.00	647 5.00	191 5.00	11.5 5.00	24.4 5.05
TPH by SW8015 Mod	<i>Extracted:</i>			09.02.2020 17:00	09.02.2020 17:00		
	<i>Analyzed:</i>			09.03.2020 02:20	09.03.2020 02:43		
	<i>Units/RL:</i>			mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)				<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)				<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)				<50.0 50.0	<49.9 49.9		
Total TPH				<50.0 50.0	<49.9 49.9		

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 671554



Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac 13 E

Project Id: 20-0107-14

Date Received in Lab: Wed 09.02.2020 08:31

Contact: Mark Larson

Report Date: 09.04.2020 08:55

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	671554-013	671554-014	671554-015	671554-016	671554-017	671554-018
	<i>Field Id:</i>	S-3 1'	S-3 3'	S-3 5'	S-3 10'	S-2 1'	S-2 3'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	09.01.2020 09:50	09.01.2020 09:52	09.01.2020 09:55	09.01.2020 09:57	09.01.2020 10:35	09.01.2020 10:38
BTEX by EPA 8021B	<i>Extracted:</i>	09.02.2020 11:00	09.02.2020 11:00			09.02.2020 11:00	09.02.2020 11:00
	<i>Analyzed:</i>	09.02.2020 14:59	09.02.2020 15:19			09.02.2020 15:39	09.02.2020 16:00
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL			mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00401 0.00401	<0.00401 0.00401			<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00200 0.00200			<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51
	<i>Analyzed:</i>	09.02.2020 19:14	09.02.2020 19:24	09.02.2020 19:34	09.02.2020 19:44	09.02.2020 20:14	09.02.2020 20:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		3960 49.9	104 4.95	26.9 5.02	43.5 5.00	3380 50.0	1720 24.9
TPH by SW8015 Mod	<i>Extracted:</i>	09.02.2020 17:00	09.02.2020 17:00			09.02.2020 17:00	09.02.2020 17:00
	<i>Analyzed:</i>	09.03.2020 03:06	09.03.2020 03:29			09.03.2020 04:14	09.03.2020 04:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL			mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.8 49.8			<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8			<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8			<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.8 49.8			<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 671554

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac 13 E

Project Id: 20-0107-14

Contact: Mark Larson

Project Location:

Date Received in Lab: Wed 09.02.2020 08:31

Report Date: 09.04.2020 08:55

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	671554-019	671554-020	671554-021	671554-022		
	<i>Field Id:</i>	S-2 5'	S-2 10'	S-11 0.5'	S-11 1'		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	09.01.2020 10:40	09.01.2020 10:45	09.01.2020 12:30	09.01.2020 12:35		
BTEX by EPA 8021B	<i>Extracted:</i>			09.02.2020 11:00	09.02.2020 14:30		
	<i>Analyzed:</i>			09.02.2020 16:20	09.02.2020 16:41		
	<i>Units/RL:</i>			mg/kg RL	mg/kg RL		
Benzene				<0.00202 0.00202	<0.00198 0.00198		
Toluene				<0.00202 0.00202	<0.00198 0.00198		
Ethylbenzene				<0.00202 0.00202	<0.00198 0.00198		
m,p-Xylenes				<0.00403 0.00403	<0.00397 0.00397		
o-Xylene				<0.00202 0.00202	<0.00198 0.00198		
Total Xylenes				<0.00202 0.00202	<0.00198 0.00198		
Total BTEX				<0.00202 0.00202	<0.00198 0.00198		
Chloride by EPA 300	<i>Extracted:</i>	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51	09.02.2020 16:51		
	<i>Analyzed:</i>	09.02.2020 20:34	09.02.2020 20:44	09.02.2020 20:54	09.02.2020 21:04		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		79.8 4.96	36.7 5.04	22.9 4.95	43.2 4.95		
TPH by SW8015 Mod	<i>Extracted:</i>			09.02.2020 17:00	09.02.2020 17:00		
	<i>Analyzed:</i>			09.03.2020 05:00	09.03.2020 05:23		
	<i>Units/RL:</i>			mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)				<49.8 49.8	<50.0 50.0		
Diesel Range Organics (DRO)				<49.8 49.8	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)				<49.8 49.8	<50.0 50.0		
Total TPH				<49.8 49.8	<50.0 50.0		

BRL - Below Reporting Limit

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



Analytical Report 671554

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado Draw Frac 13 E

20-0107-14

09.04.2020

Collected By: Client



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

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



09.04.2020

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

Reference: Eurofins Xenco, LLC Report No(s): **671554**
Salado Draw Frac 13 E
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 671554. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 671554 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Holly Taylor
Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-10 1'	S	08.31.2020 12:50		671554-001
S-10 2'	S	08.31.2020 12:52		671554-002
S-10 5'	S	08.31.2020 12:55		671554-003
S-10 10'	S	08.31.2020 12:57		671554-004
S-9 1'	S	08.31.2020 13:45		671554-005
S-9 3'	S	08.31.2020 13:47		671554-006
S-9 5'	S	08.31.2020 13:50		671554-007
S-9 10'	S	08.31.2020 13:52		671554-008
S-6 1'	S	09.01.2020 09:15		671554-009
S-6 3'	S	09.01.2020 09:17		671554-010
S-6 5'	S	09.01.2020 09:20		671554-011
S-6 10'	S	09.01.2020 09:23		671554-012
S-3 1'	S	09.01.2020 09:50		671554-013
S-3 3'	S	09.01.2020 09:52		671554-014
S-3 5'	S	09.01.2020 09:55		671554-015
S-3 10'	S	09.01.2020 09:57		671554-016
S-2 1'	S	09.01.2020 10:35		671554-017
S-2 3'	S	09.01.2020 10:38		671554-018
S-2 5'	S	09.01.2020 10:40		671554-019
S-2 10'	S	09.01.2020 10:45		671554-020
S-11 0.5'	S	09.01.2020 12:30		671554-021
S-11 1'	S	09.01.2020 12:35		671554-022



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado Draw Frac 13 E

Project ID: 20-0107-14
Work Order Number(s): 671554

Report Date: 09.04.2020
Date Received: 09.02.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3136259 BTEX by EPA 8021B

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

Samples affected are: 671554-009 SD,671554-017,671554-022,671554-014.



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 1'**
Lab Sample Id: 671554-001

Matrix: Soil
Date Collected: 08.31.2020 12:50

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	882	25.0	mg/kg	09.02.2020 17:07		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.02.2020 17:00

Basis: Wet Weight

Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.02.2020 23:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.02.2020 23:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.02.2020 23:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.02.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.02.2020 23:18	
o-Terphenyl	84-15-1	86	%	70-130	09.02.2020 23:18	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 1'**
Lab Sample Id: 671554-001

Matrix: Soil
Date Collected: 08.31.2020 12:50

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.03.2020 05:35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.03.2020 05:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.03.2020 05:35		
4-Bromofluorobenzene	460-00-4	112	%	70-130	09.03.2020 05:35		



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 2'**
Lab Sample Id: 671554-002

Matrix: Soil
Date Collected: 08.31.2020 12:52

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1080	25.0	mg/kg	09.02.2020 17:13		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.02.2020 17:00

Basis: Wet Weight

Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 00:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 00:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 00:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 00:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	09.03.2020 00:26	
o-Terphenyl	84-15-1	88	%	70-130	09.03.2020 00:26	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 2'**
Lab Sample Id: 671554-002

Matrix: Soil
Date Collected: 08.31.2020 12:52

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.03.2020 05:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.03.2020 05:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	09.03.2020 05:56	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.03.2020 05:56	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 5'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-003 Date Collected: 08.31.2020 12:55
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 15:30 Basis: Wet Weight
 Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5020	50.0	mg/kg	09.02.2020 17:28		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.03.2020 00:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.03.2020 00:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.03.2020 00:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.03.2020 00:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	09.03.2020 00:49	
o-Terphenyl	84-15-1	98	%	70-130	09.03.2020 00:49	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 5'**
Lab Sample Id: 671554-003

Matrix: Soil
Date Collected: 08.31.2020 12:55

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	09.03.2020 06:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.03.2020 06:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.03.2020 06:16	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.03.2020 06:16	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 10'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-004 Date Collected: 08.31.2020 12:57
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 15:30 Basis: Wet Weight
 Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	199	5.00	mg/kg	09.02.2020 17:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.03.2020 01:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.03.2020 01:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.03.2020 01:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.03.2020 01:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	09.03.2020 01:12	
o-Terphenyl	84-15-1	87	%	70-130	09.03.2020 01:12	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-10 10'**
Lab Sample Id: 671554-004

Matrix: Soil
Date Collected: 08.31.2020 12:57

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.03.2020 06:37	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.03.2020 06:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.03.2020 06:37		
1,4-Difluorobenzene	540-36-3	100	%	70-130	09.03.2020 06:37		



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-9 1'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-005 Date Collected: 08.31.2020 13:45
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 15:30 Basis: Wet Weight
 Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2230	25.0	mg/kg	09.02.2020 17:49		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 01:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 01:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 01:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 01:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.03.2020 01:35	
o-Terphenyl	84-15-1	87	%	70-130	09.03.2020 01:35	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-9 1'**
Lab Sample Id: 671554-005

Matrix: Soil
Date Collected: 08.31.2020 13:45

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	09.03.2020 06:57	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.03.2020 06:57	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	09.03.2020 06:57		
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.03.2020 06:57		



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-9 3'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-006 Date Collected: 08.31.2020 13:47
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 15:30 Basis: Wet Weight
 Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3740	25.0	mg/kg	09.02.2020 17:55		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 01:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 01:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 01:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 01:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.03.2020 01:57	
o-Terphenyl	84-15-1	86	%	70-130	09.03.2020 01:57	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-9 3'**
Lab Sample Id: 671554-006

Matrix: Soil
Date Collected: 08.31.2020 13:47

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 16:00

Basis: Wet Weight

Seq Number: 3136266

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.03.2020 07:18	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.03.2020 07:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.03.2020 07:18	
4-Bromofluorobenzene	460-00-4	114	%	70-130	09.03.2020 07:18	

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-9 5'**
Lab Sample Id: 671554-007

Matrix: Soil
Date Collected: 08.31.2020 13:50

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4340	25.0	mg/kg	09.02.2020 18:00		5

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-9 10'**
Lab Sample Id: 671554-008

Matrix: Soil
Date Collected: 08.31.2020 13:52

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	548	5.00	mg/kg	09.02.2020 18:05		1



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-6 1'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-009 Date Collected: 09.01.2020 09:15
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 15:30 Basis: Wet Weight
 Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	647	5.00	mg/kg	09.02.2020 18:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 02:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 02:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 02:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 02:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	09.03.2020 02:20	
o-Terphenyl	84-15-1	84	%	70-130	09.03.2020 02:20	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-6 1'**
Lab Sample Id: 671554-009

Matrix: Soil
Date Collected: 09.01.2020 09:15

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.02.2020 14:18	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.02.2020 14:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	09.02.2020 14:18	
1,4-Difluorobenzene	540-36-3	97	%	70-130	09.02.2020 14:18	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-6 3'**
Lab Sample Id: 671554-010

Matrix: Soil
Date Collected: 09.01.2020 09:17

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3136257

Prep Method: E300P

% Moisture:

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	191	5.00	mg/kg	09.02.2020 18:15		1

Analytical Method: TPH by SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3136327

Prep Method: SW8015P

% Moisture:

Date Prep: 09.02.2020 17:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.03.2020 02:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.03.2020 02:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.03.2020 02:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.03.2020 02:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	09.03.2020 02:43	
o-Terphenyl	84-15-1	87	%	70-130	09.03.2020 02:43	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-6 3'**
Lab Sample Id: 671554-010

Matrix: Soil
Date Collected: 09.01.2020 09:17

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.02.2020 14:38	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.02.2020 14:38	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	09.02.2020 14:38		
4-Bromofluorobenzene	460-00-4	116	%	70-130	09.02.2020 14:38		

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-6 5'**
Lab Sample Id: 671554-011

Matrix: Soil
Date Collected: 09.01.2020 09:20

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 15:30

Basis: Wet Weight

Seq Number: 3136257

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.5	5.00	mg/kg	09.02.2020 18:21		1

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-6 10'**
Lab Sample Id: 671554-012

Matrix: Soil
Date Collected: 09.01.2020 09:23

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24.4	5.05	mg/kg	09.02.2020 18:44		1



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-3 1'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-013 Date Collected: 09.01.2020 09:50
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 16:51 Basis: Wet Weight
 Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3960	49.9	mg/kg	09.02.2020 19:14		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 03:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 03:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 03:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 03:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	09.03.2020 03:06	
o-Terphenyl	84-15-1	86	%	70-130	09.03.2020 03:06	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: S-3 1'
Lab Sample Id: 671554-013

Matrix: Soil
Date Collected: 09.01.2020 09:50

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.02.2020 14:59	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.02.2020 14:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	126	%	70-130	09.02.2020 14:59	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.02.2020 14:59	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-3 3'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-014 Date Collected: 09.01.2020 09:52
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 16:51 Basis: Wet Weight
 Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	104	4.95	mg/kg	09.02.2020 19:24		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.03.2020 03:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.03.2020 03:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.03.2020 03:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.03.2020 03:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.03.2020 03:29	
o-Terphenyl	84-15-1	88	%	70-130	09.03.2020 03:29	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-3 3'**
Lab Sample Id: 671554-014

Matrix: Soil
Date Collected: 09.01.2020 09:52

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.02.2020 15:19	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.02.2020 15:19	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	136	%	70-130	09.02.2020 15:19	**	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.02.2020 15:19		

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-3 5'**
Lab Sample Id: 671554-015

Matrix: Soil
Date Collected: 09.01.2020 09:55

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.9	5.02	mg/kg	09.02.2020 19:34		1

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: **S-3 10'**
Lab Sample Id: 671554-016

Matrix: Soil
Date Collected: 09.01.2020 09:57

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43.5	5.00	mg/kg	09.02.2020 19:44		1



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: S-2 1' Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-017 Date Collected: 09.01.2020 10:35
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 16:51 Basis: Wet Weight
 Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3380	50.0	mg/kg	09.02.2020 20:14		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 04:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 04:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 04:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 04:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	09.03.2020 04:14	
o-Terphenyl	84-15-1	88	%	70-130	09.03.2020 04:14	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: S-2 1'
Lab Sample Id: 671554-017

Matrix: Soil
Date Collected: 09.01.2020 10:35

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	09.02.2020 15:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	09.02.2020 15:39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	09.02.2020 15:39		
4-Bromofluorobenzene	460-00-4	137	%	70-130	09.02.2020 15:39	**	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-2 3'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-018 Date Collected: 09.01.2020 10:38
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 16:51 Basis: Wet Weight
 Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1720	24.9	mg/kg	09.02.2020 20:24		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	09.03.2020 04:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	09.03.2020 04:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	09.03.2020 04:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	09.03.2020 04:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	09.03.2020 04:37	
o-Terphenyl	84-15-1	88	%	70-130	09.03.2020 04:37	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: S-2 3'
Lab Sample Id: 671554-018

Matrix: Soil
Date Collected: 09.01.2020 10:38

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.02.2020 16:00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.02.2020 16:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.02.2020 16:00		
4-Bromofluorobenzene	460-00-4	109	%	70-130	09.02.2020 16:00		

**Certificate of Analytical Results 671554****Larson and Associates, Inc., Midland, TX**

Salado Draw Frac 13 E

Sample Id: S-2 5'
Lab Sample Id: 671554-019

Matrix: Soil
Date Collected: 09.01.2020 10:40

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.8	4.96	mg/kg	09.02.2020 20:34		1



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-2 10'**
Lab Sample Id: 671554-020

Matrix: Soil
Date Collected: 09.01.2020 10:45

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	36.7	5.04	mg/kg	09.02.2020 20:44		1



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-11 0.5'**
Lab Sample Id: 671554-021

Matrix: Soil
Date Collected: 09.01.2020 12:30

Date Received: 09.02.2020 08:31

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 09.02.2020 16:51

Basis: Wet Weight

Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.9	4.95	mg/kg	09.02.2020 20:54		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 09.02.2020 17:00

Basis: Wet Weight

Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	09.03.2020 05:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	09.03.2020 05:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	09.03.2020 05:00	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	09.03.2020 05:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	09.03.2020 05:00	
o-Terphenyl	84-15-1	80	%	70-130	09.03.2020 05:00	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-11 0.5'**
Lab Sample Id: 671554-021

Matrix: Soil
Date Collected: 09.01.2020 12:30

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 11:00

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	09.02.2020 16:20	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1
Total BTEX		<0.00202	0.00202	mg/kg	09.02.2020 16:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	127	%	70-130	09.02.2020 16:20	
1,4-Difluorobenzene	540-36-3	102	%	70-130	09.02.2020 16:20	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-11 1'** Matrix: Soil Date Received: 09.02.2020 08:31
 Lab Sample Id: 671554-022 Date Collected: 09.01.2020 12:35
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 09.02.2020 16:51 Basis: Wet Weight
 Seq Number: 3136258

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43.2	4.95	mg/kg	09.02.2020 21:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 09.02.2020 17:00 Basis: Wet Weight
 Seq Number: 3136327

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	09.03.2020 05:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	09.03.2020 05:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	09.03.2020 05:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	09.03.2020 05:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	09.03.2020 05:23	
o-Terphenyl	84-15-1	84	%	70-130	09.03.2020 05:23	



Certificate of Analytical Results 671554

Larson and Associates, Inc., Midland, TX

Salado Draw Frac 13 E

Sample Id: **S-11 1'**
Lab Sample Id: 671554-022

Matrix: Soil
Date Collected: 09.01.2020 12:35

Date Received: 09.02.2020 08:31

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 09.02.2020 14:30

Basis: Wet Weight

Seq Number: 3136259

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	09.02.2020 16:41	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
Total BTEX		<0.00198	0.00198	mg/kg	09.02.2020 16:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	138	%	70-130	09.02.2020 16:41	**	
1,4-Difluorobenzene	540-36-3	103	%	70-130	09.02.2020 16:41		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Larson and Associates, Inc.
Salado Draw Frac 13 E

Analytical Method: Chloride by EPA 300

Seq Number: 3136257

MB Sample Id: 7710676-1-BLK

Matrix: Solid

LCS Sample Id: 7710676-1-BKS

Prep Method: E300P

Date Prep: 09.02.2020

LCSD Sample Id: 7710676-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	259	104	90-110	1	20	mg/kg	09.02.2020 15:49	

Analytical Method: Chloride by EPA 300

Seq Number: 3136258

MB Sample Id: 7710694-1-BLK

Matrix: Solid

LCS Sample Id: 7710694-1-BKS

Prep Method: E300P

Date Prep: 09.02.2020

LCSD Sample Id: 7710694-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	262	105	90-110	1	20	mg/kg	09.02.2020 18:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3136257

Parent Sample Id: 671549-001

Matrix: Soil

MS Sample Id: 671549-001 S

Prep Method: E300P

Date Prep: 09.02.2020

MSD Sample Id: 671549-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1060	250	1290	92	1270	84	90-110	2	20	mg/kg	09.02.2020 16:04	X

Analytical Method: Chloride by EPA 300

Seq Number: 3136257

Parent Sample Id: 671554-002

Matrix: Soil

MS Sample Id: 671554-002 S

Prep Method: E300P

Date Prep: 09.02.2020

MSD Sample Id: 671554-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1080	1250	2410	106	2360	102	90-110	2	20	mg/kg	09.02.2020 17:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3136258

Parent Sample Id: 671554-012

Matrix: Soil

MS Sample Id: 671554-012 S

Prep Method: E300P

Date Prep: 09.02.2020

MSD Sample Id: 671554-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	24.4	253	280	101	286	103	90-110	2	20	mg/kg	09.02.2020 18:54	

Analytical Method: Chloride by EPA 300

Seq Number: 3136258

Parent Sample Id: 671554-022

Matrix: Soil

MS Sample Id: 671554-022 S

Prep Method: E300P

Date Prep: 09.02.2020

MSD Sample Id: 671554-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	43.2	248	301	104	298	103	90-110	1	20	mg/kg	09.02.2020 21:14	

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

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

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

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



Larson and Associates, Inc.
Salado Draw Frac 13 E

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136327

MB Sample Id: 7710711-1-BLK

Matrix: Solid

LCS Sample Id: 7710711-1-BKS

Prep Method: SW8015P

Date Prep: 09.02.2020

LCSD Sample Id: 7710711-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	929	93	839	84	70-130	10	20	mg/kg	09.02.2020 22:34	
Diesel Range Organics (DRO)	<50.0	1000	952	95	822	82	70-130	15	20	mg/kg	09.02.2020 22:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		114		101		70-130	%	09.02.2020 22:34
o-Terphenyl	96		117		101		70-130	%	09.02.2020 22:34

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136327

MB Sample Id: 7710711-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 09.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	09.02.2020 22:12	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3136327

Parent Sample Id: 671554-001

Matrix: Soil

MS Sample Id: 671554-001 S

Prep Method: SW8015P

Date Prep: 09.02.2020

MSD Sample Id: 671554-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	848	85	829	83	70-130	2	20	mg/kg	09.02.2020 23:41	
Diesel Range Organics (DRO)	<49.9	997	826	83	805	81	70-130	3	20	mg/kg	09.02.2020 23:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		94		70-130	%	09.02.2020 23:41
o-Terphenyl	95		93		70-130	%	09.02.2020 23:41

Analytical Method: BTEX by EPA 8021B

Seq Number: 3136259

MB Sample Id: 7710714-1-BLK

Matrix: Solid

LCS Sample Id: 7710714-1-BKS

Prep Method: SW5035A

Date Prep: 09.02.2020

LCSD Sample Id: 7710714-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0847	85	0.0864	86	70-130	2	35	mg/kg	09.02.2020 11:57	
Toluene	<0.00200	0.100	0.0857	86	0.0891	89	70-130	4	35	mg/kg	09.02.2020 11:57	
Ethylbenzene	<0.00200	0.100	0.0924	92	0.0990	99	70-130	7	35	mg/kg	09.02.2020 11:57	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.208	104	70-130	9	35	mg/kg	09.02.2020 11:57	
o-Xylene	<0.00200	0.100	0.0954	95	0.104	104	70-130	9	35	mg/kg	09.02.2020 11:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		94		93		70-130	%	09.02.2020 11:57
4-Bromofluorobenzene	101		115		128		70-130	%	09.02.2020 11:57

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

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

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

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



Larson and Associates, Inc.
Salado Draw Frac 13 E

Analytical Method: BTEX by EPA 8021B

Seq Number: 3136266

Matrix: Solid

Prep Method: SW5035A

Date Prep: 09.02.2020

MB Sample Id: 7710716-1-BLK

LCS Sample Id: 7710716-1-BKS

LCSD Sample Id: 7710716-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.108	108	0.104	104	70-130	4	35	mg/kg	09.02.2020 21:24	
Toluene	<0.00200	0.100	0.0993	99	0.107	107	70-130	7	35	mg/kg	09.02.2020 21:24	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0989	99	70-130	2	35	mg/kg	09.02.2020 21:24	
m,p-Xylenes	<0.00400	0.200	0.199	100	0.197	99	70-130	1	35	mg/kg	09.02.2020 21:24	
o-Xylene	<0.00200	0.100	0.0981	98	0.0968	97	70-130	1	35	mg/kg	09.02.2020 21:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		99		97		70-130	%	09.02.2020 21:24
4-Bromofluorobenzene	109		104		104		70-130	%	09.02.2020 21:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3136259

Matrix: Soil

Prep Method: SW5035A

Date Prep: 09.02.2020

Parent Sample Id: 671554-009

MS Sample Id: 671554-009 S

MSD Sample Id: 671554-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0887	89	0.0831	83	70-130	7	35	mg/kg	09.02.2020 12:38	
Toluene	<0.00199	0.0994	0.0888	89	0.0859	86	70-130	3	35	mg/kg	09.02.2020 12:38	
Ethylbenzene	<0.00199	0.0994	0.0950	96	0.0942	94	70-130	1	35	mg/kg	09.02.2020 12:38	
m,p-Xylenes	<0.00398	0.199	0.196	98	0.197	98	70-130	1	35	mg/kg	09.02.2020 12:38	
o-Xylene	<0.00199	0.0994	0.0987	99	0.0991	99	70-130	0	35	mg/kg	09.02.2020 12:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		70-130	%	09.02.2020 12:38
4-Bromofluorobenzene	126		136	**	70-130	%	09.02.2020 12:38

Analytical Method: BTEX by EPA 8021B

Seq Number: 3136266

Matrix: Soil

Prep Method: SW5035A

Date Prep: 09.02.2020

Parent Sample Id: 671534-037

MS Sample Id: 671534-037 S

MSD Sample Id: 671534-037 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0655	66	0.0811	82	70-130	21	35	mg/kg	09.02.2020 22:04	X
Toluene	<0.00200	0.100	0.0671	67	0.0815	82	70-130	19	35	mg/kg	09.02.2020 22:04	X
Ethylbenzene	<0.00200	0.100	0.0609	61	0.0744	75	70-130	20	35	mg/kg	09.02.2020 22:04	X
m,p-Xylenes	<0.00400	0.200	0.122	61	0.148	74	70-130	19	35	mg/kg	09.02.2020 22:04	X
o-Xylene	<0.00200	0.100	0.0606	61	0.0720	72	70-130	17	35	mg/kg	09.02.2020 22:04	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		99		70-130	%	09.02.2020 22:04
4-Bromofluorobenzene	106		109		70-130	%	09.02.2020 22:04

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

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

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

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

Varson & Associates, Inc.
Environmental Consultants

507 N. Marientfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to:

DATE: 9/1/20 PAGE 2 OF 2
PO#: _____ LAB WORK ORDER#: _____
PROJECT LOCATION OR NAME: Slide Draw Frae 13 E
LAI PROJECT #: 20-0107-14 COLLECTOR: DS4 TJ

TRRP report?
☐ Yes ☒ No

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

TIME ZONE:
Time zone/State:
MST

Field Sample I.D.

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃H₂SO₄ ☐ NaOH ☐

ICE

UNPRESSERVED

PRESERVATION

ANALYSES

BTEX: ☒ MTBE ☐TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐GASOLINE MOD 8015 ☒DIESEL - MOD 8015 ☒OIL - MOD 8015 ☒SVOC 8260 ☐8081 PESTICIDES ☐8082 PESTICIDES ☐TCLP - METALS (RCRA) ☐TOTAL METALS (RCRA) ☐LEAD - TOTAL ☐RCI ☐TDS ☐pH ☐EXPLOSIVES ☐CHLORIDE ☐ANIONS ☐ALKALINITY ☐

FIELD NOTES

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 09.02.2020 08.31.00 AM

Work Order #: 671554

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 09.02.2020

Checklist reviewed by:



Holly Taylor

Date: 09.03.2020

Certificate of Analysis Summary 676597



Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac Pond 13 (FP13)

Project Id: 20-0107-14

Date Received in Lab: Mon 11.02.2020 08:43

Contact: Mark Larson

Report Date: 11.13.2020 15:36

Project Location:

Project Manager: Holly Taylor

Analysis Requested	Lab Id:	676597-001	676597-002				
	Field Id:	S-12 .5'	S-13 .5'				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	10.30.2020 10:05	10.30.2020 10:00				
BTEX by EPA 8021B	Extracted:	11.04.2020 16:45	11.11.2020 12:00				
	Analyzed:	11.05.2020 13:21	11.11.2020 18:39				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00200 0.00200	<0.00201 0.00201				
	Toluene	<0.00200 0.00200	<0.00201 0.00201				
	Ethylbenzene	<0.00200 0.00200	<0.00201 0.00201				
	m,p-Xylenes	<0.00399 0.00399	0.00530 0.00402				
	o-Xylene	0.0517 0.00200	0.00292 0.00201				
	Total Xylenes	0.0517 0.00200	0.00822 0.00201				
	Total BTEX	0.0517 0.00200	0.00822 0.00201				
Chloride by EPA 300	Extracted:	11.02.2020 16:50	11.11.2020 15:30				
	Analyzed:	11.02.2020 20:00	11.11.2020 19:23				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	848 5.00	52.8 5.03				
TPH by SW8015 Mod	Extracted:	11.02.2020 11:15	11.11.2020 12:00				
	Analyzed:	11.02.2020 15:16	11.11.2020 16:32				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	<49.9 49.9				
	Diesel Range Organics (DRO)	<50.0 50.0	<49.9 49.9				
	Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<49.9 49.9				
	Total TPH	<50.0 50.0	<49.9 49.9				

BRL - Below Reporting Limit

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

Analytical Report 676597

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado Draw Frac Pond 13 (FP13)

20-0107-14

11.13.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.13.2020

Project Manager: **Mark Larson**

Larson and Associates, Inc.

P. O. Box 50685

Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **676597**

Salado Draw Frac Pond 13 (FP13)

Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 676597. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 676597 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Holly Taylor
Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 676597

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13 (FP13)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-12 .5'	S	10.30.2020 10:05		676597-001
S-13 .5'	S	10.30.2020 10:00		676597-002



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado Draw Frac Pond 13 (FP13)

Project ID: 20-0107-14
Work Order Number(s): 676597

Report Date: 11.13.2020
Date Received: 11.02.2020

Sample receipt non conformances and comments:

11/18/2020 1.001 Revised to include results for sample 002 per Robert Nelson (email). HT

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3141451 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 676597-001.



Certificate of Analytical Results 676597

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13 (FP13)

Sample Id: S-12.5'
Lab Sample Id: 676597-001

Matrix: Soil
Date Collected: 10.30.2020 10:05

Date Received: 11.02.2020 08:43

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 16:50

% Moisture:
Basis: Wet Weight

Seq Number: 3141215

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	848	5.00	mg/kg	11.02.2020 20:00		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.02.2020 11:15

% Moisture:
Basis: Wet Weight

Seq Number: 3141187

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.02.2020 15:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.02.2020 15:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.02.2020 15:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.02.2020 15:16	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	88	%	70-130	11.02.2020 15:16		
o-Terphenyl	84-15-1	100	%	70-130	11.02.2020 15:16		



Certificate of Analytical Results 676597

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13 (FP13)

Sample Id: **S-12 .5'**
Lab Sample Id: 676597-001

Matrix: Soil
Date Collected: 10.30.2020 10:05

Date Received: 11.02.2020 08:43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:
Basis: Wet Weight

Seq Number: 3141451

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.05.2020 13:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.05.2020 13:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.05.2020 13:21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.05.2020 13:21	U	1
o-Xylene	95-47-6	0.0517	0.00200	mg/kg	11.05.2020 13:21		1
Total Xylenes	1330-20-7	0.0517	0.00200	mg/kg	11.05.2020 13:21		1
Total BTEX		0.0517	0.00200	mg/kg	11.05.2020 13:21		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	153	%	70-130	11.05.2020 13:21	**	
1,4-Difluorobenzene	540-36-3	93	%	70-130	11.05.2020 13:21		



Certificate of Analytical Results 676597

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13 (FP13)

Sample Id: S-13.5'
Lab Sample Id: 676597-002

Matrix: Soil
Date Collected: 10.30.2020 10:00

Date Received: 11.02.2020 08:43

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.11.2020 15:30

% Moisture:
Basis: Wet Weight

Seq Number: 3142020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.8	5.03	mg/kg	11.11.2020 19:23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.11.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142071

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.11.2020 16:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.11.2020 16:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.11.2020 16:32	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.11.2020 16:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-130	11.11.2020 16:32		
o-Terphenyl	84-15-1	113	%	70-130	11.11.2020 16:32		



Certificate of Analytical Results 676597

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13 (FP13)

Sample Id: **S-13 .5'**
Lab Sample Id: 676597-002

Matrix: Soil
Date Collected: 10.30.2020 10:00

Date Received: 11.02.2020 08:43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.11.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3142010

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.11.2020 18:39	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.11.2020 18:39	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.11.2020 18:39	U	1
m,p-Xylenes	179601-23-1	0.00530	0.00402	mg/kg	11.11.2020 18:39		1
o-Xylene	95-47-6	0.00292	0.00201	mg/kg	11.11.2020 18:39		1
Total Xylenes	1330-20-7	0.00822	0.00201	mg/kg	11.11.2020 18:39		1
Total BTEX		0.00822	0.00201	mg/kg	11.11.2020 18:39		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	101	%	70-130	11.11.2020 18:39		
4-Bromofluorobenzene	460-00-4	95	%	70-130	11.11.2020 18:39		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Larson and Associates, Inc.
Salado Draw Frac Pond 13 (FP13)

Analytical Method: Chloride by EPA 300

Seq Number: 3141215

MB Sample Id: 7714380-1-BLK

Matrix: Solid

LCS Sample Id: 7714380-1-BKS

Prep Method: E300P

Date Prep: 11.02.2020

LCSD Sample Id: 7714380-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	271	108	268	107	90-110	1	20	mg/kg	11.02.2020 17:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3142020

MB Sample Id: 7714973-1-BLK

Matrix: Solid

LCS Sample Id: 7714973-1-BKS

Prep Method: E300P

Date Prep: 11.11.2020

LCSD Sample Id: 7714973-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	260	104	260	104	90-110	0	20	mg/kg	11.11.2020 17:59	

Analytical Method: Chloride by EPA 300

Seq Number: 3141215

Parent Sample Id: 676021-009

Matrix: Soil

MS Sample Id: 676021-009 S

Prep Method: E300P

Date Prep: 11.02.2020

MSD Sample Id: 676021-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5960	2520	8690	108	8600	105	90-110	1	20	mg/kg	11.02.2020 19:01	

Analytical Method: Chloride by EPA 300

Seq Number: 3141215

Parent Sample Id: 676459-004

Matrix: Soil

MS Sample Id: 676459-004 S

Prep Method: E300P

Date Prep: 11.02.2020

MSD Sample Id: 676459-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10000	2480	12900	117	12800	113	90-110	1	20	mg/kg	11.02.2020 17:28	X

Analytical Method: Chloride by EPA 300

Seq Number: 3142020

Parent Sample Id: 676597-002

Matrix: Soil

MS Sample Id: 676597-002 S

Prep Method: E300P

Date Prep: 11.11.2020

MSD Sample Id: 676597-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	52.8	252	327	109	325	108	90-110	1	20	mg/kg	11.11.2020 19:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3142020

Parent Sample Id: 677457-039

Matrix: Soil

MS Sample Id: 677457-039 S

Prep Method: E300P

Date Prep: 11.11.2020

MSD Sample Id: 677457-039 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	437	250	672	94	671	94	90-110	0	20	mg/kg	11.11.2020 18:15	

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

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

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

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

Larson and Associates, Inc.
Salado Draw Frac Pond 13 (FP13)

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141187

MB Sample Id: 7714378-1-BLK

Matrix: Solid

LCS Sample Id: 7714378-1-BKS

Prep Method: SW8015P

Date Prep: 11.02.2020

LCSD Sample Id: 7714378-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1110	111	990	99	70-130	11	20	mg/kg	11.02.2020 12:19	
Diesel Range Organics (DRO)	<50.0	1000	1100	110	1000	100	70-130	10	20	mg/kg	11.02.2020 12:19	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag	Limits		Units	Analysis Date	
1-Chlorooctane	110		120			106		70-130		%	11.02.2020 12:19	
o-Terphenyl	129		127			111		70-130		%	11.02.2020 12:19	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142071

MB Sample Id: 7715008-1-BLK

Matrix: Solid

LCS Sample Id: 7715008-1-BKS

Prep Method: SW8015P

Date Prep: 11.11.2020

LCSD Sample Id: 7715008-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	912	91	1060	106	70-130	15	20	mg/kg	11.11.2020 12:40	
Diesel Range Organics (DRO)	<50.0	1000	988	99	1090	109	70-130	10	20	mg/kg	11.11.2020 12:40	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	95		119			129			70-130	%	11.11.2020 12:40	
o-Terphenyl	112		122			119			70-130	%	11.11.2020 12:40	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141187

Matrix: Solid

MB Sample Id: 7714378-1-BLK

Prep Method: SW8015P

Date Prep: 11.02.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.02.2020 11:59	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142071

Matrix: Solid

MB Sample Id: 7715008-1-BLK

Prep Method: SW8015P

Date Prep: 11.11.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.11.2020 12:02	

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

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

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

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



Larson and Associates, Inc.
Salado Draw Frac Pond 13 (FP13)

Analytical Method: TPH by SW8015 Mod

Seq Number: 3141187

Parent Sample Id: 676594-001

Matrix: Soil

MS Sample Id: 676594-001 S

Prep Method: SW8015P

Date Prep: 11.02.2020

MSD Sample Id: 676594-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	912	91	954	95	70-130	5	20	mg/kg	11.02.2020 13:18	
Diesel Range Organics (DRO)	<49.9	998	982	98	997	100	70-130	2	20	mg/kg	11.02.2020 13:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	100		110		70-130	%	11.02.2020 13:18
o-Terphenyl	104		104		70-130	%	11.02.2020 13:18

Analytical Method: TPH by SW8015 Mod

Seq Number: 3142071

Parent Sample Id: 677462-001

Matrix: Soil

MS Sample Id: 677462-001 S

Prep Method: SW8015P

Date Prep: 11.11.2020

MSD Sample Id: 677462-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	999	934	93	891	89	70-130	5	20	mg/kg	11.11.2020 13:39	
Diesel Range Organics (DRO)	<50.0	999	1020	102	986	99	70-130	3	20	mg/kg	11.11.2020 13:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		110		70-130	%	11.11.2020 13:39
o-Terphenyl	124		121		70-130	%	11.11.2020 13:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141451

MB Sample Id: 7714573-1-BLK

Matrix: Solid

LCS Sample Id: 7714573-1-BKS

Prep Method: SW5035A

Date Prep: 11.04.2020

LCSD Sample Id: 7714573-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0989	99	0.0942	94	70-130	5	35	mg/kg	11.05.2020 03:32	
Toluene	<0.00200	0.100	0.0977	98	0.0936	94	70-130	4	35	mg/kg	11.05.2020 03:32	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0957	96	70-130	5	35	mg/kg	11.05.2020 03:32	
m,p-Xylenes	<0.00400	0.200	0.199	100	0.190	95	70-130	5	35	mg/kg	11.05.2020 03:32	
o-Xylene	<0.00200	0.100	0.0981	98	0.0931	93	70-130	5	35	mg/kg	11.05.2020 03:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		100		100		70-130	%	11.05.2020 03:32
4-Bromofluorobenzene	115		102		97		70-130	%	11.05.2020 03:32

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

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

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

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

Larson and Associates, Inc.
Salado Draw Frac Pond 13 (FP13)

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142010

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.11.2020

MB Sample Id: 7714944-1-BLK

LCS Sample Id: 7714944-1-BKS

LCSD Sample Id: 7714944-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0778	78	0.0797	80	70-130	2	35	mg/kg	11.11.2020 11:51	
Toluene	<0.00200	0.100	0.0806	81	0.0834	83	70-130	3	35	mg/kg	11.11.2020 11:51	
Ethylbenzene	<0.00200	0.100	0.0884	88	0.0914	91	70-130	3	35	mg/kg	11.11.2020 11:51	
m,p-Xylenes	<0.00400	0.200	0.173	87	0.180	90	70-130	4	35	mg/kg	11.11.2020 11:51	
o-Xylene	<0.00200	0.100	0.0862	86	0.0897	90	70-130	4	35	mg/kg	11.11.2020 11:51	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		101		99		70-130	%	11.11.2020 11:51
4-Bromofluorobenzene	112		102		100		70-130	%	11.11.2020 11:51

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141451

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.04.2020

Parent Sample Id: 676455-001

MS Sample Id: 676455-001 S

MSD Sample Id: 676455-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0694	70	0.0695	70	70-130	0	35	mg/kg	11.05.2020 04:13	
Toluene	<0.00200	0.0998	0.0708	71	0.0741	74	70-130	5	35	mg/kg	11.05.2020 04:13	
Ethylbenzene	<0.00200	0.0998	0.0754	76	0.0799	80	70-130	6	35	mg/kg	11.05.2020 04:13	
m,p-Xylenes	<0.00399	0.200	0.153	77	0.165	83	70-130	8	35	mg/kg	11.05.2020 04:13	
o-Xylene	<0.00200	0.0998	0.0744	75	0.0800	80	70-130	7	35	mg/kg	11.05.2020 04:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	11.05.2020 04:13
4-Bromofluorobenzene	100		105		70-130	%	11.05.2020 04:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3142010

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.11.2020

Parent Sample Id: 677462-001

MS Sample Id: 677462-001 S

MSD Sample Id: 677462-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0802	81	0.0755	76	70-130	6	35	mg/kg	11.11.2020 12:32	
Toluene	<0.00199	0.0994	0.0846	85	0.0813	81	70-130	4	35	mg/kg	11.11.2020 12:32	
Ethylbenzene	<0.00199	0.0994	0.0938	94	0.0910	91	70-130	3	35	mg/kg	11.11.2020 12:32	
m,p-Xylenes	<0.00398	0.199	0.186	93	0.183	92	70-130	2	35	mg/kg	11.11.2020 12:32	
o-Xylene	<0.00199	0.0994	0.0929	93	0.0914	91	70-130	2	35	mg/kg	11.11.2020 12:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	11.11.2020 12:32
4-Bromofluorobenzene	105		108		70-130	%	11.11.2020 12:32

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

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

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

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

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.**Date/ Time Received:** 11.02.2020 08.43.00 AM**Work Order #:** 676597**Acceptable Temperature Range:** 0 - 6 degC**Air and Metal samples Acceptable Range:** Ambient**Temperature Measuring device used :** IR-8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 11.02.2020

Checklist reviewed by:

Holly Taylor

Date: 11.02.2020

Certificate of Analysis Summary 679286

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw Frac Pond 13

Project Id: 20-0107-14

Contact: Mark Larson

Project Location:

Date Received in Lab: Tue 12.01.2020 09:33

Report Date: 12.08.2020 10:00

Project Manager: Holly Taylor

Analysis Requested	Lab Id: 679286-001 Field Id: S-12 1' Depth: Matrix: SOIL Sampled: 11.29.2020 11:36					
BTEX by EPA 8021B	Extracted: 12.02.2020 16:00 Analyzed: 12.03.2020 00:32 Units/RL: mg/kg RL					
Benzene	<0.00200 0.00200					
Toluene	<0.00200 0.00200					
Ethylbenzene	<0.00200 0.00200					
m,p-Xylenes	<0.00399 0.00399					
o-Xylene	<0.00200 0.00200					
Total Xylenes	<0.002000 0.002000					
Total BTEX	<0.002000 0.002000					
Chloride by EPA 300	Extracted: 12.01.2020 16:50 Analyzed: 12.01.2020 18:23 Units/RL: mg/kg RL					
Chloride	16.2 5.02					
TPH by SW8015 Mod	Extracted: 12.01.2020 17:00 Analyzed: 12.02.2020 01:33 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<50.0 50.0					
Diesel Range Organics (DRO)	<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0					
Total TPH	<50.00 50.00					

BRL - Below Reporting Limit

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



Analytical Report 679286

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado Draw Frac Pond 13

20-0107-14

12.08.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



12.08.2020

Project Manager: **Mark Larson**

Larson and Associates, Inc.

P. O. Box 50685

Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **679286**

Salado Draw Frac Pond 13

Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 679286. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 679286 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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

Holly Taylor
Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 679286

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-12 1'	S	11.29.2020 11:36		679286-001
S-12 2'	S	11.29.2020 11:45		Not Analyzed
S-12 3'	S	11.29.2020 11:57		Not Analyzed



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado Draw Frac Pond 13

Project ID: 20-0107-14
Work Order Number(s): 679286

Report Date: 12.08.2020
Date Received: 12.01.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 679286

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13

Sample Id: **S-12 1'**
Lab Sample Id: 679286-001

Matrix: Soil
Date Collected: 11.29.2020 11:36

Date Received: 12.01.2020 09:33

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 12.01.2020 16:50

% Moisture:
Basis: Wet Weight

Seq Number: 3143689

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16.2	5.02	mg/kg	12.01.2020 18:23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 12.01.2020 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3143721

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.02.2020 01:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.02.2020 01:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.02.2020 01:33	U	1
Total TPH	PHC635	<50.00	50.00	mg/kg	12.02.2020 01:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	102	%	70-130	12.02.2020 01:33		
o-Terphenyl	84-15-1	106	%	70-130	12.02.2020 01:33		



Certificate of Analytical Results 679286

Larson and Associates, Inc., Midland, TX

Salado Draw Frac Pond 13

Sample Id: **S-12 1'**
Lab Sample Id: 679286-001

Matrix: Soil
Date Collected: 11.29.2020 11:36

Date Received: 12.01.2020 09:33

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 12.02.2020 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3143824

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.03.2020 00:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.03.2020 00:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.03.2020 00:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.03.2020 00:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.03.2020 00:32	U	1
Total Xylenes	1330-20-7	<0.002000	0.002000	mg/kg	12.03.2020 00:32	U	1
Total BTEX		<0.002000	0.002000	mg/kg	12.03.2020 00:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	12.03.2020 00:32	
4-Bromofluorobenzene	460-00-4	106	%	70-130	12.03.2020 00:32	

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Larson and Associates, Inc.
Salado Draw Frac Pond 13

Analytical Method: Chloride by EPA 300

Seq Number: 3143689

MB Sample Id: 7716191-1-BLK

Matrix: Solid

LCS Sample Id: 7716191-1-BKS

Prep Method: E300P

Date Prep: 12.01.2020

LCSD Sample Id: 7716191-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	252	101	253	101	90-110	0	20	mg/kg	12.01.2020 18:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3143689

Parent Sample Id: 679286-001

Matrix: Soil

MS Sample Id: 679286-001 S

Prep Method: E300P

Date Prep: 12.01.2020

MSD Sample Id: 679286-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.2	251	279	105	282	106	90-110	1	20	mg/kg	12.01.2020 18:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3143689

Parent Sample Id: 679348-011

Matrix: Soil

MS Sample Id: 679348-011 S

Prep Method: E300P

Date Prep: 12.01.2020

MSD Sample Id: 679348-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	438	248	676	96	677	96	90-110	0	20	mg/kg	12.01.2020 19:42	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3143721

MB Sample Id: 7716218-1-BLK

Matrix: Solid

LCS Sample Id: 7716218-1-BKS

Prep Method: SW8015P

Date Prep: 12.01.2020

LCSD Sample Id: 7716218-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	951	95	812	81	70-130	16	20	mg/kg	12.01.2020 18:55	
Diesel Range Organics (DRO)	<50.0	1000	870	87	872	87	70-130	0	20	mg/kg	12.01.2020 18:55	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		101		101		70-130	%	12.01.2020 18:55
o-Terphenyl	102		101		106		70-130	%	12.01.2020 18:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3143721

Matrix: Solid

MB Sample Id: 7716218-1-BLK

Prep Method: SW8015P

Date Prep: 12.01.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.01.2020 18:33	

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

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

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

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

Larson and Associates, Inc.
 Salado Draw Frac Pond 13
Analytical Method: TPH by SW8015 Mod

Seq Number: 3143721

Parent Sample Id: 679349-001

Matrix: Soil

MS Sample Id: 679349-001 S

Prep Method: SW8015P

Date Prep: 12.01.2020

MSD Sample Id: 679349-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	849	85	824	83	70-130	3	20	mg/kg	12.01.2020 20:00	
Diesel Range Organics (DRO)	58.4	998	886	83	908	85	70-130	2	20	mg/kg	12.01.2020 20:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		94		70-130	%	12.01.2020 20:00
o-Terphenyl	91		96		70-130	%	12.01.2020 20:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3143824

MB Sample Id: 7716353-1-BLK

Matrix: Solid

LCS Sample Id: 7716353-1-BKS

Prep Method: SW5035A

Date Prep: 12.02.2020

LCSD Sample Id: 7716353-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0997	100	0.0944	94	70-130	5	35	mg/kg	12.02.2020 16:00	
Toluene	<0.00200	0.100	0.113	113	0.0888	89	70-130	24	35	mg/kg	12.02.2020 16:00	
Ethylbenzene	<0.00200	0.100	0.107	107	0.0959	96	70-130	11	35	mg/kg	12.02.2020 16:00	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.189	95	70-130	12	35	mg/kg	12.02.2020 16:00	
o-Xylene	<0.00200	0.100	0.105	105	0.0936	94	70-130	11	35	mg/kg	12.02.2020 16:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		100		101		70-130	%	12.02.2020 16:00
4-Bromofluorobenzene	108		103		97		70-130	%	12.02.2020 16:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3143824

Parent Sample Id: 678987-018

Matrix: Soil

MS Sample Id: 678987-018 S

Prep Method: SW5035A

Date Prep: 12.02.2020

MSD Sample Id: 678987-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.127	127	0.129	129	70-130	2	35	mg/kg	12.02.2020 16:41	
Toluene	<0.00200	0.0998	0.116	116	0.118	118	70-130	2	35	mg/kg	12.02.2020 16:41	
Ethylbenzene	<0.00200	0.0998	0.116	116	0.118	118	70-130	2	35	mg/kg	12.02.2020 16:41	
m,p-Xylenes	<0.00399	0.200	0.234	117	0.240	120	70-130	3	35	mg/kg	12.02.2020 16:41	
o-Xylene	<0.00200	0.0998	0.110	110	0.113	113	70-130	3	35	mg/kg	12.02.2020 16:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	12.02.2020 16:41
4-Bromofluorobenzene	104		105		70-130	%	12.02.2020 16:41

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

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

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

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

CHAIN-OF-CUSTODY

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 12/11/2020 PAGE 1 OF 1
PO#: _____ LAB WORK ORDER#: _____
PROJECT LOCATION OR NAME: Salado Draw Fenc Road 13
LAI PROJECT #: 20-0107-14 COLLECTOR: DS

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

MST			
Field Sample I.D.	Lab #	Date	Time

Time

UNPRESSERVED

ANALYSES	
BTEX/MTBE	☐
TPH 418.1	☐ TPH 1005 ☐ TPH 1006 ☐
GASOLINE MOD 8015	☒
DIESEL - MOD 8015	☒
OIL - MOD 8015	☒
VOC 8260	☐
SVOC 8270	☐
8081 PESTICIDES	☐ PAH 8270 ☐ HOLDPAH ☐
8082 PCBs	☐ 8151 HERBICIDES ☐
TBLP - METALS (RCRA)	☐ TCLP VOC ☐
TCLP - PEST	☐ HERB ☐ Semi-VOC ☐
TOTAL METALS (RCRA)	☐ OTHER LIST ☐
LEAD - TOTAL	☐ D.W. 200.8 ☐ TCLP ☐
RCI	☐ FLASHPOINT ☐
TDS	☐ TOX ☐ % MOISTURE ☐ CYANIDE ☐
pH	☐ HEXVALENT CHROMIUM ☐
EXPLOSIVES	☐ PECHLORATE ☐
CHLORIDES	☐ ANIONS ☐ ALKALINITY ☐
Hold For Further Analysis	
FIELD NOTES	

FIELD NOTES

1	7	5
---	---	---

Analyze chloride to 100 mg/kg

OTHER [

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

☒ HAND DELIVERED

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 12.01.2020 09.33.00 AM

Work Order #: 679286

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 12.01.2020

Checklist reviewed by:



Holly Taylor

Date: 12.01.2020



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-3135-1

Laboratory Sample Delivery Group: 20-0107-14

Client Project/Site: SD-FRAC POND 13

For:

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

Attn: Mr. Mark J Larson

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

Authorized for release by:
6/22/2021 4:44:55 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Laboratory Job ID: 880-3135-1
SDG: 20-0107-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 15 |
| QC Sample Results | 17 |
| QC Association Summary | 25 |
| Lab Chronicle | 29 |
| Certification Summary | 33 |
| Method Summary | 34 |
| Sample Summary | 35 |
| Chain of Custody | 36 |
| Receipt Checklists | 37 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Qualifiers

GC VOA

| Qualifier | Qualifier Description |
|-----------|---|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |
| U | Indicates the analyte was analyzed for but not detected. |

GC Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| 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 |

Eurofins Xenco, Midland

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Job ID: 880-3135-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-3135-1

Comments

No additional comments.

Receipt

The samples were received on 6/17/2021 10:08 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 6.0° C.

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: C-1, 4.1 (880-3135-1), C-2, 4.1 (880-3135-2), C-3, 4.1 (880-3135-3), C-4, 4.1 (880-3135-4), C-5, 4.1 (880-3135-5), C-6, 4.1 (880-3135-6), C-7, 4.1 (880-3135-7), C-8, 4.1 (880-3135-8), C-9, 4.1 (880-3135-9), C-10, 4.1 (880-3135-10), C-11, 4.1 (880-3135-11), C-12, 4.1 (880-3135-12), C-13, 4.1 (880-3135-13), C-14, 4.1 (880-3135-14), C-15, 4.1 (880-3135-15) and (880-3136-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015B NM: The continuing calibration verification (CCV) associated with batch 880-4415 recovered above the upper control limit for Diesel Range Organics (Over C10-C28) The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-4415/3).

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-1, 4.1

Lab Sample ID: 880-3135-1

Date Collected: 06/16/21 12:08

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U * | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| Total BTEX | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:33 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 120 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 17:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 124 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 17:33 | 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 | <49.7 | U | 49.7 | mg/Kg | | 06/18/21 11:30 | 06/19/21 14:02 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 06/18/21 11:30 | 06/19/21 14:02 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 06/18/21 11:30 | 06/19/21 14:02 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 06/18/21 11:30 | 06/19/21 14:02 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 125 | | 70 - 130 | 06/18/21 11:30 | 06/19/21 14:02 | 1 |
| o-Terphenyl | 138 | S1+ | 70 - 130 | 06/18/21 11:30 | 06/19/21 14:02 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 44.8 | | 4.99 | mg/Kg | | | 06/20/21 16:38 | 1 |

Client Sample ID: C-2, 4.1

Lab Sample ID: 880-3135-2

Date Collected: 06/16/21 12:10

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U * | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| Total BTEX | <0.00397 | U | 0.00397 | mg/Kg | | 06/17/21 12:14 | 06/17/21 17:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 17:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 127 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 17:54 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-2, 4.1

Date Collected: 06/16/21 12:10

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-2

Matrix: Solid

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 125 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |
| o-Terphenyl | 111 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 15:34 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 147 | | 4.97 | mg/Kg | | | 06/20/21 16:45 | 1 |

Client Sample ID: C-3, 4.1

Date Collected: 06/16/21 12:11

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U * | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 18:14 | 1 |
| 1,4-Difluorobenzene (Surr) | 123 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 18:14 | 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 | 60.3 | | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |
| Total TPH | 60.3 | | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 124 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |
| o-Terphenyl | 122 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 15:47 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 284 | | 5.01 | mg/Kg | | | 06/20/21 17:04 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-4, 4.1

Date Collected: 06/16/21 12:12

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U * | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 18:35 | 1 |
| 1,4-Difluorobenzene (Surr) | 128 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 18:35 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:01 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:01 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 136 | S1+ | 70 - 130 | 06/18/21 11:30 | 06/19/21 16:01 | 1 |
| o-Terphenyl | 128 | | 70 - 130 | 06/18/21 11:30 | 06/19/21 16:01 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 39.3 | | 5.04 | mg/Kg | | | 06/20/21 17:11 | 1 |

Client Sample ID: C-5, 4.1

Date Collected: 06/16/21 12:21

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-5

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 | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 18:56 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 18:56 | 1 |
| 1,4-Difluorobenzene (Surr) | 128 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 18:56 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-5, 4.1

Lab Sample ID: 880-3135-5

Date Collected: 06/16/21 12:21

Matrix: Solid

Date Received: 06/17/21 10:08

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 133 | S1+ | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |
| o-Terphenyl | 117 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 16:14 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 524 | | 5.05 | mg/Kg | | | 06/20/21 17:31 | 1 |

Client Sample ID: C-6, 4.1

Lab Sample ID: 880-3135-6

Date Collected: 06/16/21 12:23

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U * | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 105 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |
| 1,4-Difluorobenzene (Surr) | 142 | S1+ | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 20:17 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |
| Diesel Range Organics (Over C10-C28) | 100 | | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |
| Oil Range Organics (Over C28-C36) | 69.2 | | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |
| Total TPH | 169 | | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 91 | | 70 - 130 | | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |
| o-Terphenyl | 93 | | 70 - 130 | | | 06/21/21 13:47 | 06/22/21 06:16 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 634 | | 5.01 | mg/Kg | | | 06/20/21 17:37 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-7, 4.1

Date Collected: 06/16/21 12:24

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-7

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U *- | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:37 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 20:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 115 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 20:37 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:41 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:41 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:41 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 123 | | 70 - 130 | 06/18/21 11:30 | 06/19/21 16:41 | 1 |
| o-Terphenyl | 136 | S1+ | 70 - 130 | 06/18/21 11:30 | 06/19/21 16:41 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 200 | | 5.03 | mg/Kg | | | 06/20/21 17:44 | 1 |

Client Sample ID: C-8, 4.1

Date Collected: 06/16/21 12:25

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-8

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U *- | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 20:58 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 20:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 109 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 20:58 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-8, 4.1

Date Collected: 06/16/21 12:25

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-8

Matrix: Solid

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 125 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |
| o-Terphenyl | 139 | S1+ | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 16:54 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 82.3 | | 4.95 | mg/Kg | | | 06/20/21 17:50 | 1 |

Client Sample ID: C-9, 4.1

Date Collected: 06/16/21 12:26

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-9

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 | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |
| 1,4-Difluorobenzene (Surr) | 119 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 21:18 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 79 | | 70 - 130 | | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |
| o-Terphenyl | 80 | | 70 - 130 | | | 06/21/21 13:47 | 06/22/21 09:47 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 60.1 | | 4.96 | mg/Kg | | | 06/20/21 17:57 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-10, 4.1

Lab Sample ID: 880-3135-10

Date Collected: 06/16/21 12:27

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U * | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 06/17/21 12:14 | 06/17/21 21:39 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 21:39 | 1 |
| 1,4-Difluorobenzene (Surr) | 131 | S1+ | 70 - 130 | 06/17/21 12:14 | 06/17/21 21:39 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:06 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:06 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:06 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/21/21 13:47 | 06/22/21 09:06 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 77 | | 70 - 130 | 06/21/21 13:47 | 06/22/21 09:06 | 1 |
| o-Terphenyl | 80 | | 70 - 130 | 06/21/21 13:47 | 06/22/21 09:06 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 43.1 | | 5.04 | mg/Kg | | | 06/18/21 01:20 | 1 |

Client Sample ID: C-11, 4.1

Lab Sample ID: 880-3135-11

Date Collected: 06/16/21 12:29

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U * | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 132 | S1+ | 70 - 130 | 06/17/21 12:14 | 06/17/21 22:00 | 1 |
| 1,4-Difluorobenzene (Surr) | 143 | S1+ | 70 - 130 | 06/17/21 12:14 | 06/17/21 22:00 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-11, 4.1

Lab Sample ID: 880-3135-11

Date Collected: 06/16/21 12:29

Matrix: Solid

Date Received: 06/17/21 10:08

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 107 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |
| o-Terphenyl | 100 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 17:48 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 16.7 | | 4.99 | mg/Kg | | | 06/18/21 01:35 | 1 |

Client Sample ID: C-12, 4.1

Lab Sample ID: 880-3135-12

Date Collected: 06/16/21 12:38

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | 0.00201 | *- | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |
| 1,4-Difluorobenzene (Surr) | 107 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 22:20 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 98 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |
| o-Terphenyl | 91 | | 70 - 130 | | | 06/18/21 11:30 | 06/19/21 18:02 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 44.5 | | 5.05 | mg/Kg | | | 06/18/21 01:40 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-13, 4.1

Lab Sample ID: 880-3135-13

Date Collected: 06/16/21 12:43

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | 0.00318 | *- | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| m-Xylene & p-Xylene | <0.00404 | U | 0.00404 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| Total BTEX | <0.00404 | U | 0.00404 | mg/Kg | | 06/17/21 12:14 | 06/17/21 22:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 22:41 | 1 |
| 1,4-Difluorobenzene (Surr) | 128 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 22:41 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:15 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:15 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:15 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 11:30 | 06/19/21 18:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 113 | | 70 - 130 | 06/18/21 11:30 | 06/19/21 18:15 | 1 |
| o-Terphenyl | 97 | | 70 - 130 | 06/18/21 11:30 | 06/19/21 18:15 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 3420 | | 25.2 | mg/Kg | | | 06/18/21 01:44 | 5 |

Client Sample ID: C-14, 4.1

Lab Sample ID: 880-3135-14

Date Collected: 06/16/21 12:46

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U *- | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 23:01 | 1 |
| 1,4-Difluorobenzene (Surr) | 124 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 23:01 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-14, 4.1

Lab Sample ID: 880-3135-14

Date Collected: 06/16/21 12:46

Matrix: Solid

Date Received: 06/17/21 10:08

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 91 | | 70 - 130 | | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |
| o-Terphenyl | 92 | | 70 - 130 | | | 06/18/21 10:16 | 06/19/21 02:38 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 61.7 | | 5.02 | mg/Kg | | | 06/18/21 01:49 | 1 |

Client Sample ID: C-15, 4.1

Lab Sample ID: 880-3135-15

Date Collected: 06/16/21 12:47

Matrix: Solid

Date Received: 06/17/21 10:08

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U * | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 100 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |
| 1,4-Difluorobenzene (Surr) | 113 | | 70 - 130 | | | 06/17/21 12:14 | 06/17/21 23:22 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 80 | | 70 - 130 | | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |
| o-Terphenyl | 81 | | 70 - 130 | | | 06/18/21 10:16 | 06/19/21 02:59 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 146 | | 4.98 | mg/Kg | | | 06/18/21 02:04 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|--------------------|------------------------|--|-------------------|
| | | BFB1
(70-130) | DFBZ1
(70-130) |
| 880-3135-1 | C-1, 4.1 | 120 | 124 |
| 880-3135-2 | C-2, 4.1 | 97 | 127 |
| 880-3135-3 | C-3, 4.1 | 109 | 123 |
| 880-3135-4 | C-4, 4.1 | 106 | 128 |
| 880-3135-5 | C-5, 4.1 | 106 | 128 |
| 880-3135-6 | C-6, 4.1 | 105 | 142 S1+ |
| 880-3135-7 | C-7, 4.1 | 103 | 115 |
| 880-3135-8 | C-8, 4.1 | 110 | 109 |
| 880-3135-9 | C-9, 4.1 | 107 | 119 |
| 880-3135-10 | C-10, 4.1 | 107 | 131 S1+ |
| 880-3135-11 | C-11, 4.1 | 132 S1+ | 143 S1+ |
| 880-3135-12 | C-12, 4.1 | 97 | 107 |
| 880-3135-13 | C-13, 4.1 | 106 | 128 |
| 880-3135-14 | C-14, 4.1 | 113 | 124 |
| 880-3135-15 | C-15, 4.1 | 100 | 113 |
| 880-3136-A-1-A MS | Matrix Spike | 96 | 106 |
| 880-3136-A-1-B MSD | Matrix Spike Duplicate | 96 | 110 |
| LCS 880-4237/1-A | Lab Control Sample | 81 | 100 |
| LCSD 880-4237/2-A | Lab Control Sample Dup | 95 | 104 |
| MB 880-4237/5-A | Method Blank | 106 | 102 |

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

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|---------------------|------------------------|--|-------------------|
| | | 1CO1
(70-130) | OTPH1
(70-130) |
| 880-3089-A-21-F MS | Matrix Spike | 88 | 78 |
| 880-3089-A-21-G MSD | Matrix Spike Duplicate | 89 | 77 |
| 880-3135-1 | C-1, 4.1 | 125 | 138 S1+ |
| 880-3135-1 MS | C-1, 4.1 | 121 | 122 |
| 880-3135-1 MSD | C-1, 4.1 | 126 | 127 |
| 880-3135-2 | C-2, 4.1 | 125 | 111 |
| 880-3135-3 | C-3, 4.1 | 124 | 122 |
| 880-3135-4 | C-4, 4.1 | 136 S1+ | 128 |
| 880-3135-5 | C-5, 4.1 | 133 S1+ | 117 |
| 880-3135-6 | C-6, 4.1 | 91 | 93 |
| 880-3135-7 | C-7, 4.1 | 123 | 136 S1+ |
| 880-3135-8 | C-8, 4.1 | 125 | 139 S1+ |
| 880-3135-9 | C-9, 4.1 | 79 | 80 |
| 880-3135-10 | C-10, 4.1 | 77 | 80 |
| 880-3135-11 | C-11, 4.1 | 107 | 100 |
| 880-3135-12 | C-12, 4.1 | 98 | 91 |
| 880-3135-13 | C-13, 4.1 | 113 | 97 |
| 880-3135-14 | C-14, 4.1 | 91 | 92 |
| 880-3135-15 | C-15, 4.1 | 80 | 81 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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) |
|---------------------|------------------------|------------------|-------------------|
| 880-3236-A-21-E MS | Matrix Spike | 94 | 83 |
| 880-3236-A-21-F MSD | Matrix Spike Duplicate | 96 | 82 |
| LCS 880-4287/2-A | Lab Control Sample | 84 | 77 |
| LCS 880-4299/2-A | Lab Control Sample | 134 S1+ | 132 S1+ |
| LCS 880-4422/2-A | Lab Control Sample | 96 | 90 |
| LCSD 880-4287/3-A | Lab Control Sample Dup | 85 | 77 |
| LCSD 880-4299/3-A | Lab Control Sample Dup | 140 S1+ | 151 S1+ |
| LCSD 880-4422/3-A | Lab Control Sample Dup | 95 | 88 |
| MB 880-4287/1-A | Method Blank | 88 | 87 |
| MB 880-4299/1-A | Method Blank | 143 S1+ | 157 S1+ |
| MB 880-4422/1-A | Method Blank | 81 | 82 |

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4237/5-A

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/17/21 12:14 | 06/17/21 15:29 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 15:29 | 1 |
| 1,4-Difluorobenzene (Surr) | 102 | | 70 - 130 | 06/17/21 12:14 | 06/17/21 15:29 | 1 |

Lab Sample ID: LCS 880-4237/1-A

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.06310 | *- | mg/Kg | | 63 | 70 - 130 |
| Toluene | 0.100 | 0.07098 | | mg/Kg | | 71 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.07301 | | mg/Kg | | 73 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.1465 | | mg/Kg | | 73 | 70 - 130 |
| o-Xylene | 0.100 | 0.07504 | | mg/Kg | | 75 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 81 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 |

Lab Sample ID: LCSD 880-4237/2-A

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.06328 | *- | mg/Kg | | 63 | 70 - 130 | 0 | 35 |
| Toluene | 0.100 | 0.08092 | | mg/Kg | | 81 | 70 - 130 | 13 | 35 |
| Ethylbenzene | 0.100 | 0.08532 | | mg/Kg | | 85 | 70 - 130 | 16 | 35 |
| m-Xylene & p-Xylene | 0.200 | 0.1685 | | mg/Kg | | 84 | 70 - 130 | 14 | 35 |
| o-Xylene | 0.100 | 0.08416 | | mg/Kg | | 84 | 70 - 130 | 11 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 95 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 104 | | 70 - 130 |

Lab Sample ID: 880-3136-A-1-A MS

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00199 | U *- F1 | 0.0992 | 0.06045 | F1 | mg/Kg | | 60 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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

Lab Sample ID: 880-3136-A-1-A MS

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Toluene | <0.00199 | U | 0.0992 | 0.07587 | | mg/Kg | | 76 | 70 - 130 |
| Ethylbenzene | <0.00199 | U | 0.0992 | 0.07636 | | mg/Kg | | 77 | 70 - 130 |
| m-Xylene & p-Xylene | 0.00548 | | 0.198 | 0.1558 | | mg/Kg | | 76 | 70 - 130 |
| o-Xylene | <0.00199 | U | 0.0992 | 0.07901 | | mg/Kg | | 78 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 4-Bromofluorobenzene (Surr) | 96 | | 70 - 130 | | | | | | |
| 1,4-Difluorobenzene (Surr) | 106 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3136-A-1-B MSD

Matrix: Solid

Analysis Batch: 4238

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4237

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Benzene | <0.00199 | U *- F1 | 0.101 | 0.06625 | F1 | mg/Kg | | 65 | 70 - 130 | 9 | 35 |
| Toluene | <0.00199 | U | 0.101 | 0.07730 | | mg/Kg | | 77 | 70 - 130 | 2 | 35 |
| Ethylbenzene | <0.00199 | U | 0.101 | 0.07343 | | mg/Kg | | 73 | 70 - 130 | 4 | 35 |
| m-Xylene & p-Xylene | 0.00548 | | 0.201 | 0.1480 | | mg/Kg | | 71 | 70 - 130 | 5 | 35 |
| o-Xylene | <0.00199 | U | 0.101 | 0.07579 | | mg/Kg | | 74 | 70 - 130 | 4 | 35 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 4-Bromofluorobenzene (Surr) | 96 | | 70 - 130 | | | | | | | | |
| 1,4-Difluorobenzene (Surr) | 110 | | 70 - 130 | | | | | | | | |

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

Lab Sample ID: MB 880-4287/1-A

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4287

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 88 | | 70 - 130 | | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |
| o-Terphenyl | 87 | | 70 - 130 | | | 06/18/21 10:16 | 06/18/21 18:16 | 1 |

Lab Sample ID: LCS 880-4287/2-A

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4287

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 847.6 | | mg/Kg | | 85 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-4287/2-A

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4287

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Diesel Range Organics (Over C10-C28) | 1000 | 909.1 | | mg/Kg | | 91 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------|---------------|---------------|----------|
| 1-Chlorooctane | 84 | | 70 - 130 |
| o-Terphenyl | 77 | | 70 - 130 |

Lab Sample ID: LCSD 880-4287/3-A

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4287

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 864.2 | | mg/Kg | | 86 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 920.1 | | mg/Kg | | 92 | 70 - 130 | 1 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|----------------|----------------|----------------|----------|
| 1-Chlorooctane | 85 | | 70 - 130 |
| o-Terphenyl | 77 | | 70 - 130 |

Lab Sample ID: 880-3089-A-21-F MS

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4287

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 866.8 | | mg/Kg | | 85 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 983.7 | | mg/Kg | | 98 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|----------------|--------------|--------------|----------|
| 1-Chlorooctane | 88 | | 70 - 130 |
| o-Terphenyl | 78 | | 70 - 130 |

Lab Sample ID: 880-3089-A-21-G MSD

Matrix: Solid

Analysis Batch: 4278

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4287

| 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 | <49.7 | U | 997 | 842.4 | | mg/Kg | | 83 | 70 - 130 | 3 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 990.5 | | mg/Kg | | 99 | 70 - 130 | 1 | 20 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|----------------|---------------|---------------|----------|
| 1-Chlorooctane | 89 | | 70 - 130 |
| o-Terphenyl | 77 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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

Lab Sample ID: MB 880-4299/1-A

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4299

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 12:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 12:17 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 12:17 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/18/21 11:30 | 06/19/21 12:17 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|--------------|--------------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 143 | S1+ | 70 - 130 | 06/18/21 11:30 | 06/19/21 12:17 | 1 |
| o-Terphenyl | 157 | S1+ | 70 - 130 | 06/18/21 11:30 | 06/19/21 12:17 | 1 |

Lab Sample ID: LCS 880-4299/2-A

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4299

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1081 | | mg/Kg | | 108 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 965.7 | | mg/Kg | | 97 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------|---------------|---------------|----------|
| 1-Chlorooctane | 134 | S1+ | 70 - 130 |
| o-Terphenyl | 132 | S1+ | 70 - 130 |

Lab Sample ID: LCSD 880-4299/3-A

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4299

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1230 | | mg/Kg | | 123 | 70 - 130 | 13 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1030 | | mg/Kg | | 103 | 70 - 130 | 6 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|----------------|----------------|----------------|----------|
| 1-Chlorooctane | 140 | S1+ | 70 - 130 |
| o-Terphenyl | 151 | S1+ | 70 - 130 |

Lab Sample ID: 880-3135-1 MS

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: C-1, 4.1

Prep Type: Total/NA

Prep Batch: 4299

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 1099 | | mg/Kg | | 110 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 858.3 | | mg/Kg | | 84 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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

Lab Sample ID: 880-3135-1 MS

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: C-1, 4.1

Prep Type: Total/NA

Prep Batch: 4299

| | MS | MS | |
|----------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane | 121 | | 70 - 130 |
| o-Terphenyl | 122 | | 70 - 130 |

Lab Sample ID: 880-3135-1 MSD

Matrix: Solid

Analysis Batch: 4336

Client Sample ID: C-1, 4.1

Prep Type: Total/NA

Prep Batch: 4299

| 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 | <49.7 | U | 997 | 1085 | | mg/Kg | | 109 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 901.4 | | mg/Kg | | 89 | 70 - 130 | 5 | 20 |

| | MSD | MSD | |
|----------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane | 126 | | 70 - 130 |
| o-Terphenyl | 127 | | 70 - 130 |

Lab Sample ID: MB 880-4422/1-A

Matrix: Solid

Analysis Batch: 4415

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4422

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/21/21 23:38 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/21/21 23:38 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/21/21 23:38 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/21/21 13:47 | 06/21/21 23:38 | 1 |

| | MB | MB | | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| Surrogate | %Recovery | Qualifier | Limits | | | |
| 1-Chlorooctane | 81 | | 70 - 130 | 06/21/21 13:47 | 06/21/21 23:38 | 1 |
| o-Terphenyl | 82 | | 70 - 130 | 06/21/21 13:47 | 06/21/21 23:38 | 1 |

Lab Sample ID: LCS 880-4422/2-A

Matrix: Solid

Analysis Batch: 4415

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4422

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 933.3 | | mg/Kg | | 93 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1033 | | mg/Kg | | 103 | 70 - 130 |

| | LCS | LCS | |
|----------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane | 96 | | 70 - 130 |
| o-Terphenyl | 90 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

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

Lab Sample ID: LCSD 880-4422/3-A

Matrix: Solid

Analysis Batch: 4415

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4422

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 928.6 | | mg/Kg | | 93 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1015 | | mg/Kg | | 102 | 70 - 130 | 2 | 20 |
| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits | | | | | | |
| 1-Chlorooctane | 95 | | 70 - 130 | | | | | | |
| o-Terphenyl | 88 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3236-A-21-E MS

Matrix: Solid

Analysis Batch: 4415

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4422

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 942.1 | | mg/Kg | | 91 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 1127 | | mg/Kg | | 111 | 70 - 130 | | |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane | 94 | | 70 - 130 | | | | | | | | |
| o-Terphenyl | 83 | | 70 - 130 | | | | | | | | |

Lab Sample ID: 880-3236-A-21-F MSD

Matrix: Solid

Analysis Batch: 4415

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4422

| 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 | <49.7 | U | 997 | 1035 | | mg/Kg | | 101 | 70 - 130 | 9 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 1132 | | mg/Kg | | 111 | 70 - 130 | 0 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane | 96 | | 70 - 130 | | | | | | | | |
| o-Terphenyl | 82 | | 70 - 130 | | | | | | | | |

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4243/1-A

Matrix: Solid

Analysis Batch: 4273

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 06/18/21 01:05 | 1 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4243/2-A

Matrix: Solid

Analysis Batch: 4273

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 231.7 | | mg/Kg | | 93 | 90 - 110 |

Lab Sample ID: LCSD 880-4243/3-A

Matrix: Solid

Analysis Batch: 4273

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 231.7 | | mg/Kg | | 93 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3135-10 MS

Matrix: Solid

Analysis Batch: 4273

Client Sample ID: C-10, 4.1

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 43.1 | | 252 | 274.3 | | mg/Kg | | 92 | 90 - 110 |

Lab Sample ID: 880-3135-10 MSD

Matrix: Solid

Analysis Batch: 4273

Client Sample ID: C-10, 4.1

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 43.1 | | 252 | 274.2 | | mg/Kg | | 92 | 90 - 110 | 0 | 20 |

Lab Sample ID: MB 880-4242/1-A

Matrix: Solid

Analysis Batch: 4305

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 06/20/21 14:53 | 1 |

Lab Sample ID: LCS 880-4242/2-A

Matrix: Solid

Analysis Batch: 4305

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 237.6 | | mg/Kg | | 95 | 90 - 110 |

Lab Sample ID: LCSD 880-4242/3-A

Matrix: Solid

Analysis Batch: 4305

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 237.5 | | mg/Kg | | 95 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3135-2 MS

Matrix: Solid

Analysis Batch: 4305

Client Sample ID: C-2, 4.1

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 147 | | 249 | 387.3 | | mg/Kg | | 97 | 90 - 110 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-3135-2 MSD

Matrix: Solid

Analysis Batch: 4305

Client Sample ID: C-2, 4.1

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 147 | | 249 | 386.3 | | mg/Kg | | 96 | 90 - 110 | 0 | 20 |

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

GC VOA

Prep Batch: 4237

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-3135-1 | C-1, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-2 | C-2, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-3 | C-3, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-4 | C-4, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-5 | C-5, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-6 | C-6, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-7 | C-7, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-8 | C-8, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-9 | C-9, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-10 | C-10, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-11 | C-11, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-12 | C-12, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-13 | C-13, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-14 | C-14, 4.1 | Total/NA | Solid | 5035 | |
| 880-3135-15 | C-15, 4.1 | Total/NA | Solid | 5035 | |
| MB 880-4237/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-4237/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-4237/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-3136-A-1-A MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 880-3136-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Analysis Batch: 4238

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-3135-1 | C-1, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-2 | C-2, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-3 | C-3, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-4 | C-4, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-5 | C-5, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-6 | C-6, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-7 | C-7, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-8 | C-8, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-9 | C-9, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-10 | C-10, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-11 | C-11, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-12 | C-12, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-13 | C-13, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-14 | C-14, 4.1 | Total/NA | Solid | 8021B | 4237 |
| 880-3135-15 | C-15, 4.1 | Total/NA | Solid | 8021B | 4237 |
| MB 880-4237/5-A | Method Blank | Total/NA | Solid | 8021B | 4237 |
| LCS 880-4237/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 4237 |
| LCSD 880-4237/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 4237 |
| 880-3136-A-1-A MS | Matrix Spike | Total/NA | Solid | 8021B | 4237 |
| 880-3136-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 4237 |

GC Semi VOA

Analysis Batch: 4278

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|----------|------------|
| 880-3135-14 | C-14, 4.1 | Total/NA | Solid | 8015B NM | 4287 |
| 880-3135-15 | C-15, 4.1 | Total/NA | Solid | 8015B NM | 4287 |
| MB 880-4287/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4287 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

GC Semi VOA (Continued)

Analysis Batch: 4278 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| LCS 880-4287/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4287 |
| LCSD 880-4287/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4287 |
| 880-3089-A-21-F MS | Matrix Spike | Total/NA | Solid | 8015B NM | 4287 |
| 880-3089-A-21-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 4287 |

Prep Batch: 4287

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-------------|------------|
| 880-3135-14 | C-14, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-15 | C-15, 4.1 | Total/NA | Solid | 8015NM Prep | |
| MB 880-4287/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4287/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4287/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3089-A-21-F MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 880-3089-A-21-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

Prep Batch: 4299

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-3135-1 | C-1, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-2 | C-2, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-3 | C-3, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-4 | C-4, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-5 | C-5, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-7 | C-7, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-8 | C-8, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-11 | C-11, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-12 | C-12, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-13 | C-13, 4.1 | Total/NA | Solid | 8015NM Prep | |
| MB 880-4299/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4299/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4299/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3135-1 MS | C-1, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-1 MSD | C-1, 4.1 | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 4336

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3135-1 | C-1, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-2 | C-2, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-3 | C-3, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-4 | C-4, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-5 | C-5, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-7 | C-7, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-8 | C-8, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-11 | C-11, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-12 | C-12, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-13 | C-13, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| MB 880-4299/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4299 |
| LCS 880-4299/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4299 |
| LCSD 880-4299/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-1 MS | C-1, 4.1 | Total/NA | Solid | 8015B NM | 4299 |
| 880-3135-1 MSD | C-1, 4.1 | Total/NA | Solid | 8015B NM | 4299 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

GC Semi VOA

Analysis Batch: 4415

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 880-3135-6 | C-6, 4.1 | Total/NA | Solid | 8015B NM | 4422 |
| 880-3135-9 | C-9, 4.1 | Total/NA | Solid | 8015B NM | 4422 |
| 880-3135-10 | C-10, 4.1 | Total/NA | Solid | 8015B NM | 4422 |
| MB 880-4422/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4422 |
| LCS 880-4422/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4422 |
| LCSD 880-4422/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4422 |
| 880-3236-A-21-E MS | Matrix Spike | Total/NA | Solid | 8015B NM | 4422 |
| 880-3236-A-21-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 4422 |

Prep Batch: 4422

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-------------|------------|
| 880-3135-6 | C-6, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-9 | C-9, 4.1 | Total/NA | Solid | 8015NM Prep | |
| 880-3135-10 | C-10, 4.1 | Total/NA | Solid | 8015NM Prep | |
| MB 880-4422/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4422/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4422/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3236-A-21-E MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 880-3236-A-21-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

HPLC/IC

Leach Batch: 4242

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3135-1 | C-1, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-2 | C-2, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-3 | C-3, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-4 | C-4, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-5 | C-5, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-6 | C-6, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-7 | C-7, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-8 | C-8, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-9 | C-9, 4.1 | Soluble | Solid | DI Leach | |
| MB 880-4242/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4242/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4242/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-3135-2 MS | C-2, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-2 MSD | C-2, 4.1 | Soluble | Solid | DI Leach | |

Leach Batch: 4243

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3135-10 | C-10, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-11 | C-11, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-12 | C-12, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-13 | C-13, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-14 | C-14, 4.1 | Soluble | Solid | DI Leach | |
| 880-3135-15 | C-15, 4.1 | Soluble | Solid | DI Leach | |
| MB 880-4243/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4243/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4243/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-3135-10 MS | C-10, 4.1 | Soluble | Solid | DI Leach | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

HPLC/IC (Continued)

Leach Batch: 4243 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|----------|------------|
| 880-3135-10 MSD | C-10, 4.1 | Soluble | Solid | DI Leach | |

Analysis Batch: 4273

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3135-10 | C-10, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-11 | C-11, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-12 | C-12, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-13 | C-13, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-14 | C-14, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-15 | C-15, 4.1 | Soluble | Solid | 300.0 | 4243 |
| MB 880-4243/1-A | Method Blank | Soluble | Solid | 300.0 | 4243 |
| LCS 880-4243/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4243 |
| LCSD 880-4243/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4243 |
| 880-3135-10 MS | C-10, 4.1 | Soluble | Solid | 300.0 | 4243 |
| 880-3135-10 MSD | C-10, 4.1 | Soluble | Solid | 300.0 | 4243 |

Analysis Batch: 4305

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3135-1 | C-1, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-2 | C-2, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-3 | C-3, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-4 | C-4, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-5 | C-5, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-6 | C-6, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-7 | C-7, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-8 | C-8, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-9 | C-9, 4.1 | Soluble | Solid | 300.0 | 4242 |
| MB 880-4242/1-A | Method Blank | Soluble | Solid | 300.0 | 4242 |
| LCS 880-4242/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4242 |
| LCSD 880-4242/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4242 |
| 880-3135-2 MS | C-2, 4.1 | Soluble | Solid | 300.0 | 4242 |
| 880-3135-2 MSD | C-2, 4.1 | Soluble | Solid | 300.0 | 4242 |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-1, 4.1

Date Collected: 06/16/21 12:08

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-1

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 | | | 5.04 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 17:33 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 14:02 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 16:38 | CH | XEN MID |

Client Sample ID: C-2, 4.1

Date Collected: 06/16/21 12:10

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-2

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.04 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 17:54 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 15:34 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 16:45 | CH | XEN MID |

Client Sample ID: C-3, 4.1

Date Collected: 06/16/21 12:11

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-3

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 18:14 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 15:47 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:04 | CH | XEN MID |

Client Sample ID: C-4, 4.1

Date Collected: 06/16/21 12:12

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-4

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 18:35 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 16:01 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:11 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-5, 4.1

Date Collected: 06/16/21 12:21

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-5

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 | | | 5.00 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 18:56 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 16:14 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:31 | CH | XEN MID |

Client Sample ID: C-6, 4.1

Date Collected: 06/16/21 12:23

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-6

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 20:17 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4422 | 06/21/21 13:47 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4415 | 06/22/21 06:16 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:37 | CH | XEN MID |

Client Sample ID: C-7, 4.1

Date Collected: 06/16/21 12:24

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-7

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 20:37 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 16:41 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:44 | CH | XEN MID |

Client Sample ID: C-8, 4.1

Date Collected: 06/16/21 12:25

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-8

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 | | | 4.97 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 20:58 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 16:54 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:50 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-9, 4.1

Date Collected: 06/16/21 12:26

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-9

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 | | | 4.99 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 21:18 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4422 | 06/21/21 13:47 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4415 | 06/22/21 09:47 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 4242 | 06/17/21 13:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4305 | 06/20/21 17:57 | CH | XEN MID |

Client Sample ID: C-10, 4.1

Date Collected: 06/16/21 12:27

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-10

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 | | | 4.96 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 21:39 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4422 | 06/21/21 13:47 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4415 | 06/22/21 09:06 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4273 | 06/18/21 01:20 | CH | XEN MID |

Client Sample ID: C-11, 4.1

Date Collected: 06/16/21 12:29

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-11

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 | | | 5.02 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 22:00 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 17:48 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4273 | 06/18/21 01:35 | CH | XEN MID |

Client Sample ID: C-12, 4.1

Date Collected: 06/16/21 12:38

Date Received: 06/17/21 10:08

Lab Sample ID: 880-3135-12

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 | | | 5.03 g | 5 mL | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 22:20 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 18:02 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4273 | 06/18/21 01:40 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Client Sample ID: C-13, 4.1

Lab Sample ID: 880-3135-13

Date Collected: 06/16/21 12:43

Matrix: Solid

Date Received: 06/17/21 10:08

| 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 | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 22:41 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4299 | 06/18/21 11:30 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4336 | 06/19/21 18:15 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | | | 4273 | 06/18/21 01:44 | CH | XEN MID |

Client Sample ID: C-14, 4.1

Lab Sample ID: 880-3135-14

Date Collected: 06/16/21 12:46

Matrix: Solid

Date Received: 06/17/21 10:08

| 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 | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 23:01 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4287 | 06/18/21 10:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4278 | 06/19/21 02:38 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4273 | 06/18/21 01:49 | CH | XEN MID |

Client Sample ID: C-15, 4.1

Lab Sample ID: 880-3135-15

Date Collected: 06/16/21 12:47

Matrix: Solid

Date Received: 06/17/21 10:08

| 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 | 4237 | 06/17/21 12:14 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4238 | 06/17/21 23:22 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 4287 | 06/18/21 10:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4278 | 06/19/21 02:59 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 4243 | 06/17/21 13:12 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4273 | 06/18/21 02:04 | CH | XEN MID |

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 06-30-21 |

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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Eurofins Xenco, Midland

Method Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD-FRAC POND 13

Job ID: 880-3135-1
SDG: 20-0107-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 880-3135-1 | C-1, 4.1 | Solid | 06/16/21 12:08 | 06/17/21 10:08 | |
| 880-3135-2 | C-2, 4.1 | Solid | 06/16/21 12:10 | 06/17/21 10:08 | |
| 880-3135-3 | C-3, 4.1 | Solid | 06/16/21 12:11 | 06/17/21 10:08 | |
| 880-3135-4 | C-4, 4.1 | Solid | 06/16/21 12:12 | 06/17/21 10:08 | |
| 880-3135-5 | C-5, 4.1 | Solid | 06/16/21 12:21 | 06/17/21 10:08 | |
| 880-3135-6 | C-6, 4.1 | Solid | 06/16/21 12:23 | 06/17/21 10:08 | |
| 880-3135-7 | C-7, 4.1 | Solid | 06/16/21 12:24 | 06/17/21 10:08 | |
| 880-3135-8 | C-8, 4.1 | Solid | 06/16/21 12:25 | 06/17/21 10:08 | |
| 880-3135-9 | C-9, 4.1 | Solid | 06/16/21 12:26 | 06/17/21 10:08 | |
| 880-3135-10 | C-10, 4.1 | Solid | 06/16/21 12:27 | 06/17/21 10:08 | |
| 880-3135-11 | C-11, 4.1 | Solid | 06/16/21 12:29 | 06/17/21 10:08 | |
| 880-3135-12 | C-12, 4.1 | Solid | 06/16/21 12:38 | 06/17/21 10:08 | |
| 880-3135-13 | C-13, 4.1 | Solid | 06/16/21 12:43 | 06/17/21 10:08 | |
| 880-3135-14 | C-14, 4.1 | Solid | 06/16/21 12:46 | 06/17/21 10:08 | |
| 880-3135-15 | C-15, 4.1 | Solid | 06/16/21 12:47 | 06/17/21 10:08 | |

Eurofins Xenco, Midland

6/22/2021

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-3135-1

SDG Number: 20-0107-14

Login Number: 3135**List Number: 1****Creator: Phillips, Kerianna****List Source: Eurofins Xenco, Midland**

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-3447-1
Client Project/Site: SD Frac 13

For:

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
7/1/2021 3:26:31 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Laboratory Job ID: 880-3447-1

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 28 |
| QC Sample Results | 31 |
| QC Association Summary | 41 |
| Lab Chronicle | 48 |
| Certification Summary | 57 |
| Method Summary | 58 |
| Sample Summary | 59 |
| Chain of Custody | 60 |
| Receipt Checklists | 63 |

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Qualifiers

GC VOA

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

GC Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| F2 | MS/MSD RPD exceeds control limits |
| U | Indicates the analyte was analyzed for but not detected. |

HPLC/IC

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

Glossary

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

Eurofins Xenco, Midland

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Job ID: 880-3447-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-3447-1****Receipt**

The samples were received on 6/25/2021 8:41 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: C-17 3' (880-3447-2), C-18 3' (880-3447-3), C-21 3' (880-3447-6), C-23 3' (880-3447-8), C-24 3' (880-3447-9), C-25 3' (880-3447-10), C-27 3' (880-3447-12), C-31 3' (880-3447-16), C-32 3' (880-3447-17), C-37 SW (880-3447-22), C-38 SW (880-3447-23), C-40 1' (880-3447-25), C-41 1' (880-3447-26), C-44 1' (880-3447-29), C-45 1' (880-3447-30), C-46 1' (880-3447-31), C-47 1' (880-3447-32), C-48 SW (880-3447-33), C-49 SW (880-3447-34), (880-3447-A-1-E MS) and (880-3447-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-16 3'

Lab Sample ID: 880-3447-1

Date Collected: 06/24/21 08:00

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| Toluene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| Ethylbenzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| Total BTEX | <0.00401 | U F1 | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 04:17 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 04:17 | 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 | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 13:56 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 13:56 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 13:56 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 13:56 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 94 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 13:56 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 13:56 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 421 | | 5.00 | mg/Kg | | | 06/25/21 21:15 | 1 |

Client Sample ID: C-17 3'

Lab Sample ID: 880-3447-2

Date Collected: 06/24/21 08:01

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| Ethylbenzene | 0.00211 | | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 143 | S1+ | 70 - 130 | 06/25/21 14:17 | 06/26/21 04:38 | 1 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 04:38 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-17 3'

Lab Sample ID: 880-3447-2

Date Collected: 06/24/21 08:01

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 91 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |
| o-Terphenyl | 94 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 15:00 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1080 | | 25.1 | mg/Kg | | | 06/25/21 21:21 | 5 |

Client Sample ID: C-18 3'

Lab Sample ID: 880-3447-3

Date Collected: 06/24/21 08:02

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 134 | S1+ | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 87 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 04:58 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 91 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |
| o-Terphenyl | 96 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 15:21 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 453 | | 5.03 | mg/Kg | | | 06/30/21 19:16 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-19 3'

Lab Sample ID: 880-3447-4

Date Collected: 06/24/21 08:03

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 05:19 | 1 |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 05:19 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:42 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:42 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:42 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 15:42 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 95 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 15:42 | 1 |
| o-Terphenyl | 100 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 15:42 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 308 | | 5.05 | mg/Kg | | | 06/30/21 19:31 | 1 |

Client Sample ID: C-20 3'

Lab Sample ID: 880-3447-5

Date Collected: 06/24/21 08:04

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:39 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 05:39 | 1 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 05:39 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-20 3'

Lab Sample ID: 880-3447-5

Date Collected: 06/24/21 08:04

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 98 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |
| o-Terphenyl | 100 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 16:03 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 479 | | 5.00 | mg/Kg | | | 06/30/21 19:35 | 1 |

Client Sample ID: C-21 3'

Lab Sample ID: 880-3447-6

Date Collected: 06/24/21 08:05

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 05:59 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 05:59 | 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 | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 95 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 16:24 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 404 | | 5.04 | mg/Kg | | | 06/30/21 19:40 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-22 3'

Lab Sample ID: 880-3447-7

Date Collected: 06/24/21 08:06

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 116 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 06:20 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 06:20 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:45 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:45 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 16:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 95 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 16:45 | 1 |
| o-Terphenyl | 100 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 16:45 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 334 | | 5.03 | mg/Kg | | | 06/30/21 19:45 | 1 |

Client Sample ID: C-23 3'

Lab Sample ID: 880-3447-8

Date Collected: 06/24/21 08:07

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 06:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 06:40 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 06:40 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-23 3'

Lab Sample ID: 880-3447-8

Date Collected: 06/24/21 08:07

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 100 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |
| o-Terphenyl | 104 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 17:06 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 159 | | 4.99 | mg/Kg | | | 06/30/21 19:59 | 1 |

Client Sample ID: C-24 3'

Lab Sample ID: 880-3447-9

Date Collected: 06/24/21 08:08

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 133 | S1+ | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 07:01 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 96 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 17:27 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 203 | | 5.03 | mg/Kg | | | 06/30/21 20:04 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-25 3'

Lab Sample ID: 880-3447-10

Date Collected: 06/24/21 08:09

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 07:21 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 126 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 07:21 | 1 |
| 1,4-Difluorobenzene (Surr) | 91 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 07:21 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:49 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:49 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:49 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 17:49 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 104 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 17:49 | 1 |
| o-Terphenyl | 106 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 17:49 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 73.6 | | 5.02 | mg/Kg | | | 06/30/21 20:08 | 1 |

Client Sample ID: C-26 3'

Lab Sample ID: 880-3447-11

Date Collected: 06/24/21 08:10

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 09:11 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 09:11 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-26 3'

Lab Sample ID: 880-3447-11

Date Collected: 06/24/21 08:10

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 95 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 18:31 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 107 | | 5.00 | mg/Kg | | | 06/30/21 20:13 | 1 |

Client Sample ID: C-27 3'

Lab Sample ID: 880-3447-12

Date Collected: 06/24/21 08:11

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 125 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 09:31 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 103 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |
| o-Terphenyl | 109 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 18:52 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 92.4 | | 4.98 | mg/Kg | | | 06/30/21 20:18 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-28 3'

Lab Sample ID: 880-3447-13

Date Collected: 06/24/21 08:12

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 09:52 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 09:52 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 09:52 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:13 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:13 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:13 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 91 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 19:13 | 1 |
| o-Terphenyl | 95 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 19:13 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 96.2 | | 5.01 | mg/Kg | | | 06/30/21 20:22 | 1 |

Client Sample ID: C-29 3'

Lab Sample ID: 880-3447-14

Date Collected: 06/24/21 08:13

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:12 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 10:12 | 1 |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 10:12 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-29 3'

Lab Sample ID: 880-3447-14

Date Collected: 06/24/21 08:13

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 88 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |
| o-Terphenyl | 91 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 19:35 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 121 | | 4.99 | mg/Kg | | | 06/30/21 20:36 | 1 |

Client Sample ID: C-30 3'

Lab Sample ID: 880-3447-15

Date Collected: 06/24/21 08:14

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 10:33 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 89 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |
| o-Terphenyl | 93 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 19:56 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 217 | | 5.00 | mg/Kg | | | 06/30/21 20:41 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-31 3'

Lab Sample ID: 880-3447-16

Date Collected: 06/24/21 08:15

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 06/25/21 14:17 | 06/26/21 10:53 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 122 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 10:53 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 10:53 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:17 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:17 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 94 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 20:17 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 20:17 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 209 | | 5.03 | mg/Kg | | | 06/30/21 20:55 | 1 |

Client Sample ID: C-32 3'

Lab Sample ID: 880-3447-17

Date Collected: 06/24/21 08:16

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:13 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 129 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 11:13 | 1 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 11:13 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-32 3'

Lab Sample ID: 880-3447-17

Date Collected: 06/24/21 08:16

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 93 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |
| o-Terphenyl | 98 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 20:38 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 123 | | 5.02 | mg/Kg | | | 06/30/21 21:00 | 1 |

Client Sample ID: C-33 3'

Lab Sample ID: 880-3447-18

Date Collected: 06/24/21 08:17

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | | | 06/25/21 14:17 | 06/26/21 11:34 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 91 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |
| o-Terphenyl | 95 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 20:59 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 183 | | 5.01 | mg/Kg | | | 06/30/21 21:05 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-34 3'

Lab Sample ID: 880-3447-19

Date Collected: 06/24/21 08:18

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:17 | 06/26/21 11:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 11:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 11:54 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:20 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:20 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:20 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 99 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 21:20 | 1 |
| o-Terphenyl | 103 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 21:20 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 250 | | 4.98 | mg/Kg | | | 06/30/21 21:09 | 1 |

Client Sample ID: C-35 3'

Lab Sample ID: 880-3447-20

Date Collected: 06/24/21 08:19

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:17 | 06/26/21 12:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 12:15 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 12:15 | 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 | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-35 3'

Lab Sample ID: 880-3447-20

Date Collected: 06/24/21 08:19

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 95 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |
| o-Terphenyl | 99 | | 70 - 130 | | | 06/25/21 13:40 | 06/26/21 21:42 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 182 | | 4.99 | mg/Kg | | | 06/30/21 21:14 | 1 |

Client Sample ID: C-36 3'

Lab Sample ID: 880-3447-21

Date Collected: 06/24/21 08:20

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 18:33 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 86 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |
| o-Terphenyl | 89 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 02:58 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 331 | | 5.00 | mg/Kg | | | 06/30/21 21:19 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-37 SW

Lab Sample ID: 880-3447-22

Date Collected: 06/24/21 08:21

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 143 | S1+ | 70 - 130 | 06/25/21 14:52 | 06/26/21 18:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 85 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 18:54 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:19 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:19 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:19 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 97 | | 70 - 130 | 06/25/21 13:58 | 06/26/21 03:19 | 1 |
| o-Terphenyl | 96 | | 70 - 130 | 06/25/21 13:58 | 06/26/21 03:19 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 179 | | 4.99 | mg/Kg | | | 06/30/21 21:23 | 1 |

Client Sample ID: C-38 SW

Lab Sample ID: 880-3447-23

Date Collected: 06/24/21 08:22

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 19:14 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 19:14 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-38 SW

Date Collected: 06/24/21 08:22

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-23

Matrix: Solid

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 77 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |
| o-Terphenyl | 77 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 03:41 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 120 | | 5.05 | mg/Kg | | | 06/30/21 08:31 | 1 |

Client Sample ID: C-39 SW

Date Collected: 06/24/21 08:23

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-24

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 | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 19:35 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 96 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |
| o-Terphenyl | 98 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 04:01 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 500 | | 5.05 | mg/Kg | | | 06/30/21 08:45 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-40 1'

Lab Sample ID: 880-3447-25

Date Collected: 06/24/21 08:24

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 19:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 131 | S1+ | 70 - 130 | 06/25/21 14:52 | 06/26/21 19:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 19:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:23 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:23 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:23 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:23 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 91 | | 70 - 130 | 06/25/21 13:58 | 06/26/21 04:23 | 1 |
| o-Terphenyl | 90 | | 70 - 130 | 06/25/21 13:58 | 06/26/21 04:23 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 140 | | 4.99 | mg/Kg | | | 06/30/21 08:50 | 1 |

Client Sample ID: C-41 1'

Lab Sample ID: 880-3447-26

Date Collected: 06/24/21 08:25

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 124 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 20:16 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 20:16 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-41 1'

Lab Sample ID: 880-3447-26

Date Collected: 06/24/21 08:25

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 93 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |
| o-Terphenyl | 94 | | 70 - 130 | | | 06/25/21 13:58 | 06/26/21 04:44 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 3620 | | 25.2 | mg/Kg | | | 06/30/21 08:54 | 5 |

Client Sample ID: C-42 1'

Lab Sample ID: 880-3447-27

Date Collected: 06/24/21 08:26

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 20:36 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 20:36 | 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 | 75.2 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |
| Diesel Range Organics (Over C10-C28) | 199 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |
| Oil Range Organics (Over C28-C36) | 236 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |
| Total TPH | 510 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 101 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |
| o-Terphenyl | 105 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:11 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 413 | | 4.99 | mg/Kg | | | 06/30/21 08:59 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-43 1'

Lab Sample ID: 880-3447-28

Date Collected: 06/24/21 08:27

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/26/21 20:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 20:57 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 20:57 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:24 | 1 |
| Diesel Range Organics (Over C10-C28) | 134 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:24 | 1 |
| Oil Range Organics (Over C28-C36) | 113 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:24 | 1 |
| Total TPH | 247 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 99 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 19:24 | 1 |
| o-Terphenyl | 106 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 19:24 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 284 | | 5.05 | mg/Kg | | | 06/30/21 09:13 | 1 |

Client Sample ID: C-44 '1

Lab Sample ID: 880-3447-29

Date Collected: 06/24/21 08:28

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 144 | S1+ | 70 - 130 | 06/25/21 14:52 | 06/26/21 21:17 | 1 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 21:17 | 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 | 72.9 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-44 '1

Lab Sample ID: 880-3447-29

Date Collected: 06/24/21 08:28

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | 95.9 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |
| Total TPH | 169 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 96 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |
| o-Terphenyl | 103 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:37 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 447 | | 5.00 | mg/Kg | | | 06/30/21 09:18 | 1 |

Client Sample ID: C-45 '1

Lab Sample ID: 880-3447-30

Date Collected: 06/24/21 08:29

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 119 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 21:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 06/25/21 14:52 | 06/26/21 21:37 | 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 | 73.7 | | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |
| Diesel Range Organics (Over C10-C28) | 69.0 | | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |
| Total TPH | 143 | | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane | 97 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |
| o-Terphenyl | 100 | | 70 - 130 | | | 06/25/21 09:52 | 06/25/21 19:50 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 353 | | 5.00 | mg/Kg | | | 06/30/21 09:23 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-46 1'

Lab Sample ID: 880-3447-31

Date Collected: 06/24/21 08:30

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:27 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 117 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 23:27 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 23:27 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | 69.2 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:03 | 1 |
| Diesel Range Organics (Over C10-C28) | 61.7 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:03 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:03 | 1 |
| Total TPH | 131 | | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:03 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 103 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:03 | 1 |
| o-Terphenyl | 104 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:03 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1330 | | 5.02 | mg/Kg | | | 06/30/21 09:27 | 1 |

Client Sample ID: C-47 1'

Lab Sample ID: 880-3447-32

Date Collected: 06/24/21 08:31

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 06/25/21 14:52 | 06/26/21 23:48 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 118 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 23:48 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 23:48 | 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 | 240 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:15 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-47 1'

Lab Sample ID: 880-3447-32

Date Collected: 06/24/21 08:31

Matrix: Solid

Date Received: 06/25/21 08:41

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|------------|-----------|------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:15 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:15 | 1 |
| Total TPH | 240 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 101 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:15 | 1 |
| o-Terphenyl | 111 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:15 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 136 | | 4.95 | mg/Kg | | | 06/30/21 09:32 | 1 |

Client Sample ID: C-48 SW

Lab Sample ID: 880-3447-33

Date Collected: 06/24/21 08:32

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 136 | S1+ | 70 - 130 | 06/25/21 14:52 | 06/27/21 00:08 | 1 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 | 06/25/21 14:52 | 06/27/21 00:08 | 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 | 72.6 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:28 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:28 | 1 |
| Total TPH | 72.6 | | 49.9 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 92 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:28 | 1 |
| o-Terphenyl | 97 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:28 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 152 | | 5.04 | mg/Kg | | | 06/30/21 09:37 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-49 SW

Lab Sample ID: 880-3447-34

Date Collected: 06/24/21 08:33

Matrix: Solid

Date Received: 06/25/21 08:41

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 06/25/21 14:52 | 06/27/21 00:28 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 149 | S1+ | 70 - 130 | 06/25/21 14:52 | 06/27/21 00:28 | 1 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 | 06/25/21 14:52 | 06/27/21 00:28 | 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 | 135 | | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:41 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:41 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:41 | 1 |
| Total TPH | 135 | | 49.8 | mg/Kg | | 06/25/21 09:52 | 06/25/21 20:41 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 93 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:41 | 1 |
| o-Terphenyl | 98 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 20:41 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 759 | | 4.95 | mg/Kg | | | 06/30/21 09:51 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|-------------------|------------------------|--|----------|
| Lab Sample ID | Client Sample ID | BFB1 | DFBZ1 |
| | | (70-130) | (70-130) |
| 880-3447-1 | C-16 3' | 110 | 94 |
| 880-3447-1 MS | C-16 3' | 140 S1+ | 85 |
| 880-3447-1 MSD | C-16 3' | 119 | 86 |
| 880-3447-2 | C-17 3' | 143 S1+ | 89 |
| 880-3447-3 | C-18 3' | 134 S1+ | 87 |
| 880-3447-4 | C-19 3' | 115 | 99 |
| 880-3447-5 | C-20 3' | 123 | 90 |
| 880-3447-6 | C-21 3' | 123 | 93 |
| 880-3447-7 | C-22 3' | 116 | 97 |
| 880-3447-8 | C-23 3' | 123 | 97 |
| 880-3447-9 | C-24 3' | 133 S1+ | 92 |
| 880-3447-10 | C-25 3' | 126 | 91 |
| 880-3447-11 | C-26 3' | 115 | 95 |
| 880-3447-12 | C-27 3' | 125 | 92 |
| 880-3447-13 | C-28 3' | 115 | 95 |
| 880-3447-14 | C-29 3' | 113 | 99 |
| 880-3447-15 | C-30 3' | 114 | 98 |
| 880-3447-16 | C-31 3' | 122 | 98 |
| 880-3447-17 | C-32 3' | 129 | 90 |
| 880-3447-18 | C-33 3' | 114 | 97 |
| 880-3447-19 | C-34 3' | 111 | 98 |
| 880-3447-20 | C-35 3' | 115 | 98 |
| 880-3447-21 | C-36 3' | 107 | 93 |
| 880-3447-22 | C-37 SW | 143 S1+ | 85 |
| 880-3447-23 | C-38 SW | 123 | 98 |
| 880-3447-24 | C-39 SW | 114 | 96 |
| 880-3447-25 | C-40 1' | 131 S1+ | 94 |
| 880-3447-26 | C-41 1' | 124 | 98 |
| 880-3447-27 | C-42 1' | 114 | 97 |
| 880-3447-28 | C-43 1' | 113 | 98 |
| 880-3447-29 | C-44 1' | 144 S1+ | 89 |
| 880-3447-30 | C-45 1' | 119 | 94 |
| 880-3447-31 | C-46 1' | 117 | 94 |
| 880-3447-32 | C-47 1' | 118 | 95 |
| 880-3447-33 | C-48 SW | 136 S1+ | 90 |
| 880-3447-34 | C-49 SW | 149 S1+ | 90 |
| LCS 880-4641/1-A | Lab Control Sample | 98 | 92 |
| LCSD 880-4641/2-A | Lab Control Sample Dup | 97 | 90 |
| MB 880-4634/5-A | Method Blank | 110 | 94 |
| MB 880-4641/5-A | Method Blank | 114 | 92 |
| MB 880-4645/5-A | Method Blank | 115 | 93 |

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.

Job ID: 880-3447-1

Project/Site: SD Frac 13

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

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|--------------------|------------------------|--|-------------------|
| | | 1CO1
(70-130) | OTPH1
(70-130) |
| 880-3447-1 | C-16 3' | 94 | 99 |
| 880-3447-1 MS | C-16 3' | 98 | 91 |
| 880-3447-1 MSD | C-16 3' | 93 | 87 |
| 880-3447-2 | C-17 3' | 91 | 94 |
| 880-3447-3 | C-18 3' | 91 | 96 |
| 880-3447-4 | C-19 3' | 95 | 100 |
| 880-3447-5 | C-20 3' | 98 | 100 |
| 880-3447-6 | C-21 3' | 95 | 99 |
| 880-3447-7 | C-22 3' | 95 | 100 |
| 880-3447-8 | C-23 3' | 100 | 104 |
| 880-3447-9 | C-24 3' | 96 | 99 |
| 880-3447-10 | C-25 3' | 104 | 106 |
| 880-3447-11 | C-26 3' | 95 | 99 |
| 880-3447-12 | C-27 3' | 103 | 109 |
| 880-3447-13 | C-28 3' | 91 | 95 |
| 880-3447-14 | C-29 3' | 88 | 91 |
| 880-3447-15 | C-30 3' | 89 | 93 |
| 880-3447-16 | C-31 3' | 94 | 99 |
| 880-3447-17 | C-32 3' | 93 | 98 |
| 880-3447-18 | C-33 3' | 91 | 95 |
| 880-3447-19 | C-34 3' | 99 | 103 |
| 880-3447-20 | C-35 3' | 95 | 99 |
| 880-3447-21 | C-36 3' | 86 | 89 |
| 880-3447-22 | C-37 SW | 97 | 96 |
| 880-3447-23 | C-38 SW | 77 | 77 |
| 880-3447-24 | C-39 SW | 96 | 98 |
| 880-3447-25 | C-40 1' | 91 | 90 |
| 880-3447-26 | C-41 1' | 93 | 94 |
| 880-3447-27 | C-42 1' | 101 | 105 |
| 880-3447-28 | C-43 1' | 99 | 106 |
| 880-3447-29 | C-44 1' | 96 | 103 |
| 880-3447-30 | C-45 1' | 97 | 100 |
| 880-3447-31 | C-46 1' | 103 | 104 |
| 880-3447-32 | C-47 1' | 101 | 111 |
| 880-3447-33 | C-48 SW | 92 | 97 |
| 880-3447-34 | C-49 SW | 93 | 98 |
| 880-3459-A-1-E MS | Matrix Spike | 96 | 86 |
| 880-3459-A-1-F MSD | Matrix Spike Duplicate | 79 | 72 |
| 890-863-A-1-F MS | Matrix Spike | 88 | 99 |
| 890-863-A-1-G MSD | Matrix Spike Duplicate | 92 | 102 |
| LCS 880-4619/2-A | Lab Control Sample | 103 | 115 |
| LCS 880-4638/2-A | Lab Control Sample | 94 | 94 |
| LCS 880-4639/2-A | Lab Control Sample | 111 | 106 |
| LCSD 880-4619/3-A | Lab Control Sample Dup | 106 | 115 |
| LCSD 880-4638/3-A | Lab Control Sample Dup | 97 | 95 |
| LCSD 880-4639/3-A | Lab Control Sample Dup | 111 | 106 |
| MB 880-4619/1-A | Method Blank | 94 | 108 |
| MB 880-4638/1-A | Method Blank | 88 | 97 |
| MB 880-4639/1-A | Method Blank | 90 | 98 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4634/5-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4634

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 12:16 | 06/25/21 16:13 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 06/25/21 12:16 | 06/25/21 16:13 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 06/25/21 12:16 | 06/25/21 16:13 | 1 |

Lab Sample ID: MB 880-4641/5-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4641

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:17 | 06/26/21 03:49 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 03:49 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | 06/25/21 14:17 | 06/26/21 03:49 | 1 |

Lab Sample ID: LCS 880-4641/1-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4641

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.09146 | | mg/Kg | | 91 | 70 - 130 |
| Toluene | 0.100 | 0.1050 | | mg/Kg | | 105 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1078 | | mg/Kg | | 108 | 70 - 130 |
| m-Xylene & p-Xylene | 0.200 | 0.2235 | | mg/Kg | | 112 | 70 - 130 |
| o-Xylene | 0.100 | 0.1113 | | mg/Kg | | 111 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

Lab Sample ID: LCSD 880-4641/2-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4641

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.09607 | | mg/Kg | | 96 | 70 - 130 | 5 | 35 |
| Toluene | 0.100 | 0.1112 | | mg/Kg | | 111 | 70 - 130 | 6 | 35 |
| Ethylbenzene | 0.100 | 0.1135 | | mg/Kg | | 114 | 70 - 130 | 5 | 35 |
| m-Xylene & p-Xylene | 0.200 | 0.2340 | | mg/Kg | | 117 | 70 - 130 | 5 | 35 |
| o-Xylene | 0.100 | 0.1144 | | mg/Kg | | 114 | 70 - 130 | 3 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 |

Lab Sample ID: 880-3447-1 MS

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: C-16 3'

Prep Type: Total/NA

Prep Batch: 4641

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|-----|-----------|
| Benzene | <0.00200 | U F1 | 0.0998 | 0.03931 | F1 | mg/Kg | | 39 | 70 - 130 | | |
| Toluene | <0.00200 | U F1 | 0.0998 | 0.06189 | F1 | mg/Kg | | 62 | 70 - 130 | | |
| Ethylbenzene | <0.00200 | U F1 | 0.0998 | 0.07222 | | mg/Kg | | 72 | 70 - 130 | | |
| m-Xylene & p-Xylene | <0.00401 | U | 0.200 | 0.1593 | | mg/Kg | | 80 | 70 - 130 | | |
| o-Xylene | <0.00200 | U | 0.0998 | 0.08330 | | mg/Kg | | 83 | 70 - 130 | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 140 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 85 | | 70 - 130 |

Lab Sample ID: 880-3447-1 MSD

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: C-16 3'

Prep Type: Total/NA

Prep Batch: 4641

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Benzene | <0.00200 | U F1 | 0.0996 | 0.04006 | F1 | mg/Kg | | 40 | 70 - 130 | 2 | 35 |
| Toluene | <0.00200 | U F1 | 0.0996 | 0.05857 | F1 | mg/Kg | | 59 | 70 - 130 | 6 | 35 |
| Ethylbenzene | <0.00200 | U F1 | 0.0996 | 0.06579 | F1 | mg/Kg | | 66 | 70 - 130 | 9 | 35 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.199 | 0.1411 | | mg/Kg | | 71 | 70 - 130 | 12 | 35 |
| o-Xylene | <0.00200 | U | 0.0996 | 0.07245 | | mg/Kg | | 73 | 70 - 130 | 14 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 119 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 86 | | 70 - 130 |

Lab Sample ID: MB 880-4645/5-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4645

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

Lab Sample ID: MB 880-4645/5-A

Matrix: Solid

Analysis Batch: 4613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4645

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 06/25/21 14:52 | 06/26/21 18:05 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 18:05 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | 06/25/21 14:52 | 06/26/21 18:05 | 1 |

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

Lab Sample ID: MB 880-4619/1-A

Matrix: Solid

Analysis Batch: 4617

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4619

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 14:44 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 14:44 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 14:44 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 09:52 | 06/25/21 14:44 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|--------------|--------------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 94 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 14:44 | 1 |
| o-Terphenyl | 108 | | 70 - 130 | 06/25/21 09:52 | 06/25/21 14:44 | 1 |

Lab Sample ID: LCS 880-4619/2-A

Matrix: Solid

Analysis Batch: 4617

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4619

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1096 | | mg/Kg | | 110 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 926.5 | | mg/Kg | | 93 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|----------------|---------------|---------------|----------|
| 1-Chlorooctane | 103 | | 70 - 130 |
| o-Terphenyl | 115 | | 70 - 130 |

Lab Sample ID: LCSD 880-4619/3-A

Matrix: Solid

Analysis Batch: 4617

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4619

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1107 | | mg/Kg | | 111 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 931.7 | | mg/Kg | | 93 | 70 - 130 | 1 | 20 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

| Surrogate | LCS D
%Recovery | LCS D
Qualifier | Limits |
|----------------|--------------------|--------------------|----------|
| 1-Chlorooctane | 106 | | 70 - 130 |
| o-Terphenyl | 115 | | 70 - 130 |

Lab Sample ID: 890-863-A-1-F MS

Matrix: Solid

Analysis Batch: 4617

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4619

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MS
Result | MS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|--------------------------------------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|-----------------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 1043 | | mg/Kg | | 104 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 873.4 | | mg/Kg | | 87 | 70 - 130 |

| Surrogate | MS
%Recovery | MS
Qualifier | Limits |
|----------------|-----------------|-----------------|----------|
| 1-Chlorooctane | 88 | | 70 - 130 |
| o-Terphenyl | 99 | | 70 - 130 |

Lab Sample ID: 890-863-A-1-G MSD

Matrix: Solid

Analysis Batch: 4617

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4619

| 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 | <49.7 | U | 997 | 996.8 | | mg/Kg | | 100 | 70 - 130 | 4 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 928.2 | | mg/Kg | | 93 | 70 - 130 | 6 | 20 |

| Surrogate | MSD
%Recovery | MSD
Qualifier | Limits |
|----------------|------------------|------------------|----------|
| 1-Chlorooctane | 92 | | 70 - 130 |
| o-Terphenyl | 102 | | 70 - 130 |

Lab Sample ID: MB 880-4638/1-A

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4638

| Analyte | MB
Result | MB
Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|-----------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 12:53 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 12:53 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 12:53 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:40 | 06/26/21 12:53 | 1 |

| Surrogate | MB
%Recovery | MB
Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|----------------|-----------------|-----------------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 88 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 12:53 | 1 |
| o-Terphenyl | 97 | | 70 - 130 | 06/25/21 13:40 | 06/26/21 12:53 | 1 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

Lab Sample ID: LCS 880-4638/2-A

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4638

| Analyte | | | Spike | LCS | LCS | Unit | D | %Rec | %Rec. | | |
|--------------------------------------|--|--|-------|--------|-----------|-------|---|--------|----------|--|--|
| | | | Added | Result | Qualifier | | | Limits | | | |
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 854.4 | | mg/Kg | | 85 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 904.0 | | mg/Kg | | 90 | 70 - 130 | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | </ | | | | | | |

Lab Sample ID: LCSD 880-4638/3-A

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4638

| Top Bottom | | | | | | | | | | | |
|--------------------------------------|----------------|----------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 876.8 | | mg/Kg | | 88 | 70 - 130 | 3 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 933.1 | | mg/Kg | | 93 | 70 - 130 | 3 | 20 |
| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane | 97 | | 70 - 130 | | | | | | | | |
| o-Terphenyl | 95 | | 70 - 130 | | | | | | | | |

Lab Sample ID: 880-3447-1 MS

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: C-16 3'

Prep Type: Total/NA

Prep Batch: 4638

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| | | | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 904.0 | | mg/Kg | | 90 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 936.5 | | mg/Kg | | 94 | 70 - 130 |
| | | | | | | | | | |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 1-Chlorooctane | 98 | | 70 - 130 | | | | | | |
| o-Terphenyl | 91 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3447-1 MSD

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: C-16 3'

Prep Type: Total/NA

Prep Batch: 4638

| 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 | <49.7 | U | 997 | 831.3 | | mg/Kg | | 83 | 70 - 130 | 8 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 914.0 | | mg/Kg | | 92 | 70 - 130 | 2 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane | 93 | | 70 - 130 | | | | | | | | |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

Lab Sample ID: 880-3447-1 MSD

Matrix: Solid

Analysis Batch: 4666

Client Sample ID: C-16 3'

Prep Type: Total/NA

Prep Batch: 4638

| | MSD | MSD | |
|---------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| <i>o</i> -Terphenyl | 87 | | 70 - 130 |

Lab Sample ID: MB 880-4639/1-A

Matrix: Solid

Analysis Batch: 4611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4639

| Analyte | MB | MB | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|----|------|-------|---|----------------|----------------|---------|
| Result | Qualifier | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/25/21 21:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/25/21 21:17 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/25/21 21:17 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 06/25/21 13:58 | 06/25/21 21:17 | 1 |

| Surrogate | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|---------------------|-----------|----|----------|----------------|----------------|---------|
| %Recovery | Qualifier | | | | | |
| 1-Chlorooctane | 90 | | 70 - 130 | 06/25/21 13:58 | 06/25/21 21:17 | 1 |
| <i>o</i> -Terphenyl | 98 | | 70 - 130 | 06/25/21 13:58 | 06/25/21 21:17 | 1 |

Lab Sample ID: LCS 880-4639/2-A

Matrix: Solid

Analysis Batch: 4611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4639

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1076 | | mg/Kg | | 108 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1115 | | mg/Kg | | 112 | 70 - 130 |

| Surrogate | LCS | LCS | Limits |
|---------------------|-----------|-----|----------|
| %Recovery | Qualifier | | |
| 1-Chlorooctane | 111 | | 70 - 130 |
| <i>o</i> -Terphenyl | 106 | | 70 - 130 |

Lab Sample ID: LCSD 880-4639/3-A

Matrix: Solid

Analysis Batch: 4611

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4639

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 984.5 | | mg/Kg | | 98 | 70 - 130 | 9 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1123 | | mg/Kg | | 112 | 70 - 130 | 1 | 20 |

| Surrogate | LCSD | LCSD | Limits |
|---------------------|-----------|------|----------|
| %Recovery | Qualifier | | |
| 1-Chlorooctane | 111 | | 70 - 130 |
| <i>o</i> -Terphenyl | 106 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

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

Lab Sample ID: 880-3459-A-1-E MS

Matrix: Solid

Analysis Batch: 4611

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 4639

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U F2 | 999 | 896.9 | | mg/Kg | | 90 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 984.3 | | mg/Kg | | 99 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 1-Chlorooctane | 96 | | 70 - 130 | | | | | | |
| o-Terphenyl | 86 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3459-A-1-F MSD

Matrix: Solid

Analysis Batch: 4611

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4639

| 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 | <49.7 | U F2 | 997 | 708.8 | F2 | mg/Kg | | 71 | 70 - 130 | 23 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 826.0 | | mg/Kg | | 83 | 70 - 130 | 17 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane | 79 | | 70 - 130 | | | | | | | | |
| o-Terphenyl | 72 | | 70 - 130 | | | | | | | | |

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4636/1-A

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 06/25/21 18:37 | 1 |

Lab Sample ID: LCS 880-4636/2-A

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 255.3 | | mg/Kg | | 102 | 90 - 110 |

Lab Sample ID: LCSD 880-4636/3-A

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 254.4 | | mg/Kg | | 102 | 90 - 110 | 0 | 20 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-1120-A-1-B MS

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 5.61 | F1 | 252 | 312.1 | F1 | mg/Kg | | 122 | 90 - 110 |

Lab Sample ID: 820-1120-A-1-C MSD

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 5.61 | F1 | 252 | 277.3 | | mg/Kg | | 108 | 90 - 110 | 12 | 20 |

Lab Sample ID: 880-3443-A-11-B MS

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 1790 | | 1240 | 3087 | | mg/Kg | | 105 | 90 - 110 |

Lab Sample ID: 880-3443-A-11-C MSD

Matrix: Solid

Analysis Batch: 4642

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 1790 | | 1240 | 3042 | | mg/Kg | | 101 | 90 - 110 | 1 | 20 |

Lab Sample ID: MB 880-4680/1-A

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 06/30/21 08:17 | 1 |

Lab Sample ID: LCS 880-4680/2-A

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 242.1 | | mg/Kg | | 97 | 90 - 110 |

Lab Sample ID: LCSD 880-4680/3-A

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 242.5 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3447-23 MS

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: C-38 SW

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 120 | | 253 | 369.9 | | mg/Kg | | 99 | 90 - 110 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-3447-23 MSD

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: C-38 SW

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 120 | | 253 | 371.0 | | mg/Kg | | 100 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3447-33 MS

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: C-48 SW

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|--|--|
| Chloride | 152 | | 252 | 407.4 | | mg/Kg | | 101 | 90 - 110 | | |

Lab Sample ID: 880-3447-33 MSD

Matrix: Solid

Analysis Batch: 4736

Client Sample ID: C-48 SW

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 152 | | 252 | 404.9 | | mg/Kg | | 100 | 90 - 110 | 1 | 20 |

Lab Sample ID: MB 880-4703/1-A

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 06/30/21 19:02 | 1 |

Lab Sample ID: LCS 880-4703/2-A

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|----------|-------------|------------|---------------|-------|---|------|--------------|--|--|
| Chloride | 250 | 233.6 | | mg/Kg | | 93 | 90 - 110 | | |

Lab Sample ID: LCSD 880-4703/3-A

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 233.6 | | mg/Kg | | 93 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3447-3 MS

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: C-18 3'

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|--|--|
| Chloride | 453 | | 252 | 680.6 | | mg/Kg | | 91 | 90 - 110 | | |

Lab Sample ID: 880-3447-3 MSD

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: C-18 3'

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 453 | | 252 | 681.2 | | mg/Kg | | 91 | 90 - 110 | 0 | 20 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-3447-13 MS

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: C-28 3'

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MS
Result | MS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|-----------------|
| Chloride | 96.2 | | 251 | 333.4 | | mg/Kg | | 95 | 90 - 110 |

Lab Sample ID: 880-3447-13 MSD

Matrix: Solid

Analysis Batch: 4787

Client Sample ID: C-28 3'

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 96.2 | | 251 | 333.7 | | mg/Kg | | 95 | 90 - 110 | 0 | 20 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

GC VOA

Analysis Batch: 4613

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3447-1 | C-16 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-2 | C-17 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-3 | C-18 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-4 | C-19 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-5 | C-20 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-6 | C-21 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-7 | C-22 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-8 | C-23 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-9 | C-24 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-10 | C-25 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-11 | C-26 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-12 | C-27 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-13 | C-28 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-14 | C-29 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-15 | C-30 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-16 | C-31 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-17 | C-32 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-18 | C-33 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-19 | C-34 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-20 | C-35 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-21 | C-36 3' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-22 | C-37 SW | Total/NA | Solid | 8021B | 4645 |
| 880-3447-23 | C-38 SW | Total/NA | Solid | 8021B | 4645 |
| 880-3447-24 | C-39 SW | Total/NA | Solid | 8021B | 4645 |
| 880-3447-25 | C-40 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-26 | C-41 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-27 | C-42 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-28 | C-43 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-29 | C-44 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-30 | C-45 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-31 | C-46 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-32 | C-47 1' | Total/NA | Solid | 8021B | 4645 |
| 880-3447-33 | C-48 SW | Total/NA | Solid | 8021B | 4645 |
| 880-3447-34 | C-49 SW | Total/NA | Solid | 8021B | 4645 |
| MB 880-4634/5-A | Method Blank | Total/NA | Solid | 8021B | 4634 |
| MB 880-4641/5-A | Method Blank | Total/NA | Solid | 8021B | 4641 |
| MB 880-4645/5-A | Method Blank | Total/NA | Solid | 8021B | 4645 |
| LCS 880-4641/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 4641 |
| LCSD 880-4641/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 4641 |
| 880-3447-1 MS | C-16 3' | Total/NA | Solid | 8021B | 4641 |
| 880-3447-1 MSD | C-16 3' | Total/NA | Solid | 8021B | 4641 |

Prep Batch: 4634

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| MB 880-4634/5-A | Method Blank | Total/NA | Solid | 5035 | |

Prep Batch: 4641

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 880-3447-1 | C-16 3' | Total/NA | Solid | 5035 | |
| 880-3447-2 | C-17 3' | Total/NA | Solid | 5035 | |
| 880-3447-3 | C-18 3' | Total/NA | Solid | 5035 | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

GC VOA (Continued)

Prep Batch: 4641 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3447-4 | C-19 3' | Total/NA | Solid | 5035 | |
| 880-3447-5 | C-20 3' | Total/NA | Solid | 5035 | |
| 880-3447-6 | C-21 3' | Total/NA | Solid | 5035 | |
| 880-3447-7 | C-22 3' | Total/NA | Solid | 5035 | |
| 880-3447-8 | C-23 3' | Total/NA | Solid | 5035 | |
| 880-3447-9 | C-24 3' | Total/NA | Solid | 5035 | |
| 880-3447-10 | C-25 3' | Total/NA | Solid | 5035 | |
| 880-3447-11 | C-26 3' | Total/NA | Solid | 5035 | |
| 880-3447-12 | C-27 3' | Total/NA | Solid | 5035 | |
| 880-3447-13 | C-28 3' | Total/NA | Solid | 5035 | |
| 880-3447-14 | C-29 3' | Total/NA | Solid | 5035 | |
| 880-3447-15 | C-30 3' | Total/NA | Solid | 5035 | |
| 880-3447-16 | C-31 3' | Total/NA | Solid | 5035 | |
| 880-3447-17 | C-32 3' | Total/NA | Solid | 5035 | |
| 880-3447-18 | C-33 3' | Total/NA | Solid | 5035 | |
| 880-3447-19 | C-34 3' | Total/NA | Solid | 5035 | |
| 880-3447-20 | C-35 3' | Total/NA | Solid | 5035 | |
| MB 880-4641/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-4641/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-4641/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-3447-1 MS | C-16 3' | Total/NA | Solid | 5035 | |
| 880-3447-1 MSD | C-16 3' | Total/NA | Solid | 5035 | |

Prep Batch: 4645

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| 880-3447-21 | C-36 3' | Total/NA | Solid | 5035 | |
| 880-3447-22 | C-37 SW | Total/NA | Solid | 5035 | |
| 880-3447-23 | C-38 SW | Total/NA | Solid | 5035 | |
| 880-3447-24 | C-39 SW | Total/NA | Solid | 5035 | |
| 880-3447-25 | C-40 1' | Total/NA | Solid | 5035 | |
| 880-3447-26 | C-41 1' | Total/NA | Solid | 5035 | |
| 880-3447-27 | C-42 1' | Total/NA | Solid | 5035 | |
| 880-3447-28 | C-43 1' | Total/NA | Solid | 5035 | |
| 880-3447-29 | C-44 1' | Total/NA | Solid | 5035 | |
| 880-3447-30 | C-45 1' | Total/NA | Solid | 5035 | |
| 880-3447-31 | C-46 1' | Total/NA | Solid | 5035 | |
| 880-3447-32 | C-47 1' | Total/NA | Solid | 5035 | |
| 880-3447-33 | C-48 SW | Total/NA | Solid | 5035 | |
| 880-3447-34 | C-49 SW | Total/NA | Solid | 5035 | |
| MB 880-4645/5-A | Method Blank | Total/NA | Solid | 5035 | |

GC Semi VOA

Analysis Batch: 4611

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 880-3447-21 | C-36 3' | Total/NA | Solid | 8015B NM | 4639 |
| 880-3447-22 | C-37 SW | Total/NA | Solid | 8015B NM | 4639 |
| 880-3447-23 | C-38 SW | Total/NA | Solid | 8015B NM | 4639 |
| 880-3447-24 | C-39 SW | Total/NA | Solid | 8015B NM | 4639 |
| 880-3447-25 | C-40 1' | Total/NA | Solid | 8015B NM | 4639 |
| 880-3447-26 | C-41 1' | Total/NA | Solid | 8015B NM | 4639 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

GC Semi VOA (Continued)

Analysis Batch: 4611 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| MB 880-4639/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4639 |
| LCS 880-4639/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4639 |
| LCSD 880-4639/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4639 |
| 880-3459-A-1-E MS | Matrix Spike | Total/NA | Solid | 8015B NM | 4639 |
| 880-3459-A-1-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 4639 |

Analysis Batch: 4617

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3447-27 | C-42 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-28 | C-43 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-29 | C-44 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-30 | C-45 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-31 | C-46 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-32 | C-47 1' | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-33 | C-48 SW | Total/NA | Solid | 8015B NM | 4619 |
| 880-3447-34 | C-49 SW | Total/NA | Solid | 8015B NM | 4619 |
| MB 880-4619/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4619 |
| LCS 880-4619/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4619 |
| LCSD 880-4619/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4619 |
| 890-863-A-1-F MS | Matrix Spike | Total/NA | Solid | 8015B NM | 4619 |
| 890-863-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 4619 |

Prep Batch: 4619

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-3447-27 | C-42 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-28 | C-43 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-29 | C-44 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-30 | C-45 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-31 | C-46 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-32 | C-47 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-33 | C-48 SW | Total/NA | Solid | 8015NM Prep | |
| 880-3447-34 | C-49 SW | Total/NA | Solid | 8015NM Prep | |
| MB 880-4619/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4619/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4619/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-863-A-1-F MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 890-863-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

Prep Batch: 4638

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|-------------|------------|
| 880-3447-1 | C-16 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-2 | C-17 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-3 | C-18 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-4 | C-19 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-5 | C-20 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-6 | C-21 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-7 | C-22 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-8 | C-23 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-9 | C-24 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-10 | C-25 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-11 | C-26 3' | Total/NA | Solid | 8015NM Prep | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

GC Semi VOA (Continued)

Prep Batch: 4638 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-3447-12 | C-27 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-13 | C-28 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-14 | C-29 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-15 | C-30 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-16 | C-31 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-17 | C-32 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-18 | C-33 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-19 | C-34 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-20 | C-35 3' | Total/NA | Solid | 8015NM Prep | |
| MB 880-4638/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4638/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4638/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3447-1 MS | C-16 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-1 MSD | C-16 3' | Total/NA | Solid | 8015NM Prep | |

Prep Batch: 4639

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 880-3447-21 | C-36 3' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-22 | C-37 SW | Total/NA | Solid | 8015NM Prep | |
| 880-3447-23 | C-38 SW | Total/NA | Solid | 8015NM Prep | |
| 880-3447-24 | C-39 SW | Total/NA | Solid | 8015NM Prep | |
| 880-3447-25 | C-40 1' | Total/NA | Solid | 8015NM Prep | |
| 880-3447-26 | C-41 1' | Total/NA | Solid | 8015NM Prep | |
| MB 880-4639/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4639/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4639/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3459-A-1-E MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 880-3459-A-1-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 4666

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 880-3447-1 | C-16 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-2 | C-17 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-3 | C-18 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-4 | C-19 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-5 | C-20 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-6 | C-21 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-7 | C-22 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-8 | C-23 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-9 | C-24 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-10 | C-25 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-11 | C-26 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-12 | C-27 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-13 | C-28 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-14 | C-29 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-15 | C-30 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-16 | C-31 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-17 | C-32 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-18 | C-33 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-19 | C-34 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-20 | C-35 3' | Total/NA | Solid | 8015B NM | 4638 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

GC Semi VOA (Continued)

Analysis Batch: 4666 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| MB 880-4638/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4638 |
| LCS 880-4638/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4638 |
| LCSD 880-4638/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-1 MS | C-16 3' | Total/NA | Solid | 8015B NM | 4638 |
| 880-3447-1 MSD | C-16 3' | Total/NA | Solid | 8015B NM | 4638 |

HPLC/IC

Leach Batch: 4636

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 880-3447-1 | C-16 3' | Soluble | Solid | DI Leach | |
| 880-3447-2 | C-17 3' | Soluble | Solid | DI Leach | |
| MB 880-4636/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4636/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4636/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 820-1120-A-1-B MS | Matrix Spike | Soluble | Solid | DI Leach | |
| 820-1120-A-1-C MSD | Matrix Spike Duplicate | Soluble | Solid | DI Leach | |
| 880-3443-A-11-B MS | Matrix Spike | Soluble | Solid | DI Leach | |
| 880-3443-A-11-C MSD | Matrix Spike Duplicate | Soluble | Solid | DI Leach | |

Analysis Batch: 4642

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 880-3447-1 | C-16 3' | Soluble | Solid | 300.0 | 4636 |
| 880-3447-2 | C-17 3' | Soluble | Solid | 300.0 | 4636 |
| MB 880-4636/1-A | Method Blank | Soluble | Solid | 300.0 | 4636 |
| LCS 880-4636/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4636 |
| LCSD 880-4636/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4636 |
| 820-1120-A-1-B MS | Matrix Spike | Soluble | Solid | 300.0 | 4636 |
| 820-1120-A-1-C MSD | Matrix Spike Duplicate | Soluble | Solid | 300.0 | 4636 |
| 880-3443-A-11-B MS | Matrix Spike | Soluble | Solid | 300.0 | 4636 |
| 880-3443-A-11-C MSD | Matrix Spike Duplicate | Soluble | Solid | 300.0 | 4636 |

Leach Batch: 4680

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3447-23 | C-38 SW | Soluble | Solid | DI Leach | |
| 880-3447-24 | C-39 SW | Soluble | Solid | DI Leach | |
| 880-3447-25 | C-40 1' | Soluble | Solid | DI Leach | |
| 880-3447-26 | C-41 1' | Soluble | Solid | DI Leach | |
| 880-3447-27 | C-42 1' | Soluble | Solid | DI Leach | |
| 880-3447-28 | C-43 1' | Soluble | Solid | DI Leach | |
| 880-3447-29 | C-44 1' | Soluble | Solid | DI Leach | |
| 880-3447-30 | C-45 1' | Soluble | Solid | DI Leach | |
| 880-3447-31 | C-46 1' | Soluble | Solid | DI Leach | |
| 880-3447-32 | C-47 1' | Soluble | Solid | DI Leach | |
| 880-3447-33 | C-48 SW | Soluble | Solid | DI Leach | |
| 880-3447-34 | C-49 SW | Soluble | Solid | DI Leach | |
| MB 880-4680/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4680/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4680/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-3447-23 MS | C-38 SW | Soluble | Solid | DI Leach | |
| 880-3447-23 MSD | C-38 SW | Soluble | Solid | DI Leach | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

HPLC/IC (Continued)

Leach Batch: 4680 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|----------|------------|
| 880-3447-33 MS | C-48 SW | Soluble | Solid | DI Leach | |
| 880-3447-33 MSD | C-48 SW | Soluble | Solid | DI Leach | |

Leach Batch: 4703

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3447-3 | C-18 3' | Soluble | Solid | DI Leach | |
| 880-3447-4 | C-19 3' | Soluble | Solid | DI Leach | |
| 880-3447-5 | C-20 3' | Soluble | Solid | DI Leach | |
| 880-3447-6 | C-21 3' | Soluble | Solid | DI Leach | |
| 880-3447-7 | C-22 3' | Soluble | Solid | DI Leach | |
| 880-3447-8 | C-23 3' | Soluble | Solid | DI Leach | |
| 880-3447-9 | C-24 3' | Soluble | Solid | DI Leach | |
| 880-3447-10 | C-25 3' | Soluble | Solid | DI Leach | |
| 880-3447-11 | C-26 3' | Soluble | Solid | DI Leach | |
| 880-3447-12 | C-27 3' | Soluble | Solid | DI Leach | |
| 880-3447-13 | C-28 3' | Soluble | Solid | DI Leach | |
| 880-3447-14 | C-29 3' | Soluble | Solid | DI Leach | |
| 880-3447-15 | C-30 3' | Soluble | Solid | DI Leach | |
| 880-3447-16 | C-31 3' | Soluble | Solid | DI Leach | |
| 880-3447-17 | C-32 3' | Soluble | Solid | DI Leach | |
| 880-3447-18 | C-33 3' | Soluble | Solid | DI Leach | |
| 880-3447-19 | C-34 3' | Soluble | Solid | DI Leach | |
| 880-3447-20 | C-35 3' | Soluble | Solid | DI Leach | |
| 880-3447-21 | C-36 3' | Soluble | Solid | DI Leach | |
| 880-3447-22 | C-37 SW | Soluble | Solid | DI Leach | |
| MB 880-4703/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4703/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4703/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-3447-3 MS | C-18 3' | Soluble | Solid | DI Leach | |
| 880-3447-3 MSD | C-18 3' | Soluble | Solid | DI Leach | |
| 880-3447-13 MS | C-28 3' | Soluble | Solid | DI Leach | |
| 880-3447-13 MSD | C-28 3' | Soluble | Solid | DI Leach | |

Analysis Batch: 4736

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3447-23 | C-38 SW | Soluble | Solid | 300.0 | 4680 |
| 880-3447-24 | C-39 SW | Soluble | Solid | 300.0 | 4680 |
| 880-3447-25 | C-40 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-26 | C-41 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-27 | C-42 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-28 | C-43 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-29 | C-44 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-30 | C-45 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-31 | C-46 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-32 | C-47 1' | Soluble | Solid | 300.0 | 4680 |
| 880-3447-33 | C-48 SW | Soluble | Solid | 300.0 | 4680 |
| 880-3447-34 | C-49 SW | Soluble | Solid | 300.0 | 4680 |
| MB 880-4680/1-A | Method Blank | Soluble | Solid | 300.0 | 4680 |
| LCS 880-4680/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4680 |
| LCSD 880-4680/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4680 |
| 880-3447-23 MS | C-38 SW | Soluble | Solid | 300.0 | 4680 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

HPLC/IC (Continued)

Analysis Batch: 4736 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| 880-3447-23 MSD | C-38 SW | Soluble | Solid | 300.0 | 4680 |
| 880-3447-33 MS | C-48 SW | Soluble | Solid | 300.0 | 4680 |
| 880-3447-33 MSD | C-48 SW | Soluble | Solid | 300.0 | 4680 |

Analysis Batch: 4787

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3447-3 | C-18 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-4 | C-19 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-5 | C-20 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-6 | C-21 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-7 | C-22 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-8 | C-23 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-9 | C-24 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-10 | C-25 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-11 | C-26 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-12 | C-27 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-13 | C-28 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-14 | C-29 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-15 | C-30 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-16 | C-31 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-17 | C-32 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-18 | C-33 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-19 | C-34 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-20 | C-35 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-21 | C-36 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-22 | C-37 SW | Soluble | Solid | 300.0 | 4703 |
| MB 880-4703/1-A | Method Blank | Soluble | Solid | 300.0 | 4703 |
| LCS 880-4703/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4703 |
| LCSD 880-4703/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4703 |
| 880-3447-3 MS | C-18 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-3 MSD | C-18 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-13 MS | C-28 3' | Soluble | Solid | 300.0 | 4703 |
| 880-3447-13 MSD | C-28 3' | Soluble | Solid | 300.0 | 4703 |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-16 3'

Date Collected: 06/24/21 08:00

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-1

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 | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 04:17 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 13:56 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4636 | 06/25/21 12:49 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4642 | 06/25/21 21:15 | CH | XEN MID |

Client Sample ID: C-17 3'

Date Collected: 06/24/21 08:01

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-2

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 04:38 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 15:00 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 4636 | 06/25/21 12:49 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | | | 4642 | 06/25/21 21:21 | CH | XEN MID |

Client Sample ID: C-18 3'

Date Collected: 06/24/21 08:02

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-3

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 04:58 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 15:21 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:16 | CH | XEN MID |

Client Sample ID: C-19 3'

Date Collected: 06/24/21 08:03

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-4

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 05:19 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 15:42 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:31 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-20 3'

Date Collected: 06/24/21 08:04

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-5

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 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 05:39 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 16:03 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:35 | CH | XEN MID |

Client Sample ID: C-21 3'

Date Collected: 06/24/21 08:05

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-6

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 | | | 4.99 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 05:59 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.07 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 16:24 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:40 | CH | XEN MID |

Client Sample ID: C-22 3'

Date Collected: 06/24/21 08:06

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-7

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 | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 06:20 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 16:45 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:45 | CH | XEN MID |

Client Sample ID: C-23 3'

Date Collected: 06/24/21 08:07

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-8

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 | | | 4.96 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 06:40 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 17:06 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 19:59 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-24 3'

Date Collected: 06/24/21 08:08

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-9

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 07:01 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 17:27 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:04 | CH | XEN MID |

Client Sample ID: C-25 3'

Date Collected: 06/24/21 08:09

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-10

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 07:21 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 17:49 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:08 | CH | XEN MID |

Client Sample ID: C-26 3'

Date Collected: 06/24/21 08:10

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-11

Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 09:11 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 18:31 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:13 | CH | XEN MID |

Client Sample ID: C-27 3'

Date Collected: 06/24/21 08:11

Date Received: 06/25/21 08:41

Lab Sample ID: 880-3447-12

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 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 09:31 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 18:52 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:18 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-28 3'

Lab Sample ID: 880-3447-13

Date Collected: 06/24/21 08:12

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 09:52 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 19:13 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:22 | CH | XEN MID |

Client Sample ID: C-29 3'

Lab Sample ID: 880-3447-14

Date Collected: 06/24/21 08:13

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.97 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 10:12 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 19:35 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:36 | CH | XEN MID |

Client Sample ID: C-30 3'

Lab Sample ID: 880-3447-15

Date Collected: 06/24/21 08:14

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 10:33 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 19:56 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:41 | CH | XEN MID |

Client Sample ID: C-31 3'

Lab Sample ID: 880-3447-16

Date Collected: 06/24/21 08:15

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.96 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 10:53 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 20:17 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 20:55 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-32 3'

Lab Sample ID: 880-3447-17

Date Collected: 06/24/21 08:16

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.00 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 11:13 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 20:38 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:00 | CH | XEN MID |

Client Sample ID: C-33 3'

Lab Sample ID: 880-3447-18

Date Collected: 06/24/21 08:17

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 11:34 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 20:59 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:05 | CH | XEN MID |

Client Sample ID: C-34 3'

Lab Sample ID: 880-3447-19

Date Collected: 06/24/21 08:18

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 11:54 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 21:20 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:09 | CH | XEN MID |

Client Sample ID: C-35 3'

Lab Sample ID: 880-3447-20

Date Collected: 06/24/21 08:19

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4641 | 06/25/21 14:17 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 12:15 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 4638 | 06/25/21 13:40 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4666 | 06/26/21 21:42 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:14 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-36 3'

Lab Sample ID: 880-3447-21

Date Collected: 06/24/21 08:20

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 18:33 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 02:58 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:19 | CH | XEN MID |

Client Sample ID: C-37 SW

Lab Sample ID: 880-3447-22

Date Collected: 06/24/21 08:21

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 18:54 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 03:19 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4703 | 06/28/21 13:27 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4787 | 06/30/21 21:23 | CH | XEN MID |

Client Sample ID: C-38 SW

Lab Sample ID: 880-3447-23

Date Collected: 06/24/21 08:22

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 19:14 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 03:41 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 08:31 | CH | XEN MID |

Client Sample ID: C-39 SW

Lab Sample ID: 880-3447-24

Date Collected: 06/24/21 08:23

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 19:35 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 04:01 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 08:45 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-40 1'

Lab Sample ID: 880-3447-25

Date Collected: 06/24/21 08:24

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 19:55 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 04:23 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 08:50 | CH | XEN MID |

Client Sample ID: C-41 1'

Lab Sample ID: 880-3447-26

Date Collected: 06/24/21 08:25

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 20:16 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4639 | 06/25/21 13:58 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4611 | 06/26/21 04:44 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | | | 4736 | 06/30/21 08:54 | CH | XEN MID |

Client Sample ID: C-42 1'

Lab Sample ID: 880-3447-27

Date Collected: 06/24/21 08:26

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 20:36 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 19:11 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 08:59 | CH | XEN MID |

Client Sample ID: C-43 1'

Lab Sample ID: 880-3447-28

Date Collected: 06/24/21 08:27

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 20:57 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 19:24 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:13 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-44 '1

Lab Sample ID: 880-3447-29

Date Collected: 06/24/21 08:28

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 21:17 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 19:37 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:18 | CH | XEN MID |

Client Sample ID: C-45 '1

Lab Sample ID: 880-3447-30

Date Collected: 06/24/21 08:29

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 21:37 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 19:50 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.00 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:23 | CH | XEN MID |

Client Sample ID: C-46 '1

Lab Sample ID: 880-3447-31

Date Collected: 06/24/21 08:30

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.02 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 23:27 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 20:03 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:27 | CH | XEN MID |

Client Sample ID: C-47 '1

Lab Sample ID: 880-3447-32

Date Collected: 06/24/21 08:31

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.03 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/26/21 23:48 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 20:15 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:32 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Client Sample ID: C-48 SW

Lab Sample ID: 880-3447-33

Date Collected: 06/24/21 08:32

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.99 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/27/21 00:08 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 20:28 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:37 | CH | XEN MID |

Client Sample ID: C-49 SW

Lab Sample ID: 880-3447-34

Date Collected: 06/24/21 08:33

Matrix: Solid

Date Received: 06/25/21 08:41

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 5.01 g | 5 mL | 4645 | 06/25/21 14:52 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 4613 | 06/27/21 00:28 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 4619 | 06/25/21 09:52 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 4617 | 06/25/21 20:41 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 4736 | 06/30/21 09:51 | CH | XEN MID |

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|---|-------------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 06-30-21 |
| 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 |
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Method Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac 13

Job ID: 880-3447-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 880-3447-1 | C-16 3' | Solid | 06/24/21 08:00 | 06/25/21 08:41 | |
| 880-3447-2 | C-17 3' | Solid | 06/24/21 08:01 | 06/25/21 08:41 | |
| 880-3447-3 | C-18 3' | Solid | 06/24/21 08:02 | 06/25/21 08:41 | |
| 880-3447-4 | C-19 3' | Solid | 06/24/21 08:03 | 06/25/21 08:41 | |
| 880-3447-5 | C-20 3' | Solid | 06/24/21 08:04 | 06/25/21 08:41 | |
| 880-3447-6 | C-21 3' | Solid | 06/24/21 08:05 | 06/25/21 08:41 | |
| 880-3447-7 | C-22 3' | Solid | 06/24/21 08:06 | 06/25/21 08:41 | |
| 880-3447-8 | C-23 3' | Solid | 06/24/21 08:07 | 06/25/21 08:41 | |
| 880-3447-9 | C-24 3' | Solid | 06/24/21 08:08 | 06/25/21 08:41 | |
| 880-3447-10 | C-25 3' | Solid | 06/24/21 08:09 | 06/25/21 08:41 | |
| 880-3447-11 | C-26 3' | Solid | 06/24/21 08:10 | 06/25/21 08:41 | |
| 880-3447-12 | C-27 3' | Solid | 06/24/21 08:11 | 06/25/21 08:41 | |
| 880-3447-13 | C-28 3' | Solid | 06/24/21 08:12 | 06/25/21 08:41 | |
| 880-3447-14 | C-29 3' | Solid | 06/24/21 08:13 | 06/25/21 08:41 | |
| 880-3447-15 | C-30 3' | Solid | 06/24/21 08:14 | 06/25/21 08:41 | |
| 880-3447-16 | C-31 3' | Solid | 06/24/21 08:15 | 06/25/21 08:41 | |
| 880-3447-17 | C-32 3' | Solid | 06/24/21 08:16 | 06/25/21 08:41 | |
| 880-3447-18 | C-33 3' | Solid | 06/24/21 08:17 | 06/25/21 08:41 | |
| 880-3447-19 | C-34 3' | Solid | 06/24/21 08:18 | 06/25/21 08:41 | |
| 880-3447-20 | C-35 3' | Solid | 06/24/21 08:19 | 06/25/21 08:41 | |
| 880-3447-21 | C-36 3' | Solid | 06/24/21 08:20 | 06/25/21 08:41 | |
| 880-3447-22 | C-37 SW | Solid | 06/24/21 08:21 | 06/25/21 08:41 | |
| 880-3447-23 | C-38 SW | Solid | 06/24/21 08:22 | 06/25/21 08:41 | |
| 880-3447-24 | C-39 SW | Solid | 06/24/21 08:23 | 06/25/21 08:41 | |
| 880-3447-25 | C-40 1' | Solid | 06/24/21 08:24 | 06/25/21 08:41 | |
| 880-3447-26 | C-41 1' | Solid | 06/24/21 08:25 | 06/25/21 08:41 | |
| 880-3447-27 | C-42 1' | Solid | 06/24/21 08:26 | 06/25/21 08:41 | |
| 880-3447-28 | C-43 1' | Solid | 06/24/21 08:27 | 06/25/21 08:41 | |
| 880-3447-29 | C-44 1' | Solid | 06/24/21 08:28 | 06/25/21 08:41 | |
| 880-3447-30 | C-45 1' | Solid | 06/24/21 08:29 | 06/25/21 08:41 | |
| 880-3447-31 | C-46 1' | Solid | 06/24/21 08:30 | 06/25/21 08:41 | |
| 880-3447-32 | C-47 1' | Solid | 06/24/21 08:31 | 06/25/21 08:41 | |
| 880-3447-33 | C-48 SW | Solid | 06/24/21 08:32 | 06/25/21 08:41 | |
| 880-3447-34 | C-49 SW | Solid | 06/24/21 08:33 | 06/25/21 08:41 | |

Eurofins Xenco, Midland

Varson & Associates, Inc.
Environmental Consultants

880-3447 Chain of Custody

Midland, TX 79701
432-687-0901



ATE: 6-24-21

PAGE 1 OF 3

JO#:

LAB WORK ORDER#:

PROJECT LOCATION OR NAME: SD frac 13

LAI PROJECT #: 20-0107-14

COLLECTOR: MP

CHAIN-OF-CUSTODY

000-3447 No 1599

Data Reported to

TRRP report?
☐ Yes ☒ No

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

TIME ZONE
Time zone/State

MSF

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD 8015 ☐

VOC 8280 ☐

SVOC 8270 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

TCIP - METALS (RCRA) ☐

Field
Sample I D

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ NaOH ☐

ICE

UNPRESERVED

PREPARATION

ANALYSES

BTEX ☐ MTBE ☐

TPH 418 ☐ TPH 1005 ☐ TPH 1006 ☐

GASOLINE MOD 8015 ☐

DIESEL MOD 8015 ☐

OIL MOD

7/1/2021

CHAIN-OF-CUSTODY

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-3447-1

Login Number: 3447

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-3887-1

Laboratory Sample Delivery Group: 20-0102-14

Client Project/Site: Salado Draw Frac Pond 13

For:

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

Attn: Mr. Mark J Larson

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

Authorized for release by:
7/19/2021 2:22:32 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Laboratory Job ID: 880-3887-1
SDG: 20-0102-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 13 |
| QC Sample Results | 15 |
| QC Association Summary | 22 |
| Lab Chronicle | 25 |
| Certification Summary | 28 |
| Method Summary | 29 |
| Sample Summary | 30 |
| Chain of Custody | 31 |
| Receipt Checklists | 32 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Job ID: 880-3887-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-3887-1

Receipt

The samples were received on 7/12/2021 8:38 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 3.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-5088 and analytical batch 880-5113 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.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-50

Lab Sample ID: 880-3887-1

Date Collected: 07/09/21 09:40

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:22 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 01:22 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 01:22 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 21:31 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 21:31 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 21:31 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 21:31 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 100 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 21:31 | 1 |
| o-Terphenyl (Surr) | 117 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 21:31 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 9.66 | | 5.03 | mg/Kg | | | 07/13/21 19:41 | 1 |

Client Sample ID: C-51

Lab Sample ID: 880-3887-2

Date Collected: 07/09/21 09:41

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 01:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 01:43 | 1 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 01:43 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-51

Lab Sample ID: 880-3887-2

Date Collected: 07/09/21 09:41

Matrix: Solid

Date Received: 07/12/21 08:38

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 102 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |
| o-Terphenyl (Surr) | 113 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 22:34 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | <4.97 | U | 4.97 | mg/Kg | | | 07/13/21 19:58 | 1 |

Client Sample ID: C-52

Lab Sample ID: 880-3887-3

Date Collected: 07/09/21 09:42

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 | | | 07/12/21 11:00 | 07/14/21 02:03 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 101 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |
| o-Terphenyl (Surr) | 116 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 22:54 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 193 | | 4.96 | mg/Kg | | | 07/13/21 20:03 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-53

Lab Sample ID: 880-3887-4

Date Collected: 07/09/21 09:43

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| m,p-Xylenes | <0.00396 | U | 0.00396 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| Total BTEX | <0.00396 | U | 0.00396 | mg/Kg | | 07/12/21 11:00 | 07/14/21 02:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 02:24 | 1 |
| 1,4-Difluorobenzene (Surr) | 88 | | 70 - 130 | 07/12/21 11:00 | 07/14/21 02:24 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:15 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:15 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:15 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 23:15 | 1 |
| o-Terphenyl (Surr) | 102 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 23:15 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | <4.95 | U | 4.95 | mg/Kg | | | 07/13/21 20:09 | 1 |

Client Sample ID: C-54

Lab Sample ID: 880-3887-5

Date Collected: 07/09/21 09:44

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| Toluene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| Ethylbenzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| m,p-Xylenes | <0.00399 | U F1 | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| o-Xylene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| Xylenes, Total | <0.00399 | U F1 | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| Total BTEX | <0.00399 | U F1 | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 06:18 | 1 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 06:18 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-54

Lab Sample ID: 880-3887-5

Date Collected: 07/09/21 09:44

Matrix: Solid

Date Received: 07/12/21 08:38

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |
| o-Terphenyl (Surr) | 101 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 23:36 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | <5.04 | U | 5.04 | mg/Kg | | | 07/13/21 20:14 | 1 |

Client Sample ID: C-55

Lab Sample ID: 880-3887-6

Date Collected: 07/09/21 09:45

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 06:38 | 1 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 06:38 | 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 | <49.7 | U | 49.7 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |
| o-Terphenyl (Surr) | 103 | | 70 - 130 | | | 07/15/21 11:27 | 07/17/21 23:56 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 39.1 | | 5.05 | mg/Kg | | | 07/13/21 20:20 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-56

Lab Sample ID: 880-3887-7

Date Collected: 07/09/21 09:46

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 06:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 06:59 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 06:59 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:17 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:17 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 | 07/15/21 11:27 | 07/18/21 00:17 | 1 |
| o-Terphenyl (Surr) | 100 | | 70 - 130 | 07/15/21 11:27 | 07/18/21 00:17 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 7.39 | | 5.03 | mg/Kg | | | 07/16/21 00:40 | 1 |

Client Sample ID: C-57

Lab Sample ID: 880-3887-8

Date Collected: 07/09/21 09:47

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 07:19 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 07:19 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-57

Lab Sample ID: 880-3887-8

Date Collected: 07/09/21 09:47

Matrix: Solid

Date Received: 07/12/21 08:38

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |
| o-Terphenyl (Surr) | 107 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 00:38 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 6.13 | | 4.95 | mg/Kg | | | 07/16/21 00:56 | 1 |

Client Sample ID: C-58

Lab Sample ID: 880-3887-9

Date Collected: 07/09/21 09:49

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| m,p-Xylenes | <0.00404 | U | 0.00404 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| Xylenes, Total | <0.00404 | U | 0.00404 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| Total BTEX | <0.00404 | U | 0.00404 | mg/Kg | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 116 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 07:39 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |
| o-Terphenyl (Surr) | 103 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 00:58 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 9.57 | | 4.99 | mg/Kg | | | 07/16/21 01:01 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-59

Lab Sample ID: 880-3887-10

Date Collected: 07/09/21 09:51

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 08:00 | 1 |
| 1,4-Difluorobenzene (Surr) | 101 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 08:00 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 01:19 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 01:19 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 01:19 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/15/21 11:27 | 07/18/21 01:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 | 07/15/21 11:27 | 07/18/21 01:19 | 1 |
| o-Terphenyl (Surr) | 107 | | 70 - 130 | 07/15/21 11:27 | 07/18/21 01:19 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 47.9 | | 5.03 | mg/Kg | | | 07/16/21 01:07 | 1 |

Client Sample ID: C-60

Lab Sample ID: 880-3887-11

Date Collected: 07/09/21 09:52

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 08:20 | 1 |
| 1,4-Difluorobenzene (Surr) | 102 | | 70 - 130 | 07/12/21 11:02 | 07/14/21 08:20 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-60

Lab Sample ID: 880-3887-11

Date Collected: 07/09/21 09:52

Matrix: Solid

Date Received: 07/12/21 08:38

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 95 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |
| o-Terphenyl (Surr) | 104 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 02:00 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 8.84 | | 4.97 | mg/Kg | | | 07/16/21 01:12 | 1 |

Client Sample ID: C-61

Lab Sample ID: 880-3887-12

Date Collected: 07/09/21 09:53

Matrix: Solid

Date Received: 07/12/21 08:38

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |
| 1,4-Difluorobenzene (Surr) | 102 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 08:41 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |
| o-Terphenyl (Surr) | 99 | | 70 - 130 | | | 07/15/21 11:27 | 07/18/21 02:21 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 10.7 | | 4.96 | mg/Kg | | | 07/16/21 01:28 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|-----------------------------------|------------------------|--|-------------------|
| | | BFB1
(70-130) | DFBZ1
(70-130) |
| 880-3887-1 | C-50 | 104 | 93 |
| 880-3887-2 | C-51 | 98 | 89 |
| 880-3887-3 | C-52 | 104 | 89 |
| 880-3887-4 | C-53 | 90 | 88 |
| 880-3887-5 | C-54 | 103 | 100 |
| 880-3887-5 MS | C-54 | 104 | 96 |
| 880-3887-5 MSD | C-54 | 108 | 93 |
| 880-3887-6 | C-55 | 108 | 103 |
| 880-3887-7 | C-56 | 114 | 105 |
| 880-3887-8 | C-57 | 113 | 105 |
| 880-3887-9 | C-58 | 116 | 105 |
| 880-3887-10 | C-59 | 113 | 101 |
| 880-3887-11 | C-60 | 110 | 102 |
| 880-3887-12 | C-61 | 111 | 102 |
| 880-3888-A-1-A MS | Matrix Spike | 98 | 103 |
| 880-3888-A-1-B MSD | Matrix Spike Duplicate | 104 | 103 |
| LCS 880-5070/1-A | Lab Control Sample | 103 | 106 |
| LCS 880-5088/1-A | Lab Control Sample | 98 | 96 |
| LCSD 880-5070/2-A | Lab Control Sample Dup | 106 | 113 |
| LCSD 880-5088/2-A | Lab Control Sample Dup | 101 | 96 |
| MB 880-5070/5-A | Method Blank | 99 | 85 |
| MB 880-5088/5-A | Method Blank | 107 | 97 |
| MB 880-5105/5-A | Method Blank | 104 | 96 |
| 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

| Lab Sample ID | Client Sample ID | Percent Surrogate Recovery (Acceptance Limits) | |
|-------------------|------------------------|--|-------------------|
| | | 1CO1
(70-130) | OTPH1
(70-130) |
| 880-3887-1 | C-50 | 100 | 117 |
| 880-3887-1 MS | C-50 | 98 | 99 |
| 880-3887-1 MSD | C-50 | 103 | 98 |
| 880-3887-2 | C-51 | 102 | 113 |
| 880-3887-3 | C-52 | 101 | 116 |
| 880-3887-4 | C-53 | 92 | 102 |
| 880-3887-5 | C-54 | 92 | 101 |
| 880-3887-6 | C-55 | 94 | 103 |
| 880-3887-7 | C-56 | 96 | 100 |
| 880-3887-8 | C-57 | 94 | 107 |
| 880-3887-9 | C-58 | 92 | 103 |
| 880-3887-10 | C-59 | 96 | 107 |
| 880-3887-11 | C-60 | 95 | 104 |
| 880-3887-12 | C-61 | 92 | 99 |
| LCS 880-5219/2-A | Lab Control Sample | 98 | 107 |
| LCSD 880-5219/3-A | Lab Control Sample Dup | 102 | 107 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

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) | | |
| MB 880-5219/1-A | Method Blank | 94 | 110 | | |
| Surrogate Legend | | | | | |
| 1CO = 1-Chlorooctane (Surr) | | | | | |
| OTPH = o-Terphenyl (Surr) | | | | | |

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5070/5-A

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5070

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 09:28 | 07/13/21 18:34 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 99 | | 70 - 130 | 07/12/21 09:28 | 07/13/21 18:34 | 1 |
| 1,4-Difluorobenzene (Surr) | 85 | | 70 - 130 | 07/12/21 09:28 | 07/13/21 18:34 | 1 |

Lab Sample ID: LCS 880-5070/1-A

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5070

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.09106 | | mg/Kg | | 91 | 70 - 130 |
| Toluene | 0.100 | 0.08276 | | mg/Kg | | 83 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.08435 | | mg/Kg | | 84 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1727 | | mg/Kg | | 86 | 70 - 130 |
| o-Xylene | 0.100 | 0.08633 | | mg/Kg | | 86 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 106 | | 70 - 130 |

Lab Sample ID: LCSD 880-5070/2-A

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5070

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.09696 | | mg/Kg | | 97 | 70 - 130 | 6 | 35 |
| Toluene | 0.100 | 0.08991 | | mg/Kg | | 90 | 70 - 130 | 8 | 35 |
| Ethylbenzene | 0.100 | 0.09050 | | mg/Kg | | 91 | 70 - 130 | 7 | 35 |
| m,p-Xylenes | 0.200 | 0.1854 | | mg/Kg | | 93 | 70 - 130 | 7 | 35 |
| o-Xylene | 0.100 | 0.09226 | | mg/Kg | | 92 | 70 - 130 | 7 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 106 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 113 | | 70 - 130 |

Lab Sample ID: 880-3888-A-1-A MS

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 5070

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00199 | U | 0.0996 | 0.07722 | | mg/Kg | | 78 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

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

Lab Sample ID: 880-3888-A-1-A MS

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 5070

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Toluene | <0.00199 | U F1 | 0.0996 | 0.06662 | F1 | mg/Kg | | 67 | 70 - 130 |
| Ethylbenzene | <0.00199 | U F1 | 0.0996 | 0.06217 | F1 | mg/Kg | | 62 | 70 - 130 |
| m,p-Xylenes | <0.00398 | U F1 | 0.199 | 0.1230 | F1 | mg/Kg | | 62 | 70 - 130 |
| o-Xylene | <0.00199 | U F1 | 0.0996 | 0.06445 | F1 | mg/Kg | | 65 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 | | | | | | |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3888-A-1-B MSD

Matrix: Solid

Analysis Batch: 5115

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 5070

| 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 | 0.08187 | | mg/Kg | | 82 | 70 - 130 | 6 | 35 |
| Toluene | <0.00199 | U F1 | 0.100 | 0.06925 | F1 | mg/Kg | | 69 | 70 - 130 | 4 | 35 |
| Ethylbenzene | <0.00199 | U F1 | 0.100 | 0.06653 | F1 | mg/Kg | | 67 | 70 - 130 | 7 | 35 |
| m,p-Xylenes | <0.00398 | U F1 | 0.200 | 0.1329 | F1 | mg/Kg | | 66 | 70 - 130 | 8 | 35 |
| o-Xylene | <0.00199 | U F1 | 0.100 | 0.07157 | | mg/Kg | | 72 | 70 - 130 | 10 | 35 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | | | | | | | | |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | | | | | | | | |

Lab Sample ID: MB 880-5088/5-A

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | | | 07/12/21 11:02 | 07/14/21 05:49 | 1 |

Lab Sample ID: LCS 880-5088/1-A

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.08145 | | mg/Kg | | 81 | 70 - 130 |
| Toluene | 0.100 | 0.08134 | | mg/Kg | | 81 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

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

Lab Sample ID: LCS 880-5088/1-A

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Ethylbenzene | 0.100 | 0.08609 | | mg/Kg | | 86 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1725 | | mg/Kg | | 86 | 70 - 130 |
| o-Xylene | 0.100 | 0.08366 | | mg/Kg | | 84 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 |

Lab Sample ID: LCSD 880-5088/2-A

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| Benzene | 0.100 | 0.08496 | | mg/Kg | | 85 | 70 - 130 | 4 | 35 |
| Toluene | 0.100 | 0.08492 | | mg/Kg | | 85 | 70 - 130 | 4 | 35 |
| Ethylbenzene | 0.100 | 0.08947 | | mg/Kg | | 89 | 70 - 130 | 4 | 35 |
| m,p-Xylenes | 0.200 | 0.1805 | | mg/Kg | | 90 | 70 - 130 | 5 | 35 |
| o-Xylene | 0.100 | 0.08685 | | mg/Kg | | 87 | 70 - 130 | 4 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 101 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 |

Lab Sample ID: 880-3887-5 MS

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: C-54

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00200 | U F1 | 0.100 | 0.06658 | F1 | mg/Kg | | 66 | 70 - 130 |
| Toluene | <0.00200 | U F1 | 0.100 | 0.06810 | F1 | mg/Kg | | 68 | 70 - 130 |
| Ethylbenzene | <0.00200 | U F1 | 0.100 | 0.07174 | | mg/Kg | | 71 | 70 - 130 |
| m,p-Xylenes | <0.00399 | U F1 | 0.201 | 0.1452 | | mg/Kg | | 72 | 70 - 130 |
| o-Xylene | <0.00200 | U F1 | 0.100 | 0.07057 | | mg/Kg | | 70 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 |

Lab Sample ID: 880-3887-5 MSD

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: C-54

Prep Type: Total/NA

Prep Batch: 5088

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Benzene | <0.00200 | U F1 | 0.0994 | 0.05379 | F1 | mg/Kg | | 54 | 70 - 130 | 21 | 35 |
| Toluene | <0.00200 | U F1 | 0.0994 | 0.05939 | F1 | mg/Kg | | 60 | 70 - 130 | 14 | 35 |
| Ethylbenzene | <0.00200 | U F1 | 0.0994 | 0.06298 | F1 | mg/Kg | | 63 | 70 - 130 | 13 | 35 |
| m,p-Xylenes | <0.00399 | U F1 | 0.199 | 0.1300 | F1 | mg/Kg | | 65 | 70 - 130 | 11 | 35 |
| o-Xylene | <0.00200 | U F1 | 0.0994 | 0.06459 | F1 | mg/Kg | | 65 | 70 - 130 | 9 | 35 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

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

| | MSD | MSD | |
|-----------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 |

Lab Sample ID: MB 880-5105/5-A

Matrix: Solid

Analysis Batch: 5113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5105

| | MB | MB | | | | | | | |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|--|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac | |
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/13/21 14:47 | 07/13/21 18:18 | 1 | |

| | MB | MB | | | | | | | |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|--|--|--|
| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac | | | |
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | 07/13/21 14:47 | 07/13/21 18:18 | 1 | | | |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 | 07/13/21 14:47 | 07/13/21 18:18 | 1 | | | |

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

Lab Sample ID: MB 880-5219/1-A

Matrix: Solid

Analysis Batch: 5323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5219

| | MB | MB | | | | | | | |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|--|
| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 20:29 | 1 | |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 20:29 | 1 | |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 20:29 | 1 | |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/15/21 11:27 | 07/17/21 20:29 | 1 | |

| | MB | MB | | | | | | | |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|--|--|--|
| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac | | | |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 20:29 | 1 | | | |
| o-Terphenyl (Surr) | 110 | | 70 - 130 | 07/15/21 11:27 | 07/17/21 20:29 | 1 | | | |

Lab Sample ID: LCS 880-5219/2-A

Matrix: Solid

Analysis Batch: 5323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5219

| | Spike | LCS | LCS | | | | | | |
|--------------------------------------|-------|--------|-----------|-------|---|------|-------|----------|--|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | %Rec. | Limits | |
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 811.7 | | mg/Kg | | 81 | | 70 - 130 | |
| Diesel Range Organics (Over C10-C28) | 1000 | 1003 | | mg/Kg | | 100 | | 70 - 130 | |

| | LCS | LCS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 98 | | 70 - 130 |
| o-Terphenyl (Surr) | 107 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

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

Lab Sample ID: LCSD 880-5219/3-A

Matrix: Solid

Analysis Batch: 5323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5219

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 885.6 | | mg/Kg | | 89 | 70 - 130 | 9 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 999.9 | | mg/Kg | | 100 | 70 - 130 | 0 | 20 |
| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits | | | | | | |
| 1-Chlorooctane (Surr) | 102 | | 70 - 130 | | | | | | |
| o-Terphenyl (Surr) | 107 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-3887-1 MS

Matrix: Solid

Analysis Batch: 5323

Client Sample ID: C-50

Prep Type: Total/NA

Prep Batch: 5219

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 996 | 955.5 | | mg/Kg | | 96 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 996 | 1131 | | mg/Kg | | 114 | 70 - 130 | | |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane (Surr) | 98 | | 70 - 130 | | | | | | | | |
| o-Terphenyl (Surr) | 99 | | 70 - 130 | | | | | | | | |

Lab Sample ID: 880-3887-1 MSD

Matrix: Solid

Analysis Batch: 5323

Client Sample ID: C-50

Prep Type: Total/NA

Prep Batch: 5219

| 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 | 996 | 1029 | | mg/Kg | | 103 | 70 - 130 | 7 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 996 | 1134 | | mg/Kg | | 114 | 70 - 130 | 0 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane (Surr) | 103 | | 70 - 130 | | | | | | | | |
| o-Terphenyl (Surr) | 98 | | 70 - 130 | | | | | | | | |

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5076/1-A

Matrix: Solid

Analysis Batch: 5130

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 07/13/21 18:52 | 1 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-5076/2-A

Matrix: Solid

Analysis Batch: 5130

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 274.7 | | mg/Kg | | 110 | 90 - 110 |

Lab Sample ID: LCSD 880-5076/3-A

Matrix: Solid

Analysis Batch: 5130

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 272.8 | | mg/Kg | | 109 | 90 - 110 | 1 | 20 |

Lab Sample ID: 820-1270-A-3-B MS

Matrix: Solid

Analysis Batch: 5130

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 28.8 | F1 | 252 | 311.1 | F1 | mg/Kg | | 112 | 90 - 110 |

Lab Sample ID: 820-1270-A-3-C MSD

Matrix: Solid

Analysis Batch: 5130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 28.8 | F1 | 252 | 299.0 | | mg/Kg | | 107 | 90 - 110 | 4 | 20 |

Lab Sample ID: MB 880-5078/1-A

Matrix: Solid

Analysis Batch: 5249

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 07/16/21 00:23 | 1 |

Lab Sample ID: LCS 880-5078/2-A

Matrix: Solid

Analysis Batch: 5249

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 263.6 | | mg/Kg | | 105 | 90 - 110 |

Lab Sample ID: LCSD 880-5078/3-A

Matrix: Solid

Analysis Batch: 5249

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 264.0 | | mg/Kg | | 106 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-3887-7 MS

Matrix: Solid

Analysis Batch: 5249

Client Sample ID: C-56

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 7.39 | | 252 | 261.7 | | mg/Kg | | 101 | 90 - 110 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Method: 300.0 - Anions, Ion Chromatography

| | | | | | | | | | | | |
|-------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|------------------------|-----|-------|
| Lab Sample ID: 880-3887-7 MSD | | | | | | | | | Client Sample ID: C-56 | | |
| Matrix: Solid | | | | | | | | | Prep Type: Soluble | | |
| Analysis Batch: 5249 | | | | | | | | | | | |
| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Chloride | 7.39 | | 252 | 261.9 | | mg/Kg | | 101 | 90 - 110 | 0 | 20 |

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

GC VOA

Prep Batch: 5070

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-1 | C-50 | Total/NA | Solid | 5035 | |
| 880-3887-2 | C-51 | Total/NA | Solid | 5035 | |
| 880-3887-3 | C-52 | Total/NA | Solid | 5035 | |
| 880-3887-4 | C-53 | Total/NA | Solid | 5035 | |
| MB 880-5070/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-5070/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-5070/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-3888-A-1-A MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 880-3888-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Prep Batch: 5088

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-5 | C-54 | Total/NA | Solid | 5035 | |
| 880-3887-6 | C-55 | Total/NA | Solid | 5035 | |
| 880-3887-7 | C-56 | Total/NA | Solid | 5035 | |
| 880-3887-8 | C-57 | Total/NA | Solid | 5035 | |
| 880-3887-9 | C-58 | Total/NA | Solid | 5035 | |
| 880-3887-10 | C-59 | Total/NA | Solid | 5035 | |
| 880-3887-11 | C-60 | Total/NA | Solid | 5035 | |
| 880-3887-12 | C-61 | Total/NA | Solid | 5035 | |
| MB 880-5088/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-5088/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-5088/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-3887-5 MS | C-54 | Total/NA | Solid | 5035 | |
| 880-3887-5 MSD | C-54 | Total/NA | Solid | 5035 | |

Prep Batch: 5105

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| MB 880-5105/5-A | Method Blank | Total/NA | Solid | 5035 | |

Analysis Batch: 5113

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-5 | C-54 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-6 | C-55 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-7 | C-56 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-8 | C-57 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-9 | C-58 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-10 | C-59 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-11 | C-60 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-12 | C-61 | Total/NA | Solid | 8021B | 5088 |
| MB 880-5088/5-A | Method Blank | Total/NA | Solid | 8021B | 5088 |
| MB 880-5105/5-A | Method Blank | Total/NA | Solid | 8021B | 5105 |
| LCS 880-5088/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 5088 |
| LCSD 880-5088/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 5088 |
| 880-3887-5 MS | C-54 | Total/NA | Solid | 8021B | 5088 |
| 880-3887-5 MSD | C-54 | Total/NA | Solid | 8021B | 5088 |

Analysis Batch: 5115

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 880-3887-1 | C-50 | Total/NA | Solid | 8021B | 5070 |
| 880-3887-2 | C-51 | Total/NA | Solid | 8021B | 5070 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

GC VOA (Continued)

Analysis Batch: 5115 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-3 | C-52 | Total/NA | Solid | 8021B | 5070 |
| 880-3887-4 | C-53 | Total/NA | Solid | 8021B | 5070 |
| MB 880-5070/5-A | Method Blank | Total/NA | Solid | 8021B | 5070 |
| LCS 880-5070/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 5070 |
| LCSD 880-5070/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 5070 |
| 880-3888-A-1-A MS | Matrix Spike | Total/NA | Solid | 8021B | 5070 |
| 880-3888-A-1-B MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 5070 |

GC Semi VOA

Prep Batch: 5219

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-3887-1 | C-50 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-2 | C-51 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-3 | C-52 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-4 | C-53 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-5 | C-54 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-6 | C-55 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-7 | C-56 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-8 | C-57 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-9 | C-58 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-10 | C-59 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-11 | C-60 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-12 | C-61 | Total/NA | Solid | 8015NM Prep | |
| MB 880-5219/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-5219/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-5219/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-3887-1 MS | C-50 | Total/NA | Solid | 8015NM Prep | |
| 880-3887-1 MSD | C-50 | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 5323

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3887-1 | C-50 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-2 | C-51 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-3 | C-52 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-4 | C-53 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-5 | C-54 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-6 | C-55 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-7 | C-56 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-8 | C-57 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-9 | C-58 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-10 | C-59 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-11 | C-60 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-12 | C-61 | Total/NA | Solid | 8015B NM | 5219 |
| MB 880-5219/1-A | Method Blank | Total/NA | Solid | 8015B NM | 5219 |
| LCS 880-5219/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 5219 |
| LCSD 880-5219/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-1 MS | C-50 | Total/NA | Solid | 8015B NM | 5219 |
| 880-3887-1 MSD | C-50 | Total/NA | Solid | 8015B NM | 5219 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

HPLC/IC

Leach Batch: 5076

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 880-3887-1 | C-50 | Soluble | Solid | DI Leach | |
| 880-3887-2 | C-51 | Soluble | Solid | DI Leach | |
| 880-3887-3 | C-52 | Soluble | Solid | DI Leach | |
| 880-3887-4 | C-53 | Soluble | Solid | DI Leach | |
| 880-3887-5 | C-54 | Soluble | Solid | DI Leach | |
| 880-3887-6 | C-55 | Soluble | Solid | DI Leach | |
| MB 880-5076/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-5076/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-5076/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 820-1270-A-3-B MS | Matrix Spike | Soluble | Solid | DI Leach | |
| 820-1270-A-3-C MSD | Matrix Spike Duplicate | Soluble | Solid | DI Leach | |

Leach Batch: 5078

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-3887-7 | C-56 | Soluble | Solid | DI Leach | |
| 880-3887-8 | C-57 | Soluble | Solid | DI Leach | |
| 880-3887-9 | C-58 | Soluble | Solid | DI Leach | |
| MB 880-5078/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-5078/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-5078/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-3887-7 MS | C-56 | Soluble | Solid | DI Leach | |
| 880-3887-7 MSD | C-56 | Soluble | Solid | DI Leach | |

Analysis Batch: 5130

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-1 | C-50 | Soluble | Solid | 300.0 | 5076 |
| 880-3887-2 | C-51 | Soluble | Solid | 300.0 | 5076 |
| 880-3887-3 | C-52 | Soluble | Solid | 300.0 | 5076 |
| 880-3887-4 | C-53 | Soluble | Solid | 300.0 | 5076 |
| 880-3887-5 | C-54 | Soluble | Solid | 300.0 | 5076 |
| 880-3887-6 | C-55 | Soluble | Solid | 300.0 | 5076 |
| MB 880-5076/1-A | Method Blank | Soluble | Solid | 300.0 | 5076 |
| LCS 880-5076/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 5076 |
| LCSD 880-5076/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 5076 |
| 820-1270-A-3-B MS | Matrix Spike | Soluble | Solid | 300.0 | 5076 |
| 820-1270-A-3-C MSD | Matrix Spike Duplicate | Soluble | Solid | 300.0 | 5076 |

Analysis Batch: 5249

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-3887-7 | C-56 | Soluble | Solid | 300.0 | 5078 |
| 880-3887-8 | C-57 | Soluble | Solid | 300.0 | 5078 |
| 880-3887-9 | C-58 | Soluble | Solid | 300.0 | 5078 |
| 880-3887-10 | C-59 | Soluble | Solid | 300.0 | |
| 880-3887-11 | C-60 | Soluble | Solid | 300.0 | |
| 880-3887-12 | C-61 | Soluble | Solid | 300.0 | |
| MB 880-5078/1-A | Method Blank | Soluble | Solid | 300.0 | 5078 |
| LCS 880-5078/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 5078 |
| LCSD 880-5078/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 5078 |
| 880-3887-7 MS | C-56 | Soluble | Solid | 300.0 | 5078 |
| 880-3887-7 MSD | C-56 | Soluble | Solid | 300.0 | 5078 |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-50

Lab Sample ID: 880-3887-1

Date Collected: 07/09/21 09:40

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5070 | 07/12/21 11:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5115 | 07/14/21 01:22 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 21:31 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 19:41 | CH | XEN MID |

Client Sample ID: C-51

Lab Sample ID: 880-3887-2

Date Collected: 07/09/21 09:41

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5070 | 07/12/21 11:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5115 | 07/14/21 01:43 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 22:34 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 19:58 | CH | XEN MID |

Client Sample ID: C-52

Lab Sample ID: 880-3887-3

Date Collected: 07/09/21 09:42

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5070 | 07/12/21 11:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5115 | 07/14/21 02:03 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 22:54 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 20:03 | CH | XEN MID |

Client Sample ID: C-53

Lab Sample ID: 880-3887-4

Date Collected: 07/09/21 09:43

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5070 | 07/12/21 11:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5115 | 07/14/21 02:24 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 23:15 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 20:09 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-54

Lab Sample ID: 880-3887-5

Date Collected: 07/09/21 09:44

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 06:18 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 23:36 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 20:14 | CH | XEN MID |

Client Sample ID: C-55

Lab Sample ID: 880-3887-6

Date Collected: 07/09/21 09:45

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 06:38 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/17/21 23:56 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 5076 | 07/12/21 16:10 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5130 | 07/13/21 20:20 | CH | XEN MID |

Client Sample ID: C-56

Lab Sample ID: 880-3887-7

Date Collected: 07/09/21 09:46

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 06:59 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 00:17 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 5078 | 07/12/21 10:13 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 00:40 | CH | XEN MID |

Client Sample ID: C-57

Lab Sample ID: 880-3887-8

Date Collected: 07/09/21 09:47

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 07:19 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 00:38 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5078 | 07/12/21 10:13 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 00:56 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Client Sample ID: C-58

Lab Sample ID: 880-3887-9

Date Collected: 07/09/21 09:49

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 07:39 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 00:58 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5078 | 07/12/21 10:13 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 01:01 | CH | XEN MID |

Client Sample ID: C-59

Lab Sample ID: 880-3887-10

Date Collected: 07/09/21 09:51

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 08:00 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 01:19 | AJ | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 01:07 | CH | XEN MID |

Client Sample ID: C-60

Lab Sample ID: 880-3887-11

Date Collected: 07/09/21 09:52

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 08:20 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 02:00 | AJ | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 01:12 | CH | XEN MID |

Client Sample ID: C-61

Lab Sample ID: 880-3887-12

Date Collected: 07/09/21 09:53

Matrix: Solid

Date Received: 07/12/21 08:38

| 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 | 5088 | 07/12/21 11:02 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5113 | 07/14/21 08:41 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5219 | 07/15/21 11:27 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5323 | 07/18/21 02:21 | AJ | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5249 | 07/16/21 01:28 | CH | XEN MID |

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Method Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-3887-1
SDG: 20-0102-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---------------|------------------|--------|----------------|----------------|----------|
| 880-3887-1 | C-50 | Solid | 07/09/21 09:40 | 07/12/21 08:38 | |
| 880-3887-2 | C-51 | Solid | 07/09/21 09:41 | 07/12/21 08:38 | |
| 880-3887-3 | C-52 | Solid | 07/09/21 09:42 | 07/12/21 08:38 | |
| 880-3887-4 | C-53 | Solid | 07/09/21 09:43 | 07/12/21 08:38 | |
| 880-3887-5 | C-54 | Solid | 07/09/21 09:44 | 07/12/21 08:38 | |
| 880-3887-6 | C-55 | Solid | 07/09/21 09:45 | 07/12/21 08:38 | |
| 880-3887-7 | C-56 | Solid | 07/09/21 09:46 | 07/12/21 08:38 | |
| 880-3887-8 | C-57 | Solid | 07/09/21 09:47 | 07/12/21 08:38 | |
| 880-3887-9 | C-58 | Solid | 07/09/21 09:49 | 07/12/21 08:38 | |
| 880-3887-10 | C-59 | Solid | 07/09/21 09:51 | 07/12/21 08:38 | |
| 880-3887-11 | C-60 | Solid | 07/09/21 09:52 | 07/12/21 08:38 | |
| 880-3887-12 | C-61 | Solid | 07/09/21 09:53 | 07/12/21 08:38 | |

7/19/2021

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-3887-1

SDG Number: 20-0102-14

Login Number: 3887

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-5484-1

Laboratory Sample Delivery Group: 20-0107-14

Client Project/Site: SD Frac Pond 13

For:

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

Attn: Mr. Mark J Larson

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

Authorized for release by:
9/3/2021 11:52:40 AM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Laboratory Job ID: 880-5484-1
SDG: 20-0107-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 11 |
| QC Sample Results | 13 |
| QC Association Summary | 20 |
| Lab Chronicle | 23 |
| Certification Summary | 26 |
| Method Summary | 27 |
| Sample Summary | 28 |
| Chain of Custody | 29 |
| Receipt Checklists | 30 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Qualifiers

GC VOA

| Qualifier | Qualifier Description |
|-----------|--|
| F2 | MS/MSD RPD exceeds control limits |
| U | Indicates the analyte was analyzed for but not detected. |

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Job ID: 880-5484-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-5484-1****Receipt**

The samples were received on 8/26/2021 9:03 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 3.9°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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7144 and analytical batch 880-7162 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: C-46 (880-5484-2), C-49 (880-5484-3), C-42 (880-5484-4), (880-5484-A-1-D MS) and (880-5484-A-1-E MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-41

Lab Sample ID: 880-5484-1

Date Collected: 08/24/21 09:45

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 11:37 | 08/26/21 22:54 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 22:54 | 1 |
| 1,4-Difluorobenzene (Surr) | 107 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 22:54 | 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 | | 08/26/21 15:25 | 08/27/21 13:36 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 13:36 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 13:36 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 13:36 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 99 | | 70 - 130 | 08/26/21 15:25 | 08/27/21 13:36 | 1 |
| o-Terphenyl (Surr) | 122 | | 70 - 130 | 08/26/21 15:25 | 08/27/21 13:36 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 12.0 | | 4.98 | mg/Kg | | | 08/27/21 18:08 | 1 |

Client Sample ID: C-46

Lab Sample ID: 880-5484-2

Date Collected: 08/24/21 09:48

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:14 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 23:14 | 1 |
| 1,4-Difluorobenzene (Surr) | 110 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 23:14 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-46

Lab Sample ID: 880-5484-2

Date Collected: 08/24/21 09:48

Matrix: Solid

Date Received: 08/26/21 09:03

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 123 | | 70 - 130 | | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |
| o-Terphenyl (Surr) | 155 | S1+ | 70 - 130 | | | 08/26/21 15:25 | 08/27/21 14:39 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.1 | | 4.95 | mg/Kg | | | 08/27/21 18:14 | 1 |

Client Sample ID: C-49

Lab Sample ID: 880-5484-3

Date Collected: 08/24/21 09:50

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 | | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 | | | 08/26/21 11:37 | 08/26/21 23:35 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 117 | | 70 - 130 | | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |
| o-Terphenyl (Surr) | 145 | S1+ | 70 - 130 | | | 08/26/21 15:25 | 08/27/21 14:59 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 177 | F1 | 5.02 | mg/Kg | | | 08/27/21 18:20 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-42

Lab Sample ID: 880-5484-4

Date Collected: 08/24/21 10:00

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 08/26/21 11:37 | 08/26/21 23:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 105 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 23:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 108 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 23:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 15:19 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 15:19 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 15:19 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 08/26/21 15:25 | 08/27/21 15:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 123 | | 70 - 130 | 08/26/21 15:25 | 08/27/21 15:19 | 1 |
| o-Terphenyl (Surr) | 151 | S1+ | 70 - 130 | 08/26/21 15:25 | 08/27/21 15:19 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.9 | | 4.98 | mg/Kg | | | 08/27/21 18:37 | 1 |

Client Sample ID: C-43

Lab Sample ID: 880-5484-5

Date Collected: 08/24/21 10:02

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|---------|-----------|--------|-------|---|----------------|----------------|---------|
| Benzene | <0.0403 | U | 0.0403 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| Toluene | <0.0403 | U | 0.0403 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| Ethylbenzene | <0.0403 | U | 0.0403 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| m,p-Xylenes | <0.0806 | U | 0.0806 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| o-Xylene | <0.0403 | U | 0.0403 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| Xylenes, Total | <0.0806 | U | 0.0806 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| Total BTEX | <0.0806 | U | 0.0806 | mg/Kg | | 08/26/21 11:37 | 08/27/21 00:16 | 20 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 | 08/26/21 11:37 | 08/27/21 00:16 | 20 |
| 1,4-Difluorobenzene (Surr) | 108 | | 70 - 130 | 08/26/21 11:37 | 08/27/21 00:16 | 20 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-43

Lab Sample ID: 880-5484-5

Date Collected: 08/24/21 10:02

Matrix: Solid

Date Received: 08/26/21 09:03

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 | | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |
| o-Terphenyl (Surr) | 113 | | 70 - 130 | | | 08/27/21 13:35 | 08/27/21 23:06 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 15.7 | | 4.97 | mg/Kg | | | 08/27/21 18:42 | 1 |

Client Sample ID: C-44

Lab Sample ID: 880-5484-6

Date Collected: 08/24/21 10:04

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| Total BTEX | <0.00399 | U F2 | 0.00399 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 121 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 18:58 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 101 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |
| o-Terphenyl (Surr) | 117 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 00:09 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 12.1 | | 4.95 | mg/Kg | | | 08/27/21 18:59 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-45

Lab Sample ID: 880-5484-7

Date Collected: 08/24/21 10:06

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 125 | | 70 - 130 | 08/26/21 15:44 | 08/27/21 19:24 | 1 |
| 1,4-Difluorobenzene (Surr) | 118 | | 70 - 130 | 08/26/21 15:44 | 08/27/21 19:24 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:30 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:30 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:30 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | 08/27/21 13:35 | 08/28/21 00:30 | 1 |
| o-Terphenyl (Surr) | 110 | | 70 - 130 | 08/27/21 13:35 | 08/28/21 00:30 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.7 | | 4.95 | mg/Kg | | | 08/27/21 19:05 | 1 |

Client Sample ID: C-47

Lab Sample ID: 880-5484-8

Date Collected: 08/24/21 10:08

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 08/26/21 15:44 | 08/27/21 19:50 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 126 | | 70 - 130 | 08/26/21 15:44 | 08/27/21 19:50 | 1 |
| 1,4-Difluorobenzene (Surr) | 121 | | 70 - 130 | 08/26/21 15:44 | 08/27/21 19:50 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-47

Lab Sample ID: 880-5484-8

Date Collected: 08/24/21 10:08

Matrix: Solid

Date Received: 08/26/21 09:03

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 101 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |
| o-Terphenyl (Surr) | 117 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 00:51 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.8 | | 5.04 | mg/Kg | | | 08/27/21 19:10 | 1 |

Client Sample ID: C-17

Lab Sample ID: 880-5484-9

Date Collected: 08/24/21 10:15

Matrix: Solid

Date Received: 08/26/21 09:03

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 124 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 20:15 | 1 |
| 1,4-Difluorobenzene (Surr) | 117 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 20:15 | 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 | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |
| o-Terphenyl (Surr) | 111 | | 70 - 130 | | | 08/27/21 13:35 | 08/28/21 01:12 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 11.7 | | 4.98 | mg/Kg | | | 08/27/21 19:16 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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) |
| 880-5471-A-1-E MS | Matrix Spike | 109 | 99 |
| 880-5471-A-1-H MSD | Matrix Spike Duplicate | 99 | 101 |
| 880-5484-1 | C-41 | 110 | 107 |
| 880-5484-2 | C-46 | 111 | 110 |
| 880-5484-3 | C-49 | 111 | 100 |
| 880-5484-4 | C-42 | 105 | 108 |
| 880-5484-5 | C-43 | 108 | 108 |
| 880-5484-6 | C-44 | 121 | 100 |
| 880-5484-6 MS | C-44 | 112 | 123 |
| 880-5484-6 MSD | C-44 | 119 | 124 |
| 880-5484-7 | C-45 | 125 | 118 |
| 880-5484-8 | C-47 | 126 | 121 |
| 880-5484-9 | C-17 | 124 | 117 |
| LCS 880-7125/1-A | Lab Control Sample | 108 | 95 |
| LCS 880-7146/1-A | Lab Control Sample | 104 | 119 |
| LCSD 880-7125/2-A | Lab Control Sample Dup | 103 | 105 |
| LCSD 880-7146/2-A | Lab Control Sample Dup | 102 | 117 |
| MB 880-7125/5-A | Method Blank | 124 | 108 |
| MB 880-7146/5-A | Method Blank | 71 | 103 |
| Surrogate Legend | | | |
| BFB = 4-Bromofluorobenzene (Surr) | | | |
| DFBZ = 1,4-Difluorobenzene (Surr) | | | |

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

Matrix: Solid

Prep Type: Total/NA

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|-------------------------|------------------------|--|-------------------|
| Lab Sample ID | Client Sample ID | 1CO1
(70-130) | OTPH1
(70-130) |
| 880-5484-1 | C-41 | 99 | 122 |
| 880-5484-1 MS | C-41 | 127 | 147 S1+ |
| 880-5484-1 MSD | C-41 | 136 S1+ | 149 S1+ |
| 880-5484-2 | C-46 | 123 | 155 S1+ |
| 880-5484-3 | C-49 | 117 | 145 S1+ |
| 880-5484-4 | C-42 | 123 | 151 S1+ |
| 880-5484-5 | C-43 | 96 | 113 |
| 880-5484-5 MS | C-43 | 92 | 99 |
| 880-5484-5 MSD | C-43 | 92 | 99 |
| 880-5484-6 | C-44 | 101 | 117 |
| 880-5484-7 | C-45 | 94 | 110 |
| 880-5484-8 | C-47 | 101 | 117 |
| 880-5484-9 | C-17 | 96 | 111 |
| LCS 880-7144/2-A | Lab Control Sample | 112 | 120 |
| LCS 880-7193/2-A | Lab Control Sample | 95 | 102 |
| LCSD 880-7144/3-A | Lab Control Sample Dup | 108 | 118 |
| LCSD 880-7193/3-A | Lab Control Sample Dup | 91 | 98 |
| MB 880-7144/1-A | Method Blank | 99 | 116 |
| MB 880-7193/1-A | Method Blank | 98 | 115 |
| Surrogate Legend | | | |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.

Project/Site: SD Frac Pond 13

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Job ID: 880-5484-1

SDG: 20-0107-14

1

2

3

4

5

6

7

8

9

10

11

12

13

14

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7125/5-A

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7125

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 11:37 | 08/26/21 17:32 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 124 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 17:32 | 1 |
| 1,4-Difluorobenzene (Surr) | 108 | | 70 - 130 | 08/26/21 11:37 | 08/26/21 17:32 | 1 |

Lab Sample ID: LCS 880-7125/1-A

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7125

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.1056 | | mg/Kg | | 106 | 70 - 130 |
| Toluene | 0.100 | 0.1020 | | mg/Kg | | 102 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1075 | | mg/Kg | | 107 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1960 | | mg/Kg | | 98 | 70 - 130 |
| o-Xylene | 0.100 | 0.1004 | | mg/Kg | | 100 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 |

Lab Sample ID: LCSD 880-7125/2-A

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7125

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.1162 | | mg/Kg | | 116 | 70 - 130 | 10 | 35 |
| Toluene | 0.100 | 0.1143 | | mg/Kg | | 114 | 70 - 130 | 11 | 35 |
| Ethylbenzene | 0.100 | 0.1112 | | mg/Kg | | 111 | 70 - 130 | 3 | 35 |
| m,p-Xylenes | 0.200 | 0.2058 | | mg/Kg | | 103 | 70 - 130 | 5 | 35 |
| o-Xylene | 0.100 | 0.1024 | | mg/Kg | | 102 | 70 - 130 | 2 | 35 |

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

Lab Sample ID: 880-5471-A-1-E MS

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7125

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00200 | U | 0.101 | 0.09018 | | mg/Kg | | 89 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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

Lab Sample ID: 880-5471-A-1-E MS

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7125

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Toluene | <0.00200 | U | 0.101 | 0.09582 | | mg/Kg | | 95 | 70 - 130 |
| Ethylbenzene | <0.00200 | U | 0.101 | 0.09855 | | mg/Kg | | 98 | 70 - 130 |
| m,p-Xylenes | <0.00399 | U | 0.202 | 0.1859 | | mg/Kg | | 92 | 70 - 130 |
| o-Xylene | <0.00200 | U | 0.101 | 0.09286 | | mg/Kg | | 91 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 | | | | | | |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-5471-A-1-H MSD

Matrix: Solid

Analysis Batch: 7136

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7125

| 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 | 0.09692 | | mg/Kg | | 96 | 70 - 130 | 7 | 35 |
| Toluene | <0.00200 | U | 0.100 | 0.09518 | | mg/Kg | | 95 | 70 - 130 | 1 | 35 |
| Ethylbenzene | <0.00200 | U | 0.100 | 0.09357 | | mg/Kg | | 93 | 70 - 130 | 5 | 35 |
| m,p-Xylenes | <0.00399 | U | 0.200 | 0.1765 | | mg/Kg | | 88 | 70 - 130 | 5 | 35 |
| o-Xylene | <0.00200 | U | 0.100 | 0.08733 | | mg/Kg | | 86 | 70 - 130 | 6 | 35 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 4-Bromofluorobenzene (Surr) | 99 | | 70 - 130 | | | | | | | | |
| 1,4-Difluorobenzene (Surr) | 101 | | 70 - 130 | | | | | | | | |

Lab Sample ID: MB 880-7146/5-A

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 71 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | | | 08/26/21 15:44 | 08/27/21 18:33 | 1 |

Lab Sample ID: LCS 880-7146/1-A

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.1067 | | mg/Kg | | 107 | 70 - 130 |
| Toluene | 0.100 | 0.1090 | | mg/Kg | | 109 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-7146/1-A

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Ethylbenzene | 0.100 | 0.1101 | | mg/Kg | | 110 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.2207 | | mg/Kg | | 110 | 70 - 130 |
| o-Xylene | 0.100 | 0.1059 | | mg/Kg | | 106 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 119 | | 70 - 130 |

Lab Sample ID: LCSD 880-7146/2-A

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| Benzene | 0.100 | 0.1028 | | mg/Kg | | 103 | 70 - 130 | 4 | 35 |
| Toluene | 0.100 | 0.09447 | | mg/Kg | | 94 | 70 - 130 | 14 | 35 |
| Ethylbenzene | 0.100 | 0.1050 | | mg/Kg | | 105 | 70 - 130 | 5 | 35 |
| m,p-Xylenes | 0.200 | 0.2119 | | mg/Kg | | 106 | 70 - 130 | 4 | 35 |
| o-Xylene | 0.100 | 0.1033 | | mg/Kg | | 103 | 70 - 130 | 2 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 102 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 117 | | 70 - 130 |

Lab Sample ID: 880-5484-6 MS

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: C-44

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00200 | U | 0.0998 | 0.08001 | | mg/Kg | | 80 | 70 - 130 |
| Toluene | <0.00200 | U | 0.0998 | 0.08089 | | mg/Kg | | 81 | 70 - 130 |
| Ethylbenzene | <0.00200 | U | 0.0998 | 0.08443 | | mg/Kg | | 85 | 70 - 130 |
| m,p-Xylenes | <0.00399 | U | 0.200 | 0.1703 | | mg/Kg | | 85 | 70 - 130 |
| o-Xylene | <0.00200 | U | 0.0998 | 0.08328 | | mg/Kg | | 83 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 112 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 123 | | 70 - 130 |

Lab Sample ID: 880-5484-6 MSD

Matrix: Solid

Analysis Batch: 7183

Client Sample ID: C-44

Prep Type: Total/NA

Prep Batch: 7146

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Benzene | <0.00200 | U | 0.101 | 0.1008 | | mg/Kg | | 100 | 70 - 130 | 23 | 35 |
| Toluene | <0.00200 | U | 0.101 | 0.09667 | | mg/Kg | | 96 | 70 - 130 | 18 | 35 |
| Ethylbenzene | <0.00200 | U | 0.101 | 0.1046 | | mg/Kg | | 104 | 70 - 130 | 21 | 35 |
| m,p-Xylenes | <0.00399 | U | 0.202 | 0.2111 | | mg/Kg | | 105 | 70 - 130 | 21 | 35 |
| o-Xylene | <0.00200 | U | 0.101 | 0.1031 | | mg/Kg | | 102 | 70 - 130 | 21 | 35 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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

| Surrogate | MSD MSD | | Limits |
|-----------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 119 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 124 | | 70 - 130 |

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

Lab Sample ID: MB 880-7144/1-A

Matrix: Solid

Analysis Batch: 7162

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7144

| Analyte | MB MB | | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 12:33 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 12:33 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 12:33 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 08/26/21 15:25 | 08/27/21 12:33 | 1 |

| Surrogate | MB MB | | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 1-Chlorooctane (Surr) | 99 | | 70 - 130 | 08/26/21 15:25 | 08/27/21 12:33 | 1 |
| o-Terphenyl (Surr) | 116 | | 70 - 130 | 08/26/21 15:25 | 08/27/21 12:33 | 1 |

Lab Sample ID: LCS 880-7144/2-A

Matrix: Solid

Analysis Batch: 7162

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7144

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1076 | | mg/Kg | | 108 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1139 | | mg/Kg | | 114 | 70 - 130 |

| Surrogate | LCS LCS | | Limits |
|-----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1-Chlorooctane (Surr) | 112 | | 70 - 130 |
| o-Terphenyl (Surr) | 120 | | 70 - 130 |

Lab Sample ID: LCSD 880-7144/3-A

Matrix: Solid

Analysis Batch: 7162

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7144

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| | | | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 1055 | | mg/Kg | | 106 | 70 - 130 | 2 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1152 | | mg/Kg | | 115 | 70 - 130 | 1 | 20 |

| Surrogate | LCSD LCSD | | Limits |
|-----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1-Chlorooctane (Surr) | 108 | | 70 - 130 |
| o-Terphenyl (Surr) | 118 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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

Lab Sample ID: 880-5484-1 MS

Matrix: Solid

Analysis Batch: 7162

Client Sample ID: C-41

Prep Type: Total/NA

Prep Batch: 7144

| 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 | 995 | 1237 | | mg/Kg | | 124 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 995 | 1011 | | mg/Kg | | 100 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 1-Chlorooctane (Surr) | 127 | | 70 - 130 | | | | | | |
| o-Terphenyl (Surr) | 147 | S1+ | 70 - 130 | | | | | | |

Lab Sample ID: 880-5484-1 MSD

Matrix: Solid

Analysis Batch: 7162

Client Sample ID: C-41

Prep Type: Total/NA

Prep Batch: 7144

| 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 | 1314 | F1 | mg/Kg | | 132 | 70 - 130 | 6 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 998 | 1074 | | mg/Kg | | 106 | 70 - 130 | 6 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane (Surr) | 136 | S1+ | 70 - 130 | | | | | | | | |
| o-Terphenyl (Surr) | 149 | S1+ | 70 - 130 | | | | | | | | |

Lab Sample ID: MB 880-7193/1-A

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7193

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 98 | | 70 - 130 | | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |
| o-Terphenyl (Surr) | 115 | | 70 - 130 | | | 08/27/21 13:35 | 08/27/21 22:03 | 1 |

Lab Sample ID: LCS 880-7193/2-A

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7193

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 881.0 | | mg/Kg | | 88 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1015 | | mg/Kg | | 102 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-7193/2-A

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7193

| | LCS | LCS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 95 | | 70 - 130 |
| o-Terphenyl (Surr) | 102 | | 70 - 130 |

Lab Sample ID: LCSD 880-7193/3-A

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7193

| | | | Spike | LCSD | LCSD | | | | %Rec. | | RPD |
|--------------------------------------|--|--|-------|--------|-----------|-------|---|------|----------|-----|-------|
| Analyte | | | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 873.2 | | mg/Kg | | 87 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 997.7 | | mg/Kg | | 100 | 70 - 130 | 2 | 20 |

| | LCSD | LCSD | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 91 | | 70 - 130 |
| o-Terphenyl (Surr) | 98 | | 70 - 130 |

Lab Sample ID: 880-5484-5 MS

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: C-43

Prep Type: Total/NA

Prep Batch: 7193

| | Sample | Sample | Spike | MS | MS | | | | %Rec. | | |
|--------------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 995 | 840.2 | | mg/Kg | | 84 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 995 | 895.5 | | mg/Kg | | 90 | 70 - 130 | | |

| | MS | MS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 |
| o-Terphenyl (Surr) | 99 | | 70 - 130 |

Lab Sample ID: 880-5484-5 MSD

Matrix: Solid

Analysis Batch: 7166

Client Sample ID: C-43

Prep Type: Total/NA

Prep Batch: 7193

| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | RPD |
|--------------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit |
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 998 | 813.7 | | mg/Kg | | 82 | 70 - 130 | 3 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 998 | 909.9 | | mg/Kg | | 91 | 70 - 130 | 2 | 20 |

| | MSD | MSD | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 92 | | 70 - 130 |
| o-Terphenyl (Surr) | 99 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7120/1-A

Matrix: Solid

Analysis Batch: 7189

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB
Result | MB
Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------------|-----------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 08/27/21 16:43 | 1 |

Lab Sample ID: LCS 880-7120/2-A

Matrix: Solid

Analysis Batch: 7189

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike
Added | LCS
Result | LCS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|----------------|---------------|------------------|-------|---|------|-----------------|
| Chloride | 250 | 265.4 | | mg/Kg | | 106 | 90 - 110 |

Lab Sample ID: LCSD 880-7120/3-A

Matrix: Solid

Analysis Batch: 7189

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike
Added | LCSD
Result | LCSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|----------------|----------------|-------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 250 | 268.8 | | mg/Kg | | 108 | 90 - 110 | 1 | 20 |

Lab Sample ID: 880-5484-3 MS

Matrix: Solid

Analysis Batch: 7189

Client Sample ID: C-49

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MS
Result | MS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|-----------------|
| Chloride | 177 | F1 | 251 | 470.5 | F1 | mg/Kg | | 117 | 90 - 110 |

Lab Sample ID: 880-5484-3 MSD

Matrix: Solid

Analysis Batch: 7189

Client Sample ID: C-49

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 177 | F1 | 251 | 449.8 | | mg/Kg | | 109 | 90 - 110 | 5 | 20 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

GC VOA

Prep Batch: 7125

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5484-1 | C-41 | Total/NA | Solid | 5035 | |
| 880-5484-2 | C-46 | Total/NA | Solid | 5035 | |
| 880-5484-3 | C-49 | Total/NA | Solid | 5035 | |
| 880-5484-4 | C-42 | Total/NA | Solid | 5035 | |
| 880-5484-5 | C-43 | Total/NA | Solid | 5035 | |
| MB 880-7125/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7125/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7125/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-5471-A-1-E MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 880-5471-A-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Analysis Batch: 7136

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5484-1 | C-41 | Total/NA | Solid | 8021B | 7125 |
| 880-5484-2 | C-46 | Total/NA | Solid | 8021B | 7125 |
| 880-5484-3 | C-49 | Total/NA | Solid | 8021B | 7125 |
| 880-5484-4 | C-42 | Total/NA | Solid | 8021B | 7125 |
| 880-5484-5 | C-43 | Total/NA | Solid | 8021B | 7125 |
| MB 880-7125/5-A | Method Blank | Total/NA | Solid | 8021B | 7125 |
| LCS 880-7125/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7125 |
| LCSD 880-7125/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7125 |
| 880-5471-A-1-E MS | Matrix Spike | Total/NA | Solid | 8021B | 7125 |
| 880-5471-A-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 7125 |

Prep Batch: 7146

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5484-6 | C-44 | Total/NA | Solid | 5035 | |
| 880-5484-7 | C-45 | Total/NA | Solid | 5035 | |
| 880-5484-8 | C-47 | Total/NA | Solid | 5035 | |
| 880-5484-9 | C-17 | Total/NA | Solid | 5035 | |
| MB 880-7146/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7146/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7146/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-5484-6 MS | C-44 | Total/NA | Solid | 5035 | |
| 880-5484-6 MSD | C-44 | Total/NA | Solid | 5035 | |

Analysis Batch: 7183

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5484-6 | C-44 | Total/NA | Solid | 8021B | 7146 |
| 880-5484-7 | C-45 | Total/NA | Solid | 8021B | 7146 |
| 880-5484-8 | C-47 | Total/NA | Solid | 8021B | 7146 |
| 880-5484-9 | C-17 | Total/NA | Solid | 8021B | 7146 |
| MB 880-7146/5-A | Method Blank | Total/NA | Solid | 8021B | 7146 |
| LCS 880-7146/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7146 |
| LCSD 880-7146/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7146 |
| 880-5484-6 MS | C-44 | Total/NA | Solid | 8021B | 7146 |
| 880-5484-6 MSD | C-44 | Total/NA | Solid | 8021B | 7146 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

GC Semi VOA

Prep Batch: 7144

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-5484-1 | C-41 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-2 | C-46 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-3 | C-49 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-4 | C-42 | Total/NA | Solid | 8015NM Prep | |
| MB 880-7144/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-7144/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-7144/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-5484-1 MS | C-41 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-1 MSD | C-41 | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 7162

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-5484-1 | C-41 | Total/NA | Solid | 8015B NM | 7144 |
| 880-5484-2 | C-46 | Total/NA | Solid | 8015B NM | 7144 |
| 880-5484-3 | C-49 | Total/NA | Solid | 8015B NM | 7144 |
| 880-5484-4 | C-42 | Total/NA | Solid | 8015B NM | 7144 |
| MB 880-7144/1-A | Method Blank | Total/NA | Solid | 8015B NM | 7144 |
| LCS 880-7144/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 7144 |
| LCSD 880-7144/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 7144 |
| 880-5484-1 MS | C-41 | Total/NA | Solid | 8015B NM | 7144 |
| 880-5484-1 MSD | C-41 | Total/NA | Solid | 8015B NM | 7144 |

Analysis Batch: 7166

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-5484-5 | C-43 | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-6 | C-44 | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-7 | C-45 | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-8 | C-47 | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-9 | C-17 | Total/NA | Solid | 8015B NM | 7193 |
| MB 880-7193/1-A | Method Blank | Total/NA | Solid | 8015B NM | 7193 |
| LCS 880-7193/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 7193 |
| LCSD 880-7193/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-5 MS | C-43 | Total/NA | Solid | 8015B NM | 7193 |
| 880-5484-5 MSD | C-43 | Total/NA | Solid | 8015B NM | 7193 |

Prep Batch: 7193

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-5484-5 | C-43 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-6 | C-44 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-7 | C-45 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-8 | C-47 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-9 | C-17 | Total/NA | Solid | 8015NM Prep | |
| MB 880-7193/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-7193/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-7193/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-5484-5 MS | C-43 | Total/NA | Solid | 8015NM Prep | |
| 880-5484-5 MSD | C-43 | Total/NA | Solid | 8015NM Prep | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

HPLC/IC

Leach Batch: 7120

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-5484-1 | C-41 | Soluble | Solid | DI Leach | |
| 880-5484-2 | C-46 | Soluble | Solid | DI Leach | |
| 880-5484-3 | C-49 | Soluble | Solid | DI Leach | |
| 880-5484-4 | C-42 | Soluble | Solid | DI Leach | |
| 880-5484-5 | C-43 | Soluble | Solid | DI Leach | |
| 880-5484-6 | C-44 | Soluble | Solid | DI Leach | |
| 880-5484-7 | C-45 | Soluble | Solid | DI Leach | |
| 880-5484-8 | C-47 | Soluble | Solid | DI Leach | |
| 880-5484-9 | C-17 | Soluble | Solid | DI Leach | |
| MB 880-7120/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-7120/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-7120/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-5484-3 MS | C-49 | Soluble | Solid | DI Leach | |
| 880-5484-3 MSD | C-49 | Soluble | Solid | DI Leach | |

Analysis Batch: 7189

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5484-1 | C-41 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-2 | C-46 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-3 | C-49 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-4 | C-42 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-5 | C-43 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-6 | C-44 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-7 | C-45 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-8 | C-47 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-9 | C-17 | Soluble | Solid | 300.0 | 7120 |
| MB 880-7120/1-A | Method Blank | Soluble | Solid | 300.0 | 7120 |
| LCS 880-7120/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 7120 |
| LCSD 880-7120/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 7120 |
| 880-5484-3 MS | C-49 | Soluble | Solid | 300.0 | 7120 |
| 880-5484-3 MSD | C-49 | Soluble | Solid | 300.0 | 7120 |

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-41

Lab Sample ID: 880-5484-1

Date Collected: 08/24/21 09:45

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7125 | 08/26/21 11:37 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7136 | 08/26/21 22:54 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 7144 | 08/26/21 15:25 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7162 | 08/27/21 13:36 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:08 | CH | XEN MID |

Client Sample ID: C-46

Lab Sample ID: 880-5484-2

Date Collected: 08/24/21 09:48

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7125 | 08/26/21 11:37 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7136 | 08/26/21 23:14 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7144 | 08/26/21 15:25 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7162 | 08/27/21 14:39 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:14 | CH | XEN MID |

Client Sample ID: C-49

Lab Sample ID: 880-5484-3

Date Collected: 08/24/21 09:50

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7125 | 08/26/21 11:37 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7136 | 08/26/21 23:35 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7144 | 08/26/21 15:25 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7162 | 08/27/21 14:59 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:20 | CH | XEN MID |

Client Sample ID: C-42

Lab Sample ID: 880-5484-4

Date Collected: 08/24/21 10:00

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7125 | 08/26/21 11:37 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7136 | 08/26/21 23:55 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 7144 | 08/26/21 15:25 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7162 | 08/27/21 15:19 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:37 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-43

Lab Sample ID: 880-5484-5

Date Collected: 08/24/21 10:02

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7125 | 08/26/21 11:37 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 20 | 5 mL | 5 mL | 7136 | 08/27/21 00:16 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7193 | 08/27/21 13:35 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7166 | 08/27/21 23:06 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:42 | CH | XEN MID |

Client Sample ID: C-44

Lab Sample ID: 880-5484-6

Date Collected: 08/24/21 10:04

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7146 | 08/26/21 15:44 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7183 | 08/27/21 18:58 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7193 | 08/27/21 13:35 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7166 | 08/28/21 00:09 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 18:59 | CH | XEN MID |

Client Sample ID: C-45

Lab Sample ID: 880-5484-7

Date Collected: 08/24/21 10:06

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7146 | 08/26/21 15:44 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7183 | 08/27/21 19:24 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 7193 | 08/27/21 13:35 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7166 | 08/28/21 00:30 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 19:05 | CH | XEN MID |

Client Sample ID: C-47

Lab Sample ID: 880-5484-8

Date Collected: 08/24/21 10:08

Matrix: Solid

Date Received: 08/26/21 09:03

| 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 | 7146 | 08/26/21 15:44 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7183 | 08/27/21 19:50 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 7193 | 08/27/21 13:35 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7166 | 08/28/21 00:51 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 19:10 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Client Sample ID: C-17
Date Collected: 08/24/21 10:15
Date Received: 08/26/21 09:03

Lab Sample ID: 880-5484-9
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 | | | 4.99 g | 5 mL | 7146 | 08/26/21 15:44 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7183 | 08/27/21 20:15 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7193 | 08/27/21 13:35 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7166 | 08/28/21 01:12 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 7120 | 08/26/21 11:06 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7189 | 08/27/21 19:16 | CH | XEN MID |

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Method Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5484-1
SDG: 20-0107-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 880-5484-1 | C-41 | Solid | 08/24/21 09:45 | 08/26/21 09:03 |
| 880-5484-2 | C-46 | Solid | 08/24/21 09:48 | 08/26/21 09:03 |
| 880-5484-3 | C-49 | Solid | 08/24/21 09:50 | 08/26/21 09:03 |
| 880-5484-4 | C-42 | Solid | 08/24/21 10:00 | 08/26/21 09:03 |
| 880-5484-5 | C-43 | Solid | 08/24/21 10:02 | 08/26/21 09:03 |
| 880-5484-6 | C-44 | Solid | 08/24/21 10:04 | 08/26/21 09:03 |
| 880-5484-7 | C-45 | Solid | 08/24/21 10:06 | 08/26/21 09:03 |
| 880-5484-8 | C-47 | Solid | 08/24/21 10:08 | 08/26/21 09:03 |
| 880-5484-9 | C-17 | Solid | 08/24/21 10:15 | 08/26/21 09:03 |

Midland, TX 79701
432-687-0901



880-5484 Chain of Custody

DATE: 8/25/21 PAGE 1 OF 1
PO#: _____ LAB WORK ORDER#: 880-5404
PROJECT LOCATION OR NAME: SD Fine Pond B3
LAI PROJECT #: 20-0107-14 COLLECTOR: TT

S=SOIL
W=WATER
A=AIR

P=PAINT
SL=SLUDGE
OT=OTHER

| | | | |
|--------------|--|--|--|
| PRESERVATION | | | |
|--------------|--|--|--|

TIME ZONE
Time zone/State
MST

Field
Sample | D

LabDate _____

Tim

Matr

of Containers

HCl

 HNO_3 H_2SO_4 ICEUNPRESSERVED

ANALYSES

BTEX ☒ MTBE ☐ TPH 1005 ☐ TPH 1008 ☐

TRPH 418 ☐ TPH 8015 ☒ TPH 8015 ☒

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 ☐

RCl ☐ TOX ☐ FLASHPOINT ☐

TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐

pH ☐ HEXAVALENT CHROMIUM ☐

EXPLOSIVES ☐ PECTHOLATE ☐

CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐

FIELD NO.

FIELD NOTES

| Case | Date | Time | Location | Remarks |
|-------|---------|------|----------|---------|
| C-41 | 8/24/21 | 0945 | S | 1 |
| C-46 | | 0948 | | X |
| C-49 | | 0950 | | X |
| C-42 | | 1000 | | X |
| C-43 | | 1002 | | X |
| C-44 | | 1004 | | X |
| C-45 | | 1006 | | X |
| C-47 | | 1008 | | X |
| C-17 | | 1015 | | X |
| TOTAL | 9 | | | |

RELINQUISHED BY (Signature)

DATE/TIME 06/11/2003RECEIVED BY (Signature)RELINQUISHED BY (Signature)DATE/TIMERECEIVED BY (Signature)RELINQUISHED BY (Signature),DATE/TIMERECEIVED BY (Signature)LABORATORY X-2766C

TURN AROUND TIME

LABORATORY USE ONLY:

RECEIVING TEMP 21.1°C THERM#

3

2 DAY ☐

OTHER ☐

CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-5484-1

SDG Number: 20-0107-14

Login Number: 5484

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-4078-1

Laboratory Sample Delivery Group: 20-0107-14

Client Project/Site: Salado Draw Frac Pond 13

For:

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

Attn: Mr. Mark J Larson

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

Authorized for release by:
7/26/2021 11:42:49 AM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Laboratory Job ID: 880-4078-1
SDG: 20-0107-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 23 |
| QC Sample Results | 25 |
| QC Association Summary | 33 |
| Lab Chronicle | 39 |
| Certification Summary | 46 |
| Method Summary | 47 |
| Sample Summary | 48 |
| Chain of Custody | 49 |
| Receipt Checklists | 51 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Qualifiers

GC VOA

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

GC Semi VOA

| Qualifier | Qualifier Description |
|-----------|--|
| 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.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Job ID: 880-4078-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-4078-1****Receipt**

The samples were received on 7/16/2021 2:07 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: Surrogate recovery for the following samples were outside control limits: C-72 (880-4078-11), C-80 (880-4078-19), C-82 (880-4078-21) and C-85 (880-4078-24). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-62

Lab Sample ID: 880-4078-1

Date Collected: 07/12/21 12:00

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| m,p-Xylenes | 0.0336 | | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| Xylenes, Total | 0.0336 | | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| Total BTEX | 0.0336 | | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:55 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 898 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 16:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 425 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 16:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 12:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U F2 | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 12:29 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 12:29 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 12:29 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 85 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 12:29 | 1 |
| o-Terphenyl (Surr) | 82 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 12:29 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 213 | | 5.05 | mg/Kg | | | 07/21/21 12:55 | 1 |

Client Sample ID: C-63

Lab Sample ID: 880-4078-2

Date Collected: 07/12/21 12:02

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| Toluene | 0.00225 | | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 120 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 17:16 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 17:16 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-63

Lab Sample ID: 880-4078-2

Date Collected: 07/12/21 12:02

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 119 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |
| o-Terphenyl (Surr) | 127 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 13:34 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 5520 | | 49.9 | mg/Kg | | | 07/21/21 13:11 | 10 |

Client Sample ID: C-64

Lab Sample ID: 880-4078-3

Date Collected: 07/12/21 12:03

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | 0.00300 | | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 120 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 106 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 17:37 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |
| o-Terphenyl (Surr) | 100 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 13:55 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1370 | | 4.95 | mg/Kg | | | 07/21/21 13:16 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-65

Lab Sample ID: 880-4078-4

Date Collected: 07/12/21 12:04

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 17:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 131 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 17:57 | 1 |
| 1,4-Difluorobenzene (Surr) | 114 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 17:57 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:16 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:16 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:16 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 113 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 14:16 | 1 |
| o-Terphenyl (Surr) | 117 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 14:16 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|-----|-------|---|----------|----------------|---------|
| Chloride | 11900 | | 252 | mg/Kg | | | 07/21/21 13:21 | 50 |

Client Sample ID: C-66

Lab Sample ID: 880-4078-5

Date Collected: 07/12/21 12:05

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 135 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 18:18 | 1 |
| 1,4-Difluorobenzene (Surr) | 108 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 18:18 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-66

Lab Sample ID: 880-4078-5

Date Collected: 07/12/21 12:05

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 101 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |
| o-Terphenyl (Surr) | 106 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 14:37 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 347 | | 5.04 | mg/Kg | | | 07/21/21 13:27 | 1 |

Client Sample ID: C-67

Lab Sample ID: 880-4078-6

Date Collected: 07/12/21 12:06

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| m,p-Xylenes | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| Total BTEX | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 18:38 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 18:38 | 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 | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 111 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |
| o-Terphenyl (Surr) | 116 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 14:58 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 751 | | 5.05 | mg/Kg | | | 07/21/21 13:43 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-68

Lab Sample ID: 880-4078-7

Date Collected: 07/12/21 12:07

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 18:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 18:59 | 1 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 18:59 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:19 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:19 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:19 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 100 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 15:19 | 1 |
| o-Terphenyl (Surr) | 101 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 15:19 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 16.2 | | 5.01 | mg/Kg | | | 07/21/21 13:48 | 1 |

Client Sample ID: C-69

Lab Sample ID: 880-4078-8

Date Collected: 07/12/21 12:08

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:20 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 121 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 19:20 | 1 |
| 1,4-Difluorobenzene (Surr) | 111 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 19:20 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-69

Lab Sample ID: 880-4078-8

Date Collected: 07/12/21 12:08

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 115 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |
| o-Terphenyl (Surr) | 119 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 15:40 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 28.3 | | 5.02 | mg/Kg | | | 07/21/21 13:54 | 1 |

Client Sample ID: C-70

Lab Sample ID: 880-4078-9

Date Collected: 07/12/21 12:09

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 19:40 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 105 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |
| o-Terphenyl (Surr) | 110 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 16:01 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 17.8 | | 5.01 | mg/Kg | | | 07/21/21 13:59 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-71

Lab Sample ID: 880-4078-10

Date Collected: 07/12/21 12:10

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 20:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 20:01 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 20:01 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:22 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:22 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 16:22 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 112 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 16:22 | 1 |
| o-Terphenyl (Surr) | 115 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 16:22 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 19.2 | | 4.99 | mg/Kg | | | 07/21/21 14:05 | 1 |

Client Sample ID: C-72

Lab Sample ID: 880-4078-11

Date Collected: 07/12/21 12:11

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:25 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 143 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 21:25 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 21:25 | 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 | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-72

Lab Sample ID: 880-4078-11

Date Collected: 07/12/21 12:11

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 104 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |
| o-Terphenyl (Surr) | 112 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 17:04 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 15.9 | | 4.97 | mg/Kg | | | 07/21/21 14:10 | 1 |

Client Sample ID: C-73

Lab Sample ID: 880-4078-12

Date Collected: 07/12/21 12:12

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |
| 1,4-Difluorobenzene (Surr) | 106 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 21:45 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 98 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |
| o-Terphenyl (Surr) | 99 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 17:25 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 12.6 | | 4.95 | mg/Kg | | | 07/21/21 14:26 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-74

Lab Sample ID: 880-4078-13

Date Collected: 07/12/21 12:13

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:06 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 105 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 22:06 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 22:06 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:46 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:46 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:46 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 17:46 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 108 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 17:46 | 1 |
| o-Terphenyl (Surr) | 110 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 17:46 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.5 | | 4.97 | mg/Kg | | | 07/21/21 14:31 | 1 |

Client Sample ID: C-75

Lab Sample ID: 880-4078-14

Date Collected: 07/12/21 12:14

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:27 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 131 | S1+ | 70 - 130 | 07/19/21 09:23 | 07/19/21 22:27 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 22:27 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-75

Lab Sample ID: 880-4078-14

Date Collected: 07/12/21 12:14

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 104 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |
| o-Terphenyl (Surr) | 109 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 18:07 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 49.9 | | 4.95 | mg/Kg | | | 07/21/21 14:48 | 1 |

Client Sample ID: C-76

Lab Sample ID: 880-4078-15

Date Collected: 07/12/21 12:15

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 122 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 22:48 | 1 |
| 1,4-Difluorobenzene (Surr) | 118 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 22:48 | 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 | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |
| o-Terphenyl (Surr) | 97 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 18:28 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 7.51 | | 4.99 | mg/Kg | | | 07/21/21 14:53 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-77

Lab Sample ID: 880-4078-16

Date Collected: 07/12/21 12:16

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 121 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 23:08 | 1 |
| 1,4-Difluorobenzene (Surr) | 104 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 23:08 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:49 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:49 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:49 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 18:49 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 103 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 18:49 | 1 |
| o-Terphenyl (Surr) | 108 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 18:49 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 8.11 | | 5.02 | mg/Kg | | | 07/21/21 14:59 | 1 |

Client Sample ID: C-78

Lab Sample ID: 880-4078-17

Date Collected: 07/12/21 12:17

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:29 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 23:29 | 1 |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 23:29 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-78

Lab Sample ID: 880-4078-17

Date Collected: 07/12/21 12:17

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 105 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |
| o-Terphenyl (Surr) | 112 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 19:09 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 32.1 | | 4.99 | mg/Kg | | | 07/21/21 15:04 | 1 |

Client Sample ID: C-79

Lab Sample ID: 880-4078-18

Date Collected: 07/12/21 12:18

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | | | 07/19/21 09:23 | 07/19/21 23:50 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 111 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |
| o-Terphenyl (Surr) | 118 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 19:30 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 13.2 | | 4.99 | mg/Kg | | | 07/21/21 15:09 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-80

Lab Sample ID: 880-4078-19

Date Collected: 07/12/21 12:19

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | 0.00229 | | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 91 | | 70 - 130 | 07/19/21 09:23 | 07/20/21 00:10 | 1 |
| 1,4-Difluorobenzene (Surr) | 62 | S1- | 70 - 130 | 07/19/21 09:23 | 07/20/21 00:10 | 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 | | 07/19/21 11:17 | 07/25/21 19:51 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:51 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:51 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 11:17 | 07/25/21 19:51 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 117 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 19:51 | 1 |
| o-Terphenyl (Surr) | 119 | | 70 - 130 | 07/19/21 11:17 | 07/25/21 19:51 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 20.9 | | 4.98 | mg/Kg | | | 07/21/21 15:15 | 1 |

Client Sample ID: C-81

Lab Sample ID: 880-4078-20

Date Collected: 07/12/21 12:20

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:23 | 07/20/21 00:31 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 121 | | 70 - 130 | 07/19/21 09:23 | 07/20/21 00:31 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 07/19/21 09:23 | 07/20/21 00:31 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-81

Lab Sample ID: 880-4078-20

Date Collected: 07/12/21 12:20

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 119 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |
| o-Terphenyl (Surr) | 125 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 20:12 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 14.2 | | 5.04 | mg/Kg | | | 07/21/21 15:20 | 1 |

Client Sample ID: C-82

Lab Sample ID: 880-4078-21

Date Collected: 07/12/21 12:21

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| Ethylbenzene | 0.00443 | F1 | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| o-Xylene | 0.00204 | F1 | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| Total BTEX | 0.00647 | | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 128 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 03:55 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |
| o-Terphenyl (Surr) | 101 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 13:10 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 27.8 | | 5.01 | mg/Kg | | | 07/20/21 22:10 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-83

Lab Sample ID: 880-4078-22

Date Collected: 07/12/21 12:22

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:16 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 04:16 | 1 |
| 1,4-Difluorobenzene (Surr) | 87 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 04:16 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 15:57 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 15:57 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 15:57 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 15:57 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 90 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 15:57 | 1 |
| o-Terphenyl (Surr) | 99 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 15:57 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 16.0 | | 5.02 | mg/Kg | | | 07/20/21 22:16 | 1 |

Client Sample ID: C-84

Lab Sample ID: 880-4078-23

Date Collected: 07/12/21 12:23

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:37 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 112 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 04:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 04:37 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-84

Lab Sample ID: 880-4078-23

Date Collected: 07/12/21 12:23

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 84 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |
| o-Terphenyl (Surr) | 91 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 16:18 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 10.4 | | 5.01 | mg/Kg | | | 07/20/21 22:21 | 1 |

Client Sample ID: C-85

Lab Sample ID: 880-4078-24

Date Collected: 07/12/21 12:24

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 124 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 04:58 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |
| o-Terphenyl (Surr) | 104 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 16:39 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1170 | | 4.99 | mg/Kg | | | 07/20/21 22:27 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-86

Lab Sample ID: 880-4078-25

Date Collected: 07/13/21 09:00

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:18 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 134 | S1+ | 70 - 130 | 07/19/21 09:25 | 07/20/21 05:18 | 1 |
| 1,4-Difluorobenzene (Surr) | 113 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 05:18 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:00 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:00 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 87 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 17:00 | 1 |
| o-Terphenyl (Surr) | 97 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 17:00 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 127 | | 4.97 | mg/Kg | | | 07/20/21 22:32 | 1 |

Client Sample ID: C-87

Lab Sample ID: 880-4078-26

Date Collected: 07/13/21 09:01

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 07/19/21 09:25 | 07/20/21 05:39 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 121 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 05:39 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 05:39 | 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 | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-87

Lab Sample ID: 880-4078-26

Date Collected: 07/13/21 09:01

Matrix: Solid

Date Received: 07/16/21 14:07

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |
| Total TPH | <49.7 | U | 49.7 | mg/Kg | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 95 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |
| o-Terphenyl (Surr) | 103 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 17:42 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 164 | | 4.95 | mg/Kg | | | 07/20/21 22:48 | 1 |

Client Sample ID: C-88

Lab Sample ID: 880-4078-27

Date Collected: 07/13/21 09:02

Matrix: Solid

Date Received: 07/16/21 14:07

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| Toluene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| m,p-Xylenes | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| Xylenes, Total | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| Total BTEX | <0.00396 | U | 0.00396 | mg/Kg | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 118 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |
| 1,4-Difluorobenzene (Surr) | 102 | | 70 - 130 | | | 07/19/21 09:25 | 07/20/21 06:00 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 95 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |
| o-Terphenyl (Surr) | 104 | | 70 - 130 | | | 07/19/21 08:46 | 07/22/21 18:03 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 163 | | 4.97 | mg/Kg | | | 07/20/21 22:53 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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) |
| 880-4078-1 | C-62 | 898 S1+ | 425 S1+ |
| 880-4078-2 | C-63 | 120 | 105 |
| 880-4078-3 | C-64 | 120 | 106 |
| 880-4078-4 | C-65 | 131 S1+ | 114 |
| 880-4078-5 | C-66 | 135 S1+ | 108 |
| 880-4078-6 | C-67 | 113 | 94 |
| 880-4078-7 | C-68 | 108 | 103 |
| 880-4078-8 | C-69 | 121 | 111 |
| 880-4078-9 | C-70 | 114 | 105 |
| 880-4078-10 | C-71 | 109 | 94 |
| 880-4078-11 | C-72 | 143 S1+ | 97 |
| 880-4078-12 | C-73 | 110 | 106 |
| 880-4078-13 | C-74 | 105 | 95 |
| 880-4078-14 | C-75 | 131 S1+ | 105 |
| 880-4078-15 | C-76 | 122 | 118 |
| 880-4078-16 | C-77 | 121 | 104 |
| 880-4078-17 | C-78 | 114 | 99 |
| 880-4078-18 | C-79 | 123 | 97 |
| 880-4078-19 | C-80 | 91 | 62 S1- |
| 880-4078-20 | C-81 | 121 | 105 |
| 880-4078-21 | C-82 | 128 | 92 |
| 880-4078-21 MS | C-82 | 102 | 93 |
| 880-4078-21 MSD | C-82 | 109 | 100 |
| 880-4078-22 | C-83 | 103 | 87 |
| 880-4078-23 | C-84 | 112 | 96 |
| 880-4078-24 | C-85 | 124 | 95 |
| 880-4078-25 | C-86 | 134 S1+ | 113 |
| 880-4078-26 | C-87 | 121 | 94 |
| 880-4078-27 | C-88 | 118 | 102 |
| LCS 880-5351/1-A | Lab Control Sample | 90 | 89 |
| LCS 880-5352/1-A | Lab Control Sample | 94 | 87 |
| LCSD 880-5351/2-A | Lab Control Sample Dup | 102 | 103 |
| LCSD 880-5352/2-A | Lab Control Sample Dup | 93 | 89 |
| MB 880-5351/5-A | Method Blank | 108 | 94 |
| MB 880-5352/5-A | Method Blank | 119 | 95 |
| Surrogate Legend | | | |
| BFB = 4-Bromofluorobenzene (Surr) | | | |
| DFBZ = 1,4-Difluorobenzene (Surr) | | | |

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|-----------------------------------|------------------|--|-------|
| Lab Sample ID | Client Sample ID | BFB1 | DFBZ1 |
| 880-4078-1 MS | C-62 | | |
| 880-4078-1 MSD | C-62 | | |
| Surrogate Legend | | | |
| BFB = 4-Bromofluorobenzene (Surr) | | | |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
 Project/Site: Salado Draw Frac Pond 13
 DFBZ = 1,4-Difluorobenzene (Surr)

Job ID: 880-4078-1
 SDG: 20-0107-14

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 | OTPH1 |
|-------------------|------------------------|----------|----------|
| | | (70-130) | (70-130) |
| 880-4078-1 | C-62 | 85 | 82 |
| 880-4078-1 MS | C-62 | 78 | 70 |
| 880-4078-1 MSD | C-62 | 95 | 85 |
| 880-4078-2 | C-63 | 119 | 127 |
| 880-4078-3 | C-64 | 94 | 100 |
| 880-4078-4 | C-65 | 113 | 117 |
| 880-4078-5 | C-66 | 101 | 106 |
| 880-4078-6 | C-67 | 111 | 116 |
| 880-4078-7 | C-68 | 100 | 101 |
| 880-4078-8 | C-69 | 115 | 119 |
| 880-4078-9 | C-70 | 105 | 110 |
| 880-4078-10 | C-71 | 112 | 115 |
| 880-4078-11 | C-72 | 104 | 112 |
| 880-4078-12 | C-73 | 98 | 99 |
| 880-4078-13 | C-74 | 108 | 110 |
| 880-4078-14 | C-75 | 104 | 109 |
| 880-4078-15 | C-76 | 96 | 97 |
| 880-4078-16 | C-77 | 103 | 108 |
| 880-4078-17 | C-78 | 105 | 112 |
| 880-4078-18 | C-79 | 111 | 118 |
| 880-4078-19 | C-80 | 117 | 119 |
| 880-4078-20 | C-81 | 119 | 125 |
| 880-4078-21 | C-82 | 94 | 101 |
| 880-4078-21 MS | C-82 | 90 | 89 |
| 880-4078-21 MSD | C-82 | 94 | 92 |
| 880-4078-22 | C-83 | 90 | 99 |
| 880-4078-23 | C-84 | 84 | 91 |
| 880-4078-24 | C-85 | 94 | 104 |
| 880-4078-25 | C-86 | 87 | 97 |
| 880-4078-26 | C-87 | 95 | 103 |
| 880-4078-27 | C-88 | 95 | 104 |
| LCS 880-5350/2-A | Lab Control Sample | 89 | 88 |
| LCS 880-5362/2-A | Lab Control Sample | 106 | 104 |
| LCSD 880-5350/3-A | Lab Control Sample Dup | 96 | 96 |
| LCSD 880-5362/3-A | Lab Control Sample Dup | 96 | 97 |
| MB 880-5350/1-A | Method Blank | 100 | 115 |
| MB 880-5362/1-A | Method Blank | 113 | 118 |

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5351/5-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5351

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:23 | 07/19/21 16:33 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 108 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 16:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 94 | | 70 - 130 | 07/19/21 09:23 | 07/19/21 16:33 | 1 |

Lab Sample ID: LCS 880-5351/1-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5351

| 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 | 0.09577 | | mg/Kg | | 96 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.09785 | | mg/Kg | | 98 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1739 | | mg/Kg | | 87 | 70 - 130 |
| o-Xylene | 0.100 | 0.08401 | | mg/Kg | | 84 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 90 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 |

Lab Sample ID: LCSD 880-5351/2-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5351

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.1173 | | mg/Kg | | 117 | 70 - 130 | 10 | 35 |
| Toluene | 0.100 | 0.1045 | | mg/Kg | | 105 | 70 - 130 | 9 | 35 |
| Ethylbenzene | 0.100 | 0.1037 | | mg/Kg | | 104 | 70 - 130 | 6 | 35 |
| m,p-Xylenes | 0.200 | 0.2177 | | mg/Kg | | 109 | 70 - 130 | 22 | 35 |
| o-Xylene | 0.100 | 0.09583 | | mg/Kg | | 96 | 70 - 130 | 13 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 102 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 |

Lab Sample ID: 880-4078-1 MS

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: C-62

Prep Type: Total/NA

Prep Batch: 5351

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00202 | U | 0.0998 | 0.1183 | | mg/Kg | | | |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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

Lab Sample ID: 880-4078-1 MS

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: C-62

Prep Type: Total/NA

Prep Batch: 5351

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Toluene | <0.00202 | U | 0.0998 | 0.09482 | | mg/Kg | | | |
| Ethylbenzene | <0.00202 | U | 0.0998 | 0.1050 | | mg/Kg | | | |
| m,p-Xylenes | 0.0336 | | 0.200 | 0.2082 | | mg/Kg | | | |
| o-Xylene | <0.00202 | U | 0.0998 | 0.09922 | | mg/Kg | | | |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|--------|
| 4-Bromofluorobenzene (Surr) | | | |
| 1,4-Difluorobenzene (Surr) | | | |

Lab Sample ID: 880-4078-1 MSD

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: C-62

Prep Type: Total/NA

Prep Batch: 5351

| 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 | 0.09701 | | mg/Kg | | | | | |
| Toluene | <0.00202 | U | 0.100 | 0.08811 | | mg/Kg | | | | | |
| Ethylbenzene | <0.00202 | U | 0.100 | 0.08223 | | mg/Kg | | | | | |
| m,p-Xylenes | 0.0336 | | 0.200 | 0.1750 | | mg/Kg | | | | | |
| o-Xylene | <0.00202 | U | 0.100 | 0.08272 | | mg/Kg | | | | | |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|-----------------------------|---------------|---------------|--------|
| 4-Bromofluorobenzene (Surr) | | | |
| 1,4-Difluorobenzene (Surr) | | | |

Lab Sample ID: MB 880-5352/5-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 07/19/21 09:25 | 07/20/21 03:34 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 119 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 03:34 | 1 |
| 1,4-Difluorobenzene (Surr) | 95 | | 70 - 130 | 07/19/21 09:25 | 07/20/21 03:34 | 1 |

Lab Sample ID: LCS 880-5352/1-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.09874 | | mg/Kg | | 99 | 70 - 130 |
| Toluene | 0.100 | 0.09020 | | mg/Kg | | 90 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-5352/1-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Ethylbenzene | 0.100 | 0.08214 | | mg/Kg | | 82 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1750 | | mg/Kg | | 88 | 70 - 130 |
| o-Xylene | 0.100 | 0.08140 | | mg/Kg | | 81 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 94 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 87 | | 70 - 130 |

Lab Sample ID: LCSD 880-5352/2-A

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| Benzene | 0.100 | 0.08867 | | mg/Kg | | 89 | 70 - 130 | 11 | 35 |
| Toluene | 0.100 | 0.08759 | | mg/Kg | | 88 | 70 - 130 | 3 | 35 |
| Ethylbenzene | 0.100 | 0.07884 | | mg/Kg | | 79 | 70 - 130 | 4 | 35 |
| m,p-Xylenes | 0.200 | 0.1696 | | mg/Kg | | 85 | 70 - 130 | 3 | 35 |
| o-Xylene | 0.100 | 0.08078 | | mg/Kg | | 81 | 70 - 130 | 1 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 89 | | 70 - 130 |

Lab Sample ID: 880-4078-21 MS

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: C-82

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00201 | U | 0.100 | 0.07863 | | mg/Kg | | 78 | 70 - 130 |
| Toluene | <0.00201 | U | 0.100 | 0.07579 | | mg/Kg | | 75 | 70 - 130 |
| Ethylbenzene | 0.00443 | F1 | 0.100 | 0.07394 | F1 | mg/Kg | | 69 | 70 - 130 |
| m,p-Xylenes | <0.00402 | U | 0.201 | 0.1479 | | mg/Kg | | 74 | 70 - 130 |
| o-Xylene | 0.00204 | F1 | 0.100 | 0.06994 | F1 | mg/Kg | | 68 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 102 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 |

Lab Sample ID: 880-4078-21 MSD

Matrix: Solid

Analysis Batch: 5373

Client Sample ID: C-82

Prep Type: Total/NA

Prep Batch: 5352

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-------|
| Benzene | <0.00201 | U | 0.100 | 0.08813 | | mg/Kg | | 88 | 70 - 130 | 11 | 35 |
| Toluene | <0.00201 | U | 0.100 | 0.08246 | | mg/Kg | | 82 | 70 - 130 | 8 | 35 |
| Ethylbenzene | 0.00443 | F1 | 0.100 | 0.07640 | | mg/Kg | | 72 | 70 - 130 | 3 | 35 |
| m,p-Xylenes | <0.00402 | U | 0.200 | 0.1593 | | mg/Kg | | 79 | 70 - 130 | 7 | 35 |
| o-Xylene | 0.00204 | F1 | 0.100 | 0.07763 | | mg/Kg | | 75 | 70 - 130 | 10 | 35 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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

| Surrogate | MSD MSD | | Limits |
|-----------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 |

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

Lab Sample ID: MB 880-5350/1-A

Matrix: Solid

Analysis Batch: 5510

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5350

| Analyte | MB MB | | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 12:07 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 12:07 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 12:07 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 08:46 | 07/22/21 12:07 | 1 |

| Surrogate | MB MB | | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| 1-Chlorooctane (Surr) | 100 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 12:07 | 1 |
| o-Terphenyl (Surr) | 115 | | 70 - 130 | 07/19/21 08:46 | 07/22/21 12:07 | 1 |

Lab Sample ID: LCS 880-5350/2-A

Matrix: Solid

Analysis Batch: 5510

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5350

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 762.1 | | mg/Kg | | 76 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 881.8 | | mg/Kg | | 88 | 70 - 130 |

| Surrogate | LCS LCS | | Limits |
|-----------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 1-Chlorooctane (Surr) | 89 | | 70 - 130 |
| o-Terphenyl (Surr) | 88 | | 70 - 130 |

Lab Sample ID: LCSD 880-5350/3-A

Matrix: Solid

Analysis Batch: 5510

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5350

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-------|
| | | | | | | | | | |
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 808.2 | | mg/Kg | | 81 | 70 - 130 | 6 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 949.4 | | mg/Kg | | 95 | 70 - 130 | 7 | 20 |

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

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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

Lab Sample ID: 880-4078-21 MS

Matrix: Solid

Analysis Batch: 5510

Client Sample ID: C-82

Prep Type: Total/NA

Prep Batch: 5350

| 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 | 996 | 714.9 | | mg/Kg | | 70 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 996 | 957.9 | | mg/Kg | | 96 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 1-Chlorooctane (Surr) | 90 | | 70 - 130 | | | | | | |
| o-Terphenyl (Surr) | 89 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-4078-21 MSD

Matrix: Solid

Analysis Batch: 5510

Client Sample ID: C-82

Prep Type: Total/NA

Prep Batch: 5350

| 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 | 996 | 810.7 | | mg/Kg | | 80 | 70 - 130 | 13 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 996 | 997.6 | | mg/Kg | | 100 | 70 - 130 | 4 | 20 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | | | | | | | | |
| o-Terphenyl (Surr) | 92 | | 70 - 130 | | | | | | | | |

Lab Sample ID: MB 880-5362/1-A

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5362

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 113 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |
| o-Terphenyl (Surr) | 118 | | 70 - 130 | | | 07/19/21 11:17 | 07/25/21 11:26 | 1 |

Lab Sample ID: LCS 880-5362/2-A

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5362

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 888.0 | | mg/Kg | | 89 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 987.9 | | mg/Kg | | 99 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-5362/2-A

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5362

| | LCS | LCS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 106 | | 70 - 130 |
| o-Terphenyl (Surr) | 104 | | 70 - 130 |

Lab Sample ID: LCSD 880-5362/3-A

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5362

| | | | Spike | LCSD | LCSD | | | | %Rec. | | | |
|--------------------------------------|--|--|-------|--------|-----------|-------|---|------|----------|-----|-------|--|
| Analyte | | | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit | |
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 842.4 | | mg/Kg | | 84 | 70 - 130 | 5 | 20 | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 908.2 | | mg/Kg | | 91 | 70 - 130 | 8 | 20 | |

| | LCSD | LCSD | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 96 | | 70 - 130 |
| o-Terphenyl (Surr) | 97 | | 70 - 130 |

Lab Sample ID: 880-4078-1 MS

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: C-62

Prep Type: Total/NA

Prep Batch: 5362

| | Sample | Sample | Spike | MS | MS | | | | %Rec. | | | |
|--------------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 996 | 765.9 | | mg/Kg | | 77 | 70 - 130 | | | |
| Diesel Range Organics (Over C10-C28) | <50.0 | U F2 | 996 | 752.0 | | mg/Kg | | 75 | 70 - 130 | | | |

| | MS | MS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 78 | | 70 - 130 |
| o-Terphenyl (Surr) | 70 | | 70 - 130 |

Lab Sample ID: 880-4078-1 MSD

Matrix: Solid

Analysis Batch: 5631

Client Sample ID: C-62

Prep Type: Total/NA

Prep Batch: 5362

| | Sample | Sample | Spike | MSD | MSD | | | | %Rec. | | | |
|--------------------------------------|--------|-----------|-------|--------|-----------|-------|---|------|----------|-----|-------|--|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits | RPD | Limit | |
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 996 | 826.3 | | mg/Kg | | 83 | 70 - 130 | 8 | 20 | |
| Diesel Range Organics (Over C10-C28) | <50.0 | U F2 | 996 | 930.6 | F2 | mg/Kg | | 93 | 70 - 130 | 21 | 20 | |

| | MSD | MSD | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 95 | | 70 - 130 |
| o-Terphenyl (Surr) | 85 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5380/1-A

Matrix: Solid

Analysis Batch: 5437

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB
Result | MB
Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------------|-----------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 07/20/21 20:39 | 1 |

Lab Sample ID: LCS 880-5380/2-A

Matrix: Solid

Analysis Batch: 5437

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike
Added | LCS
Result | LCS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|----------------|---------------|------------------|-------|---|------|-----------------|
| Chloride | 250 | 245.0 | | mg/Kg | | 98 | 90 - 110 |

Lab Sample ID: LCSD 880-5380/3-A

Matrix: Solid

Analysis Batch: 5437

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike
Added | LCSD
Result | LCSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|----------------|----------------|-------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 250 | 245.4 | | mg/Kg | | 98 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-4078-25 MS

Matrix: Solid

Analysis Batch: 5437

Client Sample ID: C-86

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MS
Result | MS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|-----------------|
| Chloride | 127 | | 249 | 367.8 | | mg/Kg | | 97 | 90 - 110 |

Lab Sample ID: 880-4078-25 MSD

Matrix: Solid

Analysis Batch: 5437

Client Sample ID: C-86

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 127 | | 249 | 367.8 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

Lab Sample ID: MB 880-5379/1-A

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte | MB
Result | MB
Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------------|-----------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00 | U | 5.00 | mg/Kg | | | 07/21/21 12:38 | 1 |

Lab Sample ID: LCS 880-5379/2-A

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike
Added | LCS
Result | LCS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|----------------|---------------|------------------|-------|---|------|-----------------|
| Chloride | 250 | 243.0 | | mg/Kg | | 97 | 90 - 110 |

Lab Sample ID: LCSD 880-5379/3-A

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike
Added | LCSD
Result | LCSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|----------------|----------------|-------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 250 | 242.8 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-4078-1 MS

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: C-62

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 213 | | 253 | 457.7 | | mg/Kg | | 97 | 90 - 110 |

Lab Sample ID: 880-4078-1 MSD

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: C-62

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 213 | | 253 | 458.5 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-4078-11 MS

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: C-72

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 15.9 | | 249 | 274.9 | | mg/Kg | | 104 | 90 - 110 |

Lab Sample ID: 880-4078-11 MSD

Matrix: Solid

Analysis Batch: 5483

Client Sample ID: C-72

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Chloride | 15.9 | | 249 | 274.0 | | mg/Kg | | 104 | 90 - 110 | 0 | 20 |

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

GC VOA

Prep Batch: 5351

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-4078-1 | C-62 | Total/NA | Solid | 5035 | |
| 880-4078-2 | C-63 | Total/NA | Solid | 5035 | |
| 880-4078-3 | C-64 | Total/NA | Solid | 5035 | |
| 880-4078-4 | C-65 | Total/NA | Solid | 5035 | |
| 880-4078-5 | C-66 | Total/NA | Solid | 5035 | |
| 880-4078-6 | C-67 | Total/NA | Solid | 5035 | |
| 880-4078-7 | C-68 | Total/NA | Solid | 5035 | |
| 880-4078-8 | C-69 | Total/NA | Solid | 5035 | |
| 880-4078-9 | C-70 | Total/NA | Solid | 5035 | |
| 880-4078-10 | C-71 | Total/NA | Solid | 5035 | |
| 880-4078-11 | C-72 | Total/NA | Solid | 5035 | |
| 880-4078-12 | C-73 | Total/NA | Solid | 5035 | |
| 880-4078-13 | C-74 | Total/NA | Solid | 5035 | |
| 880-4078-14 | C-75 | Total/NA | Solid | 5035 | |
| 880-4078-15 | C-76 | Total/NA | Solid | 5035 | |
| 880-4078-16 | C-77 | Total/NA | Solid | 5035 | |
| 880-4078-17 | C-78 | Total/NA | Solid | 5035 | |
| 880-4078-18 | C-79 | Total/NA | Solid | 5035 | |
| 880-4078-19 | C-80 | Total/NA | Solid | 5035 | |
| 880-4078-20 | C-81 | Total/NA | Solid | 5035 | |
| MB 880-5351/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-5351/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-5351/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-4078-1 MS | C-62 | Total/NA | Solid | 5035 | |
| 880-4078-1 MSD | C-62 | Total/NA | Solid | 5035 | |

Prep Batch: 5352

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-4078-21 | C-82 | Total/NA | Solid | 5035 | |
| 880-4078-22 | C-83 | Total/NA | Solid | 5035 | |
| 880-4078-23 | C-84 | Total/NA | Solid | 5035 | |
| 880-4078-24 | C-85 | Total/NA | Solid | 5035 | |
| 880-4078-25 | C-86 | Total/NA | Solid | 5035 | |
| 880-4078-26 | C-87 | Total/NA | Solid | 5035 | |
| 880-4078-27 | C-88 | Total/NA | Solid | 5035 | |
| MB 880-5352/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-5352/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-5352/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-4078-21 MS | C-82 | Total/NA | Solid | 5035 | |
| 880-4078-21 MSD | C-82 | Total/NA | Solid | 5035 | |

Analysis Batch: 5373

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 880-4078-1 | C-62 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-2 | C-63 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-3 | C-64 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-4 | C-65 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-5 | C-66 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-6 | C-67 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-7 | C-68 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-8 | C-69 | Total/NA | Solid | 8021B | 5351 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

GC VOA (Continued)

Analysis Batch: 5373 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-4078-9 | C-70 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-10 | C-71 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-11 | C-72 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-12 | C-73 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-13 | C-74 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-14 | C-75 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-15 | C-76 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-16 | C-77 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-17 | C-78 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-18 | C-79 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-19 | C-80 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-20 | C-81 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-21 | C-82 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-22 | C-83 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-23 | C-84 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-24 | C-85 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-25 | C-86 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-26 | C-87 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-27 | C-88 | Total/NA | Solid | 8021B | 5352 |
| MB 880-5351/5-A | Method Blank | Total/NA | Solid | 8021B | 5351 |
| MB 880-5352/5-A | Method Blank | Total/NA | Solid | 8021B | 5352 |
| LCS 880-5351/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 5351 |
| LCS 880-5352/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 5352 |
| LCSD 880-5351/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 5351 |
| LCSD 880-5352/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 5352 |
| 880-4078-1 MS | C-62 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-1 MSD | C-62 | Total/NA | Solid | 8021B | 5351 |
| 880-4078-21 MS | C-82 | Total/NA | Solid | 8021B | 5352 |
| 880-4078-21 MSD | C-82 | Total/NA | Solid | 8021B | 5352 |

GC Semi VOA

Prep Batch: 5350

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-4078-21 | C-82 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-22 | C-83 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-23 | C-84 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-24 | C-85 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-25 | C-86 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-26 | C-87 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-27 | C-88 | Total/NA | Solid | 8015NM Prep | |
| MB 880-5350/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-5350/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-5350/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-4078-21 MS | C-82 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-21 MSD | C-82 | Total/NA | Solid | 8015NM Prep | |

Prep Batch: 5362

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|-------------|------------|
| 880-4078-1 | C-62 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-2 | C-63 | Total/NA | Solid | 8015NM Prep | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

GC Semi VOA (Continued)

Prep Batch: 5362 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|-------------|------------|
| 880-4078-3 | C-64 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-4 | C-65 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-5 | C-66 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-6 | C-67 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-7 | C-68 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-8 | C-69 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-9 | C-70 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-10 | C-71 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-11 | C-72 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-12 | C-73 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-13 | C-74 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-14 | C-75 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-15 | C-76 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-16 | C-77 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-17 | C-78 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-18 | C-79 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-19 | C-80 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-20 | C-81 | Total/NA | Solid | 8015NM Prep | |
| MB 880-5362/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-5362/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-5362/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-4078-1 MS | C-62 | Total/NA | Solid | 8015NM Prep | |
| 880-4078-1 MSD | C-62 | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 5510

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-4078-21 | C-82 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-22 | C-83 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-23 | C-84 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-24 | C-85 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-25 | C-86 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-26 | C-87 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-27 | C-88 | Total/NA | Solid | 8015B NM | 5350 |
| MB 880-5350/1-A | Method Blank | Total/NA | Solid | 8015B NM | 5350 |
| LCS 880-5350/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 5350 |
| LCSD 880-5350/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-21 MS | C-82 | Total/NA | Solid | 8015B NM | 5350 |
| 880-4078-21 MSD | C-82 | Total/NA | Solid | 8015B NM | 5350 |

Analysis Batch: 5631

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 880-4078-1 | C-62 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-2 | C-63 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-3 | C-64 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-4 | C-65 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-5 | C-66 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-6 | C-67 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-7 | C-68 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-8 | C-69 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-9 | C-70 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-10 | C-71 | Total/NA | Solid | 8015B NM | 5362 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

GC Semi VOA (Continued)

Analysis Batch: 5631 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-4078-11 | C-72 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-12 | C-73 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-13 | C-74 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-14 | C-75 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-15 | C-76 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-16 | C-77 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-17 | C-78 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-18 | C-79 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-19 | C-80 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-20 | C-81 | Total/NA | Solid | 8015B NM | 5362 |
| MB 880-5362/1-A | Method Blank | Total/NA | Solid | 8015B NM | 5362 |
| LCS 880-5362/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 5362 |
| LCSD 880-5362/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-1 MS | C-62 | Total/NA | Solid | 8015B NM | 5362 |
| 880-4078-1 MSD | C-62 | Total/NA | Solid | 8015B NM | 5362 |

HPLC/IC

Leach Batch: 5379

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-4078-1 | C-62 | Soluble | Solid | DI Leach | |
| 880-4078-2 | C-63 | Soluble | Solid | DI Leach | |
| 880-4078-3 | C-64 | Soluble | Solid | DI Leach | |
| 880-4078-4 | C-65 | Soluble | Solid | DI Leach | |
| 880-4078-5 | C-66 | Soluble | Solid | DI Leach | |
| 880-4078-6 | C-67 | Soluble | Solid | DI Leach | |
| 880-4078-7 | C-68 | Soluble | Solid | DI Leach | |
| 880-4078-8 | C-69 | Soluble | Solid | DI Leach | |
| 880-4078-9 | C-70 | Soluble | Solid | DI Leach | |
| 880-4078-10 | C-71 | Soluble | Solid | DI Leach | |
| 880-4078-11 | C-72 | Soluble | Solid | DI Leach | |
| 880-4078-12 | C-73 | Soluble | Solid | DI Leach | |
| 880-4078-13 | C-74 | Soluble | Solid | DI Leach | |
| 880-4078-14 | C-75 | Soluble | Solid | DI Leach | |
| 880-4078-15 | C-76 | Soluble | Solid | DI Leach | |
| 880-4078-16 | C-77 | Soluble | Solid | DI Leach | |
| 880-4078-17 | C-78 | Soluble | Solid | DI Leach | |
| 880-4078-18 | C-79 | Soluble | Solid | DI Leach | |
| 880-4078-19 | C-80 | Soluble | Solid | DI Leach | |
| 880-4078-20 | C-81 | Soluble | Solid | DI Leach | |
| MB 880-5379/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-5379/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-5379/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-4078-1 MS | C-62 | Soluble | Solid | DI Leach | |
| 880-4078-1 MSD | C-62 | Soluble | Solid | DI Leach | |
| 880-4078-11 MS | C-72 | Soluble | Solid | DI Leach | |
| 880-4078-11 MSD | C-72 | Soluble | Solid | DI Leach | |

Leach Batch: 5380

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 880-4078-21 | C-82 | Soluble | Solid | DI Leach | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

HPLC/IC (Continued)

Leach Batch: 5380 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-4078-22 | C-83 | Soluble | Solid | DI Leach | |
| 880-4078-23 | C-84 | Soluble | Solid | DI Leach | |
| 880-4078-24 | C-85 | Soluble | Solid | DI Leach | |
| 880-4078-25 | C-86 | Soluble | Solid | DI Leach | |
| 880-4078-26 | C-87 | Soluble | Solid | DI Leach | |
| 880-4078-27 | C-88 | Soluble | Solid | DI Leach | |
| MB 880-5380/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-5380/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-5380/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-4078-25 MS | C-86 | Soluble | Solid | DI Leach | |
| 880-4078-25 MSD | C-86 | Soluble | Solid | DI Leach | |

Analysis Batch: 5437

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-4078-21 | C-82 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-22 | C-83 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-23 | C-84 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-24 | C-85 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-25 | C-86 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-26 | C-87 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-27 | C-88 | Soluble | Solid | 300.0 | 5380 |
| MB 880-5380/1-A | Method Blank | Soluble | Solid | 300.0 | 5380 |
| LCS 880-5380/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 5380 |
| LCSD 880-5380/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 5380 |
| 880-4078-25 MS | C-86 | Soluble | Solid | 300.0 | 5380 |
| 880-4078-25 MSD | C-86 | Soluble | Solid | 300.0 | 5380 |

Analysis Batch: 5483

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 880-4078-1 | C-62 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-2 | C-63 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-3 | C-64 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-4 | C-65 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-5 | C-66 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-6 | C-67 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-7 | C-68 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-8 | C-69 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-9 | C-70 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-10 | C-71 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-11 | C-72 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-12 | C-73 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-13 | C-74 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-14 | C-75 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-15 | C-76 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-16 | C-77 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-17 | C-78 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-18 | C-79 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-19 | C-80 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-20 | C-81 | Soluble | Solid | 300.0 | 5379 |
| MB 880-5379/1-A | Method Blank | Soluble | Solid | 300.0 | 5379 |
| LCS 880-5379/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 5379 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

HPLC/IC (Continued)

Analysis Batch: 5483 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| LCSD 880-5379/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 5379 |
| 880-4078-1 MS | C-62 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-1 MSD | C-62 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-11 MS | C-72 | Soluble | Solid | 300.0 | 5379 |
| 880-4078-11 MSD | C-72 | Soluble | Solid | 300.0 | 5379 |

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-62

Lab Sample ID: 880-4078-1

Date Collected: 07/12/21 12:00

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 16:55 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 12:29 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 12:55 | CH | XEN MID |

Client Sample ID: C-63

Lab Sample ID: 880-4078-2

Date Collected: 07/12/21 12:02

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 17:16 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 13:34 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 10 | | | 5483 | 07/21/21 13:11 | CH | XEN MID |

Client Sample ID: C-64

Lab Sample ID: 880-4078-3

Date Collected: 07/12/21 12:03

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 17:37 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 13:55 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:16 | CH | XEN MID |

Client Sample ID: C-65

Lab Sample ID: 880-4078-4

Date Collected: 07/12/21 12:04

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 17:57 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 14:16 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 50 | | | 5483 | 07/21/21 13:21 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-66

Lab Sample ID: 880-4078-5

Date Collected: 07/12/21 12:05

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 18:18 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 14:37 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:27 | CH | XEN MID |

Client Sample ID: C-67

Lab Sample ID: 880-4078-6

Date Collected: 07/12/21 12:06

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 18:38 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 14:58 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:43 | CH | XEN MID |

Client Sample ID: C-68

Lab Sample ID: 880-4078-7

Date Collected: 07/12/21 12:07

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 18:59 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 15:19 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:48 | CH | XEN MID |

Client Sample ID: C-69

Lab Sample ID: 880-4078-8

Date Collected: 07/12/21 12:08

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 19:20 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 15:40 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:54 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-70

Lab Sample ID: 880-4078-9

Date Collected: 07/12/21 12:09

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 19:40 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 16:01 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 13:59 | CH | XEN MID |

Client Sample ID: C-71

Lab Sample ID: 880-4078-10

Date Collected: 07/12/21 12:10

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 20:01 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 16:22 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:05 | CH | XEN MID |

Client Sample ID: C-72

Lab Sample ID: 880-4078-11

Date Collected: 07/12/21 12:11

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 21:25 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 17:04 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:10 | CH | XEN MID |

Client Sample ID: C-73

Lab Sample ID: 880-4078-12

Date Collected: 07/12/21 12:12

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 21:45 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 17:25 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:26 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-74

Lab Sample ID: 880-4078-13

Date Collected: 07/12/21 12:13

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 22:06 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 17:46 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:31 | CH | XEN MID |

Client Sample ID: C-75

Lab Sample ID: 880-4078-14

Date Collected: 07/12/21 12:14

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 22:27 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 18:07 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:48 | CH | XEN MID |

Client Sample ID: C-76

Lab Sample ID: 880-4078-15

Date Collected: 07/12/21 12:15

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 22:48 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 18:28 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:53 | CH | XEN MID |

Client Sample ID: C-77

Lab Sample ID: 880-4078-16

Date Collected: 07/12/21 12:16

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 23:08 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 18:49 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 14:59 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-78

Lab Sample ID: 880-4078-17

Date Collected: 07/12/21 12:17

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 23:29 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 19:09 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 15:04 | CH | XEN MID |

Client Sample ID: C-79

Lab Sample ID: 880-4078-18

Date Collected: 07/12/21 12:18

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/19/21 23:50 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 19:30 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 15:09 | CH | XEN MID |

Client Sample ID: C-80

Lab Sample ID: 880-4078-19

Date Collected: 07/12/21 12:19

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 00:10 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 19:51 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 15:15 | CH | XEN MID |

Client Sample ID: C-81

Lab Sample ID: 880-4078-20

Date Collected: 07/12/21 12:20

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5351 | 07/19/21 09:23 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 00:31 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.00 g | 10 mL | 5362 | 07/19/21 11:17 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5631 | 07/25/21 20:12 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 5379 | 07/19/21 13:11 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5483 | 07/21/21 15:20 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-82

Lab Sample ID: 880-4078-21

Date Collected: 07/12/21 12:21

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 03:55 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 13:10 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:10 | CH | XEN MID |

Client Sample ID: C-83

Lab Sample ID: 880-4078-22

Date Collected: 07/12/21 12:22

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 04:16 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 15:57 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:16 | CH | XEN MID |

Client Sample ID: C-84

Lab Sample ID: 880-4078-23

Date Collected: 07/12/21 12:23

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 04:37 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 16:18 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:21 | CH | XEN MID |

Client Sample ID: C-85

Lab Sample ID: 880-4078-24

Date Collected: 07/12/21 12:24

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 04:58 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 16:39 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:27 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Client Sample ID: C-86

Lab Sample ID: 880-4078-25

Date Collected: 07/13/21 09:00

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 05:18 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 17:00 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:32 | CH | XEN MID |

Client Sample ID: C-87

Lab Sample ID: 880-4078-26

Date Collected: 07/13/21 09:01

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 05:39 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.06 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 17:42 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:48 | CH | XEN MID |

Client Sample ID: C-88

Lab Sample ID: 880-4078-27

Date Collected: 07/13/21 09:02

Matrix: Solid

Date Received: 07/16/21 14:07

| 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 | 5352 | 07/19/21 09:25 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 5373 | 07/20/21 06:00 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 5350 | 07/19/21 08:46 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 5510 | 07/22/21 18:03 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 5380 | 07/19/21 13:14 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 5437 | 07/20/21 22:53 | CH | XEN MID |

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw Frac Pond 13

Job ID: 880-4078-1
SDG: 20-0107-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 880-4078-1 | C-62 | Solid | 07/12/21 12:00 | 07/16/21 14:07 |
| 880-4078-2 | C-63 | Solid | 07/12/21 12:02 | 07/16/21 14:07 |
| 880-4078-3 | C-64 | Solid | 07/12/21 12:03 | 07/16/21 14:07 |
| 880-4078-4 | C-65 | Solid | 07/12/21 12:04 | 07/16/21 14:07 |
| 880-4078-5 | C-66 | Solid | 07/12/21 12:05 | 07/16/21 14:07 |
| 880-4078-6 | C-67 | Solid | 07/12/21 12:06 | 07/16/21 14:07 |
| 880-4078-7 | C-68 | Solid | 07/12/21 12:07 | 07/16/21 14:07 |
| 880-4078-8 | C-69 | Solid | 07/12/21 12:08 | 07/16/21 14:07 |
| 880-4078-9 | C-70 | Solid | 07/12/21 12:09 | 07/16/21 14:07 |
| 880-4078-10 | C-71 | Solid | 07/12/21 12:10 | 07/16/21 14:07 |
| 880-4078-11 | C-72 | Solid | 07/12/21 12:11 | 07/16/21 14:07 |
| 880-4078-12 | C-73 | Solid | 07/12/21 12:12 | 07/16/21 14:07 |
| 880-4078-13 | C-74 | Solid | 07/12/21 12:13 | 07/16/21 14:07 |
| 880-4078-14 | C-75 | Solid | 07/12/21 12:14 | 07/16/21 14:07 |
| 880-4078-15 | C-76 | Solid | 07/12/21 12:15 | 07/16/21 14:07 |
| 880-4078-16 | C-77 | Solid | 07/12/21 12:16 | 07/16/21 14:07 |
| 880-4078-17 | C-78 | Solid | 07/12/21 12:17 | 07/16/21 14:07 |
| 880-4078-18 | C-79 | Solid | 07/12/21 12:18 | 07/16/21 14:07 |
| 880-4078-19 | C-80 | Solid | 07/12/21 12:19 | 07/16/21 14:07 |
| 880-4078-20 | C-81 | Solid | 07/12/21 12:20 | 07/16/21 14:07 |
| 880-4078-21 | C-82 | Solid | 07/12/21 12:21 | 07/16/21 14:07 |
| 880-4078-22 | C-83 | Solid | 07/12/21 12:22 | 07/16/21 14:07 |
| 880-4078-23 | C-84 | Solid | 07/12/21 12:23 | 07/16/21 14:07 |
| 880-4078-24 | C-85 | Solid | 07/12/21 12:24 | 07/16/21 14:07 |
| 880-4078-25 | C-86 | Solid | 07/13/21 09:00 | 07/16/21 14:07 |
| 880-4078-26 | C-87 | Solid | 07/13/21 09:01 | 07/16/21 14:07 |
| 880-4078-27 | C-88 | Solid | 07/13/21 09:02 | 07/16/21 14:07 |

Page 1 of 1

1234567891011121314

Nº 1517

CHAIN-OF-CUSTODY

Arson & Associates, Inc.
Environmental Consultants

880-4078 Chain of Custody

432-687-0901

Data Reported to

DATE: 7/13/2021 PAGE 1 OF 2
PO#: 880-4078 LAB WORK ORDER#: 880-4078
PROJECT LOCATION OR NAME: Salado Dam from Pond 13
LAI PROJECT #: 20-0107-14 COLLECTOR: BSG

| | | | | | | |
|---|----------------------------|----------------------------------|--|--|---|---|
| TRRP report?
☐ Yes ☒ No | S=SOIL
W=WATER
A=AIR | P=PAINT
SL=SLUDGE
OT=OTHER | PRESERVATION
HCl
HNO ₃
H ₂ SO ₄ ☐ NaOH ☐
ICE
UNPRESERVED | | ANALYSES
BTX/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 ☐
TBLP - METALS (RCRA) ☐ TCLP VOC ☐
TCLP - PEST ☐ HERB ☐ Semi-VOC ☐
TOTAL METALS (RCRA) ☐ OTHER LIST ☐
LEAD - TOTAL ☐ p W 200 8 ☐ TCLP ☐
RCL ☐ TOX ☐ FLASHPOINT ☐
TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐
pH ☐ HEXAVALENT CHROMIUM ☐
EXPLOSIVES ☐ PETCHLORATE ☐
CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐ | |
| TIME ZONE
Time zone/State
MST/ NM | Lab # | Date | Time | Matrix | # of Containers | |
| C-62 | | 7/12/21 | 1800 | S | 1 | X |
| C-63 | | | 1202 | | | X |
| C-64 | | | 1203 | | | X |
| C-65 | | | 1204 | | | X |
| C-66 | | | 1205 | | | |
| C-67 | | | 1206 | | | |
| C-68 | | | 1207 | | | |
| C-69 | | | 1208 | | | |
| C-70 | | | 1209 | | | |
| C-71 | | | 1210 | | | |
| C-72 | | | 1211 | | | |
| C-73 | | | 1212 | | | |
| C-74 | | | 1213 | | | |
| C-75 | | | 1214 | | | |
| C-76 | | | 1215 | | | |
| TOTAL | IS | | | | | |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐ | LABORATORY USE ONLY:
RECEIVING TEMP <u>0.5/1.0</u> THERM# <u>1R8</u>
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL # <u> </u>
☒ HAND DELIVERED | |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | | | |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | | | |
| LABORATORY | YCANCO | | | | | |



Environmental Consultants

507 N. Warrenfield, Ste. 200

Midland, TX 79701

432-687-0901

CHAIN-OF-CUSTODY

No 1518

Data Reported to:

DATE: 7/13/2021 PAGE 2 OF 2
 PO#: _____ LAB WORK ORDER#: _____
 PROJECT LOCATION OR NAME: Salade Drive E99C Box 18
 LAI PROJECT #: 20-0167-14 COLLECTOR: ASG

TRRP report?
☐ Yes ☒ No

S=SOIL
 W=WATER
 A=AIR

P=PAINT
 SL=SLUDGE
 OT=OTHER

TIME ZONE
 Time zone/State

Field
 Sample ID

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ ☐ 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 ☐

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TBLP - METALS (RCRA) ☐

TCLP - METALS (RCRA) ☐

TOTAL METALS (RCRA) ☐

LEAD - TOTAL ☐

TOX ☐

TDS ☐

pH ☐

EXPLOSIVES ☐

CHLORIDE ☐

ANIONS ☐

ALKALINITY ☐

FIELD NOTES

8081 PESTICIDES ☐

8082 PESTICIDES ☐

TBLP - METALS (RCRA) ☐

TCLP - METALS (RCRA) ☐

TOTAL METALS (RCRA) ☐

LEAD - TOTAL ☐

TOX ☐

TDS ☐

pH ☐

EXPLOSIVES ☐

CHLORIDE ☐

ANIONS ☐

ALKALINITY ☐

TOTAL 12

RELINQUISHED BY (Signature)

DATE/TIME

RECEIVED BY (Signature)

TURN AROUND TIME

LABORATORY USE ONLY:

RECEIVING TEMP 0.5/1.0 THERM# 128

RELINQUISHED BY (Signature)

DATE/TIME

RECEIVED BY (Signature)

TURN AROUND TIME

LABORATORY USE ONLY:

RECEIVING TEMP 0.5/1.0 THERM# 128

RELINQUISHED BY (Signature)

DATE/TIME

RECEIVED BY (Signature)

TURN AROUND TIME

LABORATORY USE ONLY:

RECEIVING TEMP 0.5/1.0 THERM# 128

LABORATORY

X ENCO

DATE/TIME

RECEIVED BY (Signature)

TURN AROUND TIME

LABORATORY USE ONLY:

RECEIVING TEMP 0.5/1.0 THERM# 128

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-4078-1

SDG Number: 20-0107-14

Login Number: 4078

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-5629-1

Laboratory Sample Delivery Group: 20-0107-14

Client Project/Site: Salado Draw 13 E Frac Pond

For:

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
9/2/2021 3:14:30 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Laboratory Job ID: 880-5629-1
SDG: 20-0107-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 9 |
| QC Sample Results | 10 |
| QC Association Summary | 14 |
| Lab Chronicle | 16 |
| Certification Summary | 18 |
| Method Summary | 19 |
| Sample Summary | 20 |
| Chain of Custody | 21 |
| Receipt Checklists | 22 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Job ID: 880-5629-1

Laboratory: Eurofins Xenco, Midland

Narrative

**Job Narrative
880-5629-1**

Receipt

The samples were received on 8/31/2021 2:24 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 4.5°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7363 and analytical batch 880-7359 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

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: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-90 SW

Lab Sample ID: 880-5629-1

Date Collected: 08/27/21 11:04

Matrix: Solid

Date Received: 08/31/21 14:24

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| Toluene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| Ethylbenzene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| m,p-Xylenes | <0.00399 | U F1 | 0.00399 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| o-Xylene | <0.00200 | U F1 | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| Xylenes, Total | <0.00399 | U F1 | 0.00399 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| Total BTEX | <0.00399 | U F1 | 0.00399 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:17 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 107 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 13:17 | 1 |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 13:17 | 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 | | 09/01/21 08:19 | 09/01/21 18:45 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 18:45 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 18:45 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 18:45 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 70 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 18:45 | 1 |
| o-Terphenyl (Surr) | 72 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 18:45 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 176 | | 4.99 | mg/Kg | | | 09/01/21 15:58 | 1 |

Client Sample ID: C-89 SW

Lab Sample ID: 880-5629-2

Date Collected: 08/26/21 13:47

Matrix: Solid

Date Received: 08/31/21 14:24

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:38 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 97 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 13:38 | 1 |
| 1,4-Difluorobenzene (Surr) | 106 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 13:38 | 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 | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-89 SW

Lab Sample ID: 880-5629-2

Date Collected: 08/26/21 13:47

Matrix: Solid

Date Received: 08/31/21 14:24

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 73 | | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |
| o-Terphenyl (Surr) | 75 | | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 19:06 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 40.7 | | 4.95 | mg/Kg | | | 09/01/21 16:04 | 1 |

Client Sample ID: C-91 BTM

Lab Sample ID: 880-5629-3

Date Collected: 08/30/21 13:44

Matrix: Solid

Date Received: 08/31/21 14:24

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 98 | | 70 - 130 | | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | | | 09/01/21 09:00 | 09/01/21 13:58 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 79 | | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |
| o-Terphenyl (Surr) | 83 | | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 19:28 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 132 | | 4.96 | mg/Kg | | | 09/01/21 16:09 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-92 BTM

Lab Sample ID: 880-5629-4

Date Collected: 08/30/21 13:52

Matrix: Solid

Date Received: 08/31/21 14:24

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:19 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 14:19 | 1 |
| 1,4-Difluorobenzene (Surr) | 109 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 14:19 | 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 | | 09/01/21 08:19 | 09/01/21 19:48 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:48 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:48 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/01/21 08:19 | 09/01/21 19:48 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 75 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 19:48 | 1 |
| o-Terphenyl (Surr) | 77 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 19:48 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 64.4 | | 5.03 | mg/Kg | | | 09/01/21 16:15 | 1 |

Client Sample ID: C-93 BTM

Lab Sample ID: 880-5629-5

Date Collected: 08/30/21 14:09

Matrix: Solid

Date Received: 08/31/21 14:24

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 09/01/21 09:00 | 09/01/21 14:40 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 100 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 14:40 | 1 |
| 1,4-Difluorobenzene (Surr) | 88 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 14:40 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 20:09 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-93 BTM

Lab Sample ID: 880-5629-5

Date Collected: 08/30/21 14:09

Matrix: Solid

Date Received: 08/31/21 14:24

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 20:09 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 20:09 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 20:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 76 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 20:09 | 1 |
| o-Terphenyl (Surr) | 79 | | 70 - 130 | 09/01/21 08:19 | 09/01/21 20:09 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 133 | | 4.98 | mg/Kg | | | 09/01/21 16:20 | 1 |

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

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) |
| 880-5629-1 | C-90 SW | 107 | 96 |
| 880-5629-1 MS | C-90 SW | 96 | 96 |
| 880-5629-1 MSD | C-90 SW | 114 | 68 S1- |
| 880-5629-2 | C-89 SW | 97 | 106 |
| 880-5629-3 | C-91 BTM | 98 | 93 |
| 880-5629-4 | C-92 BTM | 104 | 109 |
| 880-5629-5 | C-93 BTM | 100 | 88 |
| LCS 880-7262/1-A | Lab Control Sample | 104 | 77 |
| LCSD 880-7262/2-A | Lab Control Sample Dup | 109 | 86 |
| MB 880-7262/5-A | Method Blank | 105 | 100 |
| 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) |
| 880-5629-1 | C-90 SW | 70 | 72 |
| 880-5629-2 | C-89 SW | 73 | 75 |
| 880-5629-3 | C-91 BTM | 79 | 83 |
| 880-5629-4 | C-92 BTM | 75 | 77 |
| 880-5629-5 | C-93 BTM | 76 | 79 |
| 890-1190-A-1-F MS | Matrix Spike | 89 | 69 S1- |
| 890-1190-A-1-G MSD | Matrix Spike Duplicate | 91 | 72 |
| LCS 880-7363/2-A | Lab Control Sample | 126 | 141 S1+ |
| LCSD 880-7363/3-A | Lab Control Sample Dup | 87 | 96 |
| MB 880-7363/1-A | Method Blank | 67 S1- | 67 S1- |
| Surrogate Legend | | | |
| 1CO = 1-Chlorooctane (Surr) | | | |
| OTPH = o-Terphenyl (Surr) | | | |

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7262/5-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 09/01/21 09:00 | 09/01/21 12:55 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 105 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 12:55 | 1 |
| 1,4-Difluorobenzene (Surr) | 100 | | 70 - 130 | 09/01/21 09:00 | 09/01/21 12:55 | 1 |

Lab Sample ID: LCS 880-7262/1-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.07243 | | mg/Kg | | 72 | 70 - 130 |
| Toluene | 0.100 | 0.1000 | | mg/Kg | | 100 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1008 | | mg/Kg | | 101 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1893 | | mg/Kg | | 95 | 70 - 130 |
| o-Xylene | 0.100 | 0.08763 | | mg/Kg | | 88 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 77 | | 70 - 130 |

Lab Sample ID: LCSD 880-7262/2-A

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.07059 | | mg/Kg | | 71 | 70 - 130 | 3 | 35 |
| Toluene | 0.100 | 0.08551 | | mg/Kg | | 86 | 70 - 130 | 16 | 35 |
| Ethylbenzene | 0.100 | 0.09127 | | mg/Kg | | 91 | 70 - 130 | 10 | 35 |
| m,p-Xylenes | 0.200 | 0.1691 | | mg/Kg | | 85 | 70 - 130 | 11 | 35 |
| o-Xylene | 0.100 | 0.08001 | | mg/Kg | | 80 | 70 - 130 | 9 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 86 | | 70 - 130 |

Lab Sample ID: 880-5629-1 MS

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: C-90 SW

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00200 | U F1 | 0.0998 | 0.04812 | F1 | mg/Kg | | 48 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

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

Lab Sample ID: 880-5629-1 MS

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: C-90 SW

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Toluene | <0.00200 | U F1 | 0.0998 | 0.06939 | F1 | mg/Kg | | 69 | 70 - 130 |
| Ethylbenzene | <0.00200 | U F1 | 0.0998 | 0.06915 | F1 | mg/Kg | | 68 | 70 - 130 |
| m,p-Xylenes | <0.00399 | U F1 | 0.200 | 0.1322 | F1 | mg/Kg | | 66 | 70 - 130 |
| o-Xylene | <0.00200 | U F1 | 0.0998 | 0.06388 | F1 | mg/Kg | | 63 | 70 - 130 |
| Surrogate | MS %Recovery | MS Qualifier | Limits | | | | | | |
| 4-Bromofluorobenzene (Surr) | 96 | | 70 - 130 | | | | | | |
| 1,4-Difluorobenzene (Surr) | 96 | | 70 - 130 | | | | | | |

Lab Sample ID: 880-5629-1 MSD

Matrix: Solid

Analysis Batch: 7384

Client Sample ID: C-90 SW

Prep Type: Total/NA

Prep Batch: 7262

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|-----------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Benzene | <0.00200 | U F1 | 0.101 | 0.05315 | F1 | mg/Kg | | 53 | 70 - 130 | 10 | 35 |
| Toluene | <0.00200 | U F1 | 0.101 | 0.07792 | | mg/Kg | | 77 | 70 - 130 | 12 | 35 |
| Ethylbenzene | <0.00200 | U F1 | 0.101 | 0.08067 | | mg/Kg | | 79 | 70 - 130 | 15 | 35 |
| m,p-Xylenes | <0.00399 | U F1 | 0.202 | 0.1589 | | mg/Kg | | 79 | 70 - 130 | 18 | 35 |
| o-Xylene | <0.00200 | U F1 | 0.101 | 0.07367 | | mg/Kg | | 72 | 70 - 130 | 14 | 35 |
| Surrogate | MSD %Recovery | MSD Qualifier | Limits | | | | | | | | |
| 4-Bromofluorobenzene (Surr) | 114 | | 70 - 130 | | | | | | | | |
| 1,4-Difluorobenzene (Surr) | 68 | S1- | 70 - 130 | | | | | | | | |

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

Lab Sample ID: MB 880-7363/1-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7363

| 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 | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |
| Surrogate | MB %Recovery | MB Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 67 | S1- | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |
| o-Terphenyl (Surr) | 67 | S1- | 70 - 130 | | | 09/01/21 08:19 | 09/01/21 11:41 | 1 |

Lab Sample ID: LCS 880-7363/2-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7363

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 853.0 | | mg/Kg | | 85 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

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

Lab Sample ID: LCS 880-7363/2-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7363

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|---------------|---------------|----------|---|------|--------------|
| Diesel Range Organics (Over C10-C28) | 1000 | 1213 | | mg/Kg | | 121 | 70 - 130 |
| Surrogate | %Recovery | LCS Qualifier | LCS | Limits | | | |
| 1-Chlorooctane (Surr) | 126 | | | 70 - 130 | | | |
| o-Terphenyl (Surr) | 141 | S1+ | | 70 - 130 | | | |

Lab Sample ID: LCSD 880-7363/3-A

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7363

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|-------------|----------------|----------------|----------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 864.0 | | mg/Kg | | 86 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 1068 | | mg/Kg | | 107 | 70 - 130 | 13 | 20 |
| Surrogate | %Recovery | LCSD Qualifier | LCSD | Limits | | | | | |
| 1-Chlorooctane (Surr) | 87 | | | 70 - 130 | | | | | |
| o-Terphenyl (Surr) | 96 | | | 70 - 130 | | | | | |

Lab Sample ID: 890-1190-A-1-F MS

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7363

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 3660 | F1 | 995 | 5638 | F1 | mg/Kg | | 199 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 448 | | 995 | 1239 | | mg/Kg | | 79 | 70 - 130 |
| Surrogate | %Recovery | MS Qualifier | MS | Limits | | | | | |
| 1-Chlorooctane (Surr) | 89 | | | 70 - 130 | | | | | |
| o-Terphenyl (Surr) | 69 | S1- | | 70 - 130 | | | | | |

Lab Sample ID: 890-1190-A-1-G MSD

Matrix: Solid

Analysis Batch: 7359

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7363

| 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 | 3660 | F1 | 998 | 5715 | F1 | mg/Kg | | 206 | 70 - 130 | 1 | 20 |
| Diesel Range Organics (Over C10-C28) | 448 | | 998 | 1276 | | mg/Kg | | 83 | 70 - 130 | 3 | 20 |
| Surrogate | %Recovery | MSD Qualifier | MSD | Limits | | | | | | | |
| 1-Chlorooctane (Surr) | 91 | | | 70 - 130 | | | | | | | |
| o-Terphenyl (Surr) | 72 | | | 70 - 130 | | | | | | | |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7349/1-A

Matrix: Solid

Analysis Batch: 7397

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 | | | 09/01/21 13:06 | 1 |

Lab Sample ID: LCS 880-7349/2-A

Matrix: Solid

Analysis Batch: 7397

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike
Added | LCS
Result | LCS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|----------------|---------------|------------------|-------|---|------|-----------------|
| Chloride | 250 | 247.5 | | mg/Kg | | 99 | 90 - 110 |

Lab Sample ID: LCSD 880-7349/3-A

Matrix: Solid

Analysis Batch: 7397

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike
Added | LCSD
Result | LCSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|----------------|----------------|-------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 250 | 247.7 | | mg/Kg | | 99 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-5627-A-9-B MS

Matrix: Solid

Analysis Batch: 7397

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MS
Result | MS
Qualifier | Unit | D | %Rec | %Rec.
Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|-----------------|
| Chloride | 64.1 | | 248 | 315.0 | | mg/Kg | | 101 | 90 - 110 |

Lab Sample ID: 880-5627-A-9-C MSD

Matrix: Solid

Analysis Batch: 7397

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 64.1 | | 248 | 315.6 | | mg/Kg | | 102 | 90 - 110 | 0 | 20 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

GC VOA

Prep Batch: 7262

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5629-1 | C-90 SW | Total/NA | Solid | 5035 | |
| 880-5629-2 | C-89 SW | Total/NA | Solid | 5035 | |
| 880-5629-3 | C-91 BTM | Total/NA | Solid | 5035 | |
| 880-5629-4 | C-92 BTM | Total/NA | Solid | 5035 | |
| 880-5629-5 | C-93 BTM | Total/NA | Solid | 5035 | |
| MB 880-7262/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7262/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7262/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-5629-1 MS | C-90 SW | Total/NA | Solid | 5035 | |
| 880-5629-1 MSD | C-90 SW | Total/NA | Solid | 5035 | |

Analysis Batch: 7384

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5629-1 | C-90 SW | Total/NA | Solid | 8021B | 7262 |
| 880-5629-2 | C-89 SW | Total/NA | Solid | 8021B | 7262 |
| 880-5629-3 | C-91 BTM | Total/NA | Solid | 8021B | 7262 |
| 880-5629-4 | C-92 BTM | Total/NA | Solid | 8021B | 7262 |
| 880-5629-5 | C-93 BTM | Total/NA | Solid | 8021B | 7262 |
| MB 880-7262/5-A | Method Blank | Total/NA | Solid | 8021B | 7262 |
| LCS 880-7262/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7262 |
| LCSD 880-7262/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7262 |
| 880-5629-1 MS | C-90 SW | Total/NA | Solid | 8021B | 7262 |
| 880-5629-1 MSD | C-90 SW | Total/NA | Solid | 8021B | 7262 |

GC Semi VOA

Analysis Batch: 7359

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 880-5629-1 | C-90 SW | Total/NA | Solid | 8015B NM | 7363 |
| 880-5629-2 | C-89 SW | Total/NA | Solid | 8015B NM | 7363 |
| 880-5629-3 | C-91 BTM | Total/NA | Solid | 8015B NM | 7363 |
| 880-5629-4 | C-92 BTM | Total/NA | Solid | 8015B NM | 7363 |
| 880-5629-5 | C-93 BTM | Total/NA | Solid | 8015B NM | 7363 |
| MB 880-7363/1-A | Method Blank | Total/NA | Solid | 8015B NM | 7363 |
| LCS 880-7363/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 7363 |
| LCSD 880-7363/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 7363 |
| 890-1190-A-1-F MS | Matrix Spike | Total/NA | Solid | 8015B NM | 7363 |
| 890-1190-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 7363 |

Prep Batch: 7363

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 880-5629-1 | C-90 SW | Total/NA | Solid | 8015NM Prep | |
| 880-5629-2 | C-89 SW | Total/NA | Solid | 8015NM Prep | |
| 880-5629-3 | C-91 BTM | Total/NA | Solid | 8015NM Prep | |
| 880-5629-4 | C-92 BTM | Total/NA | Solid | 8015NM Prep | |
| 880-5629-5 | C-93 BTM | Total/NA | Solid | 8015NM Prep | |
| MB 880-7363/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-7363/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-7363/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-1190-A-1-F MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 890-1190-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

HPLC/IC

Leach Batch: 7349

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 880-5629-1 | C-90 SW | Soluble | Solid | DI Leach | |
| 880-5629-2 | C-89 SW | Soluble | Solid | DI Leach | |
| 880-5629-3 | C-91 BTM | Soluble | Solid | DI Leach | |
| 880-5629-4 | C-92 BTM | Soluble | Solid | DI Leach | |
| 880-5629-5 | C-93 BTM | Soluble | Solid | DI Leach | |
| MB 880-7349/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-7349/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-7349/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-5627-A-9-B MS | Matrix Spike | Soluble | Solid | DI Leach | |
| 880-5627-A-9-C MSD | Matrix Spike Duplicate | Soluble | Solid | DI Leach | |

Analysis Batch: 7397

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5629-1 | C-90 SW | Soluble | Solid | 300.0 | 7349 |
| 880-5629-2 | C-89 SW | Soluble | Solid | 300.0 | 7349 |
| 880-5629-3 | C-91 BTM | Soluble | Solid | 300.0 | 7349 |
| 880-5629-4 | C-92 BTM | Soluble | Solid | 300.0 | 7349 |
| 880-5629-5 | C-93 BTM | Soluble | Solid | 300.0 | 7349 |
| MB 880-7349/1-A | Method Blank | Soluble | Solid | 300.0 | 7349 |
| LCS 880-7349/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 7349 |
| LCSD 880-7349/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 7349 |
| 880-5627-A-9-B MS | Matrix Spike | Soluble | Solid | 300.0 | 7349 |
| 880-5627-A-9-C MSD | Matrix Spike Duplicate | Soluble | Solid | 300.0 | 7349 |

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-90 SW

Lab Sample ID: 880-5629-1

Date Collected: 08/27/21 11:04

Matrix: Solid

Date Received: 08/31/21 14:24

| 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 | 7262 | 09/01/21 09:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7384 | 09/01/21 13:17 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7363 | 09/01/21 08:19 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7359 | 09/01/21 18:45 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 7349 | 08/31/21 15:57 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7397 | 09/01/21 15:58 | CH | XEN MID |

Client Sample ID: C-89 SW

Lab Sample ID: 880-5629-2

Date Collected: 08/26/21 13:47

Matrix: Solid

Date Received: 08/31/21 14:24

| 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 | 7262 | 09/01/21 09:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7384 | 09/01/21 13:38 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 7363 | 09/01/21 08:19 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7359 | 09/01/21 19:06 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 7349 | 08/31/21 15:57 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7397 | 09/01/21 16:04 | CH | XEN MID |

Client Sample ID: C-91 BTM

Lab Sample ID: 880-5629-3

Date Collected: 08/30/21 13:44

Matrix: Solid

Date Received: 08/31/21 14:24

| 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 | 7262 | 09/01/21 09:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7384 | 09/01/21 13:58 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7363 | 09/01/21 08:19 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7359 | 09/01/21 19:28 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.04 g | 50 mL | 7349 | 08/31/21 15:57 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7397 | 09/01/21 16:09 | CH | XEN MID |

Client Sample ID: C-92 BTM

Lab Sample ID: 880-5629-4

Date Collected: 08/30/21 13:52

Matrix: Solid

Date Received: 08/31/21 14:24

| 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 | 7262 | 09/01/21 09:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7384 | 09/01/21 14:19 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7363 | 09/01/21 08:19 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7359 | 09/01/21 19:48 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.97 g | 50 mL | 7349 | 08/31/21 15:57 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7397 | 09/01/21 16:15 | CH | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Client Sample ID: C-93 BTM
Date Collected: 08/30/21 14:09
Date Received: 08/31/21 14:24

Lab Sample ID: 880-5629-5
Matrix: Solid

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | 5035 | | | 4.98 g | 5 mL | 7262 | 09/01/21 09:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7384 | 09/01/21 14:40 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 7363 | 09/01/21 08:19 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7359 | 09/01/21 20:09 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.02 g | 50 mL | 7349 | 08/31/21 15:57 | SC | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7397 | 09/01/21 16:20 | CH | XEN MID |

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

Laboratory: Eurofins Xenco, Midland

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas | NELAP | T104704400-20-21 | 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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Method Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Salado Draw 13 E Frac Pond

Job ID: 880-5629-1
SDG: 20-0107-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 880-5629-1 | C-90 SW | Solid | 08/27/21 11:04 | 08/31/21 14:24 |
| 880-5629-2 | C-89 SW | Solid | 08/26/21 13:47 | 08/31/21 14:24 |
| 880-5629-3 | C-91 BTM | Solid | 08/30/21 13:44 | 08/31/21 14:24 |
| 880-5629-4 | C-92 BTM | Solid | 08/30/21 13:52 | 08/31/21 14:24 |
| 880-5629-5 | C-93 BTM | Solid | 08/30/21 14:09 | 08/31/21 14:24 |

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Arson & Associates, Inc.
Environmental Consultants

880-5629 Chain of Custody

Midland TX 79701
432-687 0901

Data Reported to

DATE 8-31-21

PAGE 1 OF 1

PO#

LAB WORK ORDER#

PROJECT LOCATION OR NAME Salado Draw 13E Frac Pond

COLLECTOR TP

5024 No. 2081
CHAIN-OF-CUSTODY

| Field Sample ID | Lab # | Date | Time | Matrix | # of Containers | PRESERVATION | | | | UNPRESERVED | ANALYSES | | FIELD NOTES |
|-----------------|-------|---------|------|--------|-----------------|--------------|------------------|---|-----|-------------|----------|------|-------------|
| | | | | | | HCl | HNO ₃ | H ₂ SO ₄ ↓ NaOH ↓ | ICE | | BTX | MTBE | |
| C-89 SW | | 8/27/21 | 1104 | S | 1 | | | | | | | | |
| C-89 SW | | 8/26/21 | 1347 | S | 1 | | | | | | | | |
| C-91 Btm | | 8/30/21 | 1344 | S | 1 | | | | | | | | |
| C-92 Btm | | 8/30/21 | 1352 | S | 1 | | | | | | | | |
| C-93 Btm | | 8/30/21 | 1409 | S | 1 | | | | | | | | |
| TOTAL | 5 | | | | | | | | | | | | |

| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | TURN AROUND TIME | LABORATORY USE ONLY |
|-----------------------------|--------------|-------------------------|-----------|-------------------------|------------------|--|
| John P. [Signature] | 8/31/21 1424 | [Signature] | | | NORMAL | RECEIVING TEMP 4.0/4.5 THERM# 1P8 |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | 1 DAY | CUSTODY SEALS - [] BROKEN [] INTACT [] NOT USED |
| RELINQUISHED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | DATE/TIME | RECEIVED BY (Signature) | 2 DAY | CARRIER BILL # |
| LABORATORY XencO | | | | | OTHER | [] HAND DELIVERED |

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-5629-1

SDG Number: 20-0107-14

Login Number: 5629

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-5805-1

Laboratory Sample Delivery Group: 20-0107-14

Client Project/Site: SD Frac Pond 13

For:

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
9/13/2021 9:18:13 AM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Laboratory Job ID: 880-5805-1
SDG: 20-0107-14

Table of Contents

| | |
|----------------------------------|----|
| Cover Page | 1 |
| Table of Contents | 2 |
| Definitions/Glossary | 3 |
| Case Narrative | 4 |
| Client Sample Results | 5 |
| Surrogate Summary | 11 |
| QC Sample Results | 13 |
| QC Association Summary | 21 |
| Lab Chronicle | 24 |
| Certification Summary | 27 |
| Method Summary | 28 |
| Sample Summary | 29 |
| Chain of Custody | 30 |
| Receipt Checklists | 31 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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 |
|-----------|--|
| U | Indicates the analyte was analyzed for but not detected. |

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Job ID: 880-5805-1

Laboratory: Eurofins Xenco, Midland

Narrative

**Job Narrative
880-5805-1**

Receipt

The samples were received on 9/7/2021 10:26 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 2.3°C

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. No analyses were marked on the chain of custody. Robert Nelson was contacted and he told us to run BTEX, TPH 8015 and Cl.

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7645 and analytical batch 880-7670 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 880-7729 and analytical batch 880-7728 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 880-7754 and analytical batch 880-7782 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.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-1

Lab Sample ID: 880-5805-1

Date Collected: 09/03/21 13:00

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:23 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 09:23 | 1 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 09:23 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:02 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:02 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:02 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:02 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 106 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 12:02 | 1 |
| o-Terphenyl (Surr) | 115 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 12:02 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 26.7 | | 5.04 | mg/Kg | | | 09/08/21 18:44 | 1 |

Client Sample ID: BF-2

Lab Sample ID: 880-5805-2

Date Collected: 09/03/21 13:01

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| m,p-Xylenes | <0.00401 | U | 0.00401 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | mg/Kg | | 09/08/21 11:57 | 09/09/21 09:43 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 100 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 09:43 | 1 |
| 1,4-Difluorobenzene (Surr) | 101 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 09:43 | 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 | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-2

Lab Sample ID: 880-5805-2

Date Collected: 09/03/21 13:01

Matrix: Solid

Date Received: 09/07/21 10:26

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 88 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |
| o-Terphenyl (Surr) | 84 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 12:22 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 27.7 | | 5.05 | mg/Kg | | | 09/08/21 19:01 | 1 |

Client Sample ID: BF-3

Lab Sample ID: 880-5805-3

Date Collected: 09/03/21 13:02

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00201 | U | 0.00201 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| Toluene | <0.00201 | U | 0.00201 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| m,p-Xylenes | <0.00402 | U | 0.00402 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 115 | | 70 - 130 | | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 | | | 09/08/21 11:57 | 09/09/21 10:04 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 82 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |
| o-Terphenyl (Surr) | 79 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 12:44 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 39.7 | | 5.01 | mg/Kg | | | 09/08/21 19:07 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-4

Lab Sample ID: 880-5805-4

Date Collected: 09/03/21 13:03

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 09/08/21 11:57 | 09/09/21 10:24 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 10:24 | 1 |
| 1,4-Difluorobenzene (Surr) | 102 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 10:24 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:06 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:06 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:06 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:06 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 80 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 13:06 | 1 |
| o-Terphenyl (Surr) | 81 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 13:06 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 38.3 | | 5.02 | mg/Kg | | | 09/08/21 19:12 | 1 |

Client Sample ID: BF-5

Lab Sample ID: 880-5805-5

Date Collected: 09/03/21 13:04

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| Toluene | <0.00199 | U | 0.00199 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| m,p-Xylenes | <0.00398 | U | 0.00398 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:04 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 123 | | 70 - 130 | 09/09/21 13:47 | 09/10/21 19:04 | 1 |
| 1,4-Difluorobenzene (Surr) | 103 | | 70 - 130 | 09/09/21 13:47 | 09/10/21 19:04 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-5

Lab Sample ID: 880-5805-5

Date Collected: 09/03/21 13:04

Matrix: Solid

Date Received: 09/07/21 10:26

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 82 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |
| o-Terphenyl (Surr) | 84 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 13:27 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 43.4 | | 5.01 | mg/Kg | | | 09/08/21 19:18 | 1 |

Client Sample ID: BF-6

Lab Sample ID: 880-5805-6

Date Collected: 09/03/21 13:05

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 128 | | 70 - 130 | | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |
| 1,4-Difluorobenzene (Surr) | 104 | | 70 - 130 | | | 09/09/21 13:47 | 09/10/21 19:24 | 1 |

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 97 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |
| o-Terphenyl (Surr) | 107 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 13:48 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 33.8 | | 4.99 | mg/Kg | | | 09/08/21 19:24 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-7

Lab Sample ID: 880-5805-7

Date Collected: 09/03/21 13:06

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 09/10/21 17:00 | 09/12/21 08:01 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 110 | | 70 - 130 | 09/10/21 17:00 | 09/12/21 08:01 | 1 |
| 1,4-Difluorobenzene (Surr) | 107 | | 70 - 130 | 09/10/21 17:00 | 09/12/21 08:01 | 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 | | 09/07/21 14:13 | 09/08/21 14:09 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:09 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:09 | 1 |
| Total TPH | <49.9 | U | 49.9 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:09 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 94 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 14:09 | 1 |
| o-Terphenyl (Surr) | 103 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 14:09 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 26.1 | | 4.97 | mg/Kg | | | 09/08/21 19:29 | 1 |

Client Sample ID: BF-8

Lab Sample ID: 880-5805-8

Date Collected: 09/03/21 13:07

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00202 | U | 0.00202 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| Toluene | <0.00202 | U | 0.00202 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| m,p-Xylenes | <0.00403 | U | 0.00403 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:15 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 109 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 13:15 | 1 |
| 1,4-Difluorobenzene (Surr) | 105 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 13:15 | 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 | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-8

Lab Sample ID: 880-5805-8

Date Collected: 09/03/21 13:07

Matrix: Solid

Date Received: 09/07/21 10:26

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

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |
| Total TPH | <49.8 | U | 49.8 | mg/Kg | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 105 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |
| o-Terphenyl (Surr) | 115 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 14:30 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 45.5 | | 4.95 | mg/Kg | | | 09/08/21 19:46 | 1 |

Client Sample ID: BF-9

Lab Sample ID: 880-5805-9

Date Collected: 09/03/21 13:08

Matrix: Solid

Date Received: 09/07/21 10:26

Method: 8021B - Volatile Organic Compounds (GC)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| m,p-Xylenes | <0.00399 | U | 0.00399 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | mg/Kg | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 113 | | 70 - 130 | | | 09/08/21 11:57 | 09/09/21 13:36 | 1 |
| 1,4-Difluorobenzene (Surr) | 97 | | 70 - 130 | | | 09/08/21 11:57 | 09/09/21 13:36 | 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 | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac |
| 1-Chlorooctane (Surr) | 105 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |
| o-Terphenyl (Surr) | 112 | | 70 - 130 | | | 09/07/21 14:13 | 09/08/21 15:12 | 1 |

Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 28.1 | | 4.97 | mg/Kg | | | 09/08/21 19:52 | 1 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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) |
| 880-5804-A-1-G MS | Matrix Spike | 111 | 98 |
| 880-5804-A-1-H MSD | Matrix Spike Duplicate | 93 | 74 |
| 880-5805-1 | BF-1 | 113 | 103 |
| 880-5805-2 | BF-2 | 100 | 101 |
| 880-5805-3 | BF-3 | 115 | 93 |
| 880-5805-4 | BF-4 | 113 | 102 |
| 880-5805-5 | BF-5 | 123 | 103 |
| 880-5805-6 | BF-6 | 128 | 104 |
| 880-5805-7 | BF-7 | 110 | 107 |
| 880-5805-8 | BF-8 | 109 | 105 |
| 880-5805-9 | BF-9 | 113 | 97 |
| 890-1230-A-2-C MS | Matrix Spike | 126 | 93 |
| 890-1230-A-2-D MSD | Matrix Spike Duplicate | 116 | 108 |
| 890-1232-A-1-F MS | Matrix Spike | 159 S1+ | 116 |
| 890-1232-A-1-G MSD | Matrix Spike Duplicate | 143 S1+ | 90 |
| LCS 880-7645/1-A | Lab Control Sample | 143 S1+ | 87 |
| LCS 880-7729/1-A | Lab Control Sample | 116 | 99 |
| LCS 880-7754/1-A | Lab Control Sample | 150 S1+ | 130 |
| LCSD 880-7645/2-A | Lab Control Sample Dup | 103 | 90 |
| LCSD 880-7754/2-A | Lab Control Sample Dup | 173 S1+ | 142 S1+ |
| MB 880-7644/5-A | Method Blank | 120 | 110 |
| MB 880-7645/5-A | Method Blank | 133 S1+ | 104 |
| MB 880-7729/5-A | Method Blank | 104 | 98 |
| MB 880-7754/5-A | Method Blank | 93 | 92 |
| Surrogate Legend | | | |
| BFB = 4-Bromofluorobenzene (Surr) | | | |
| DFBZ = 1,4-Difluorobenzene (Surr) | | | |

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|-----------------------------------|------------------------|--|-------|
| Lab Sample ID | Client Sample ID | BFB1 | DFBZ1 |
| LCSD 880-7729/2-A | Lab Control Sample Dup | | |
| 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) |
| 880-5798-A-1-E MS | Matrix Spike | 112 | 102 |
| 880-5798-A-1-F MSD | Matrix Spike Duplicate | 107 | 102 |
| 880-5805-1 | BF-1 | 106 | 115 |
| 880-5805-2 | BF-2 | 88 | 84 |

Eurofins Xenco, Midland

Surrogate Summary

Client: Larson & Associates, Inc.

Job ID: 880-5805-1

Project/Site: SD Frac Pond 13

SDG: 20-0107-14

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) |
| 880-5805-3 | BF-3 | 82 | 79 |
| 880-5805-4 | BF-4 | 80 | 81 |
| 880-5805-5 | BF-5 | 82 | 84 |
| 880-5805-6 | BF-6 | 97 | 107 |
| 880-5805-7 | BF-7 | 94 | 103 |
| 880-5805-8 | BF-8 | 105 | 115 |
| 880-5805-9 | BF-9 | 105 | 112 |
| LCS 880-7612/2-A | Lab Control Sample | 105 | 103 |
| LCSD 880-7612/3-A | Lab Control Sample Dup | 106 | 111 |
| MB 880-7612/1-A | Method Blank | 97 | 106 |

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7644/5-A

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7644

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:47 | 09/08/21 19:59 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 120 | | 70 - 130 | 09/08/21 11:47 | 09/08/21 19:59 | 1 |
| 1,4-Difluorobenzene (Surr) | 110 | | 70 - 130 | 09/08/21 11:47 | 09/08/21 19:59 | 1 |

Lab Sample ID: MB 880-7645/5-A

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7645

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 09/08/21 11:57 | 09/09/21 07:33 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 133 | S1+ | 70 - 130 | 09/08/21 11:57 | 09/09/21 07:33 | 1 |
| 1,4-Difluorobenzene (Surr) | 104 | | 70 - 130 | 09/08/21 11:57 | 09/09/21 07:33 | 1 |

Lab Sample ID: LCS 880-7645/1-A

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7645

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.09255 | | mg/Kg | | 93 | 70 - 130 |
| Toluene | 0.100 | 0.09254 | | mg/Kg | | 93 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1021 | | mg/Kg | | 102 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1995 | | mg/Kg | | 100 | 70 - 130 |
| o-Xylene | 0.100 | 0.1079 | | mg/Kg | | 108 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 143 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 87 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

Lab Sample ID: LCSD 880-7645/2-A

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7645

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.08256 | | mg/Kg | | 83 | 70 - 130 | 11 | 35 |
| Toluene | 0.100 | 0.09815 | | mg/Kg | | 98 | 70 - 130 | 6 | 35 |
| Ethylbenzene | 0.100 | 0.1055 | | mg/Kg | | 106 | 70 - 130 | 3 | 35 |
| m,p-Xylenes | 0.200 | 0.1970 | | mg/Kg | | 99 | 70 - 130 | 1 | 35 |
| o-Xylene | 0.100 | 0.09939 | | mg/Kg | | 99 | 70 - 130 | 8 | 35 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 103 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 |

Lab Sample ID: 880-5804-A-1-G MS

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7645

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | 0.0218 | F2 F1 | 0.0998 | 0.06053 | F1 | mg/Kg | | 39 | 70 - 130 |
| Toluene | 0.0468 | F2 F1 | 0.0998 | 0.05219 | F1 | mg/Kg | | 5 | 70 - 130 |
| Ethylbenzene | 0.103 | F1 | 0.0998 | 0.06099 | F1 | mg/Kg | | -42 | 70 - 130 |
| m,p-Xylenes | 0.280 | F2 F1 | 0.200 | 0.1151 | F1 | mg/Kg | | -83 | 70 - 130 |
| o-Xylene | 0.0523 | F2 F1 | 0.0998 | 0.07526 | F1 | mg/Kg | | 23 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 111 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 |

Lab Sample ID: 880-5804-A-1-H MSD

Matrix: Solid

Analysis Batch: 7670

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7645

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.0218 | F2 F1 | 0.101 | 0.03166 | F2 F1 | mg/Kg | | 10 | 70 - 130 | 63 | 35 |
| Toluene | 0.0468 | F2 F1 | 0.101 | 0.02481 | F2 F1 | mg/Kg | | -22 | 70 - 130 | 71 | 35 |
| Ethylbenzene | 0.103 | F1 | 0.101 | 0.05157 | F1 | mg/Kg | | -51 | 70 - 130 | 17 | 35 |
| m,p-Xylenes | 0.280 | F2 F1 | 0.202 | 0.03935 | F2 F1 | mg/Kg | | -120 | 70 - 130 | 98 | 35 |
| o-Xylene | 0.0523 | F2 F1 | 0.101 | 0.03104 | F2 F1 | mg/Kg | | -21 | 70 - 130 | 83 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 74 | | 70 - 130 |

Lab Sample ID: MB 880-7729/5-A

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

Lab Sample ID: MB 880-7729/5-A

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 09:09 | 09/10/21 17:21 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 104 | | 70 - 130 | 09/10/21 09:09 | 09/10/21 17:21 | 1 |
| 1,4-Difluorobenzene (Surr) | 98 | | 70 - 130 | 09/10/21 09:09 | 09/10/21 17:21 | 1 |

Lab Sample ID: LCS 880-7729/1-A

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.08645 | | mg/Kg | | 86 | 70 - 130 |
| Toluene | 0.100 | 0.08777 | | mg/Kg | | 88 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.08937 | | mg/Kg | | 89 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.1902 | | mg/Kg | | 95 | 70 - 130 |
| o-Xylene | 0.100 | 0.09347 | | mg/Kg | | 93 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 116 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 99 | | 70 - 130 |

Lab Sample ID: LCSD 880-7729/2-A

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.08285 | | mg/Kg | | | | | |
| Toluene | 0.100 | 0.08121 | | mg/Kg | | | | | |
| Ethylbenzene | 0.100 | 0.08236 | | mg/Kg | | | | | |
| m,p-Xylenes | 0.200 | 0.1748 | | mg/Kg | | | | | |
| o-Xylene | 0.100 | 0.08603 | | mg/Kg | | | | | |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------------|----------------|----------------|--------|
| 4-Bromofluorobenzene (Surr) | | | |
| 1,4-Difluorobenzene (Surr) | | | |

Lab Sample ID: 890-1230-A-2-C MS

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Benzene | <0.00200 | U | 0.101 | 0.08146 | | mg/Kg | | 81 | 70 - 130 |
| Toluene | <0.00200 | U | 0.101 | 0.08340 | | mg/Kg | | 83 | 70 - 130 |
| Ethylbenzene | <0.00200 | U | 0.101 | 0.08460 | | mg/Kg | | 84 | 70 - 130 |
| m,p-Xylenes | <0.00399 | U | 0.201 | 0.1801 | | mg/Kg | | 90 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

Lab Sample ID: 890-1230-A-2-C MS

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7729

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| o-Xylene | <0.00200 | U | 0.101 | 0.08900 | | mg/Kg | | 88 | 70 - 130 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 126 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 93 | | 70 - 130 |

Lab Sample ID: 890-1230-A-2-D MSD

Matrix: Solid

Analysis Batch: 7728

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7729

| 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 | 0.07990 | | mg/Kg | | 80 | 70 - 130 | 2 | 35 |
| Toluene | <0.00200 | U | 0.0994 | 0.07221 | | mg/Kg | | 73 | 70 - 130 | 14 | 35 |
| Ethylbenzene | <0.00200 | U | 0.0994 | 0.07000 | | mg/Kg | | 70 | 70 - 130 | 19 | 35 |
| m,p-Xylenes | <0.00399 | U | 0.199 | 0.1465 | | mg/Kg | | 74 | 70 - 130 | 21 | 35 |
| o-Xylene | <0.00200 | U | 0.0994 | 0.07317 | | mg/Kg | | 74 | 70 - 130 | 20 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 116 | | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 108 | | 70 - 130 |

Lab Sample ID: MB 880-7754/5-A

Matrix: Solid

Analysis Batch: 7782

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7754

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| m,p-Xylenes | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | mg/Kg | | 09/10/21 13:40 | 09/12/21 05:37 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93 | | 70 - 130 | 09/10/21 13:40 | 09/12/21 05:37 | 1 |
| 1,4-Difluorobenzene (Surr) | 92 | | 70 - 130 | 09/10/21 13:40 | 09/12/21 05:37 | 1 |

Lab Sample ID: LCS 880-7754/1-A

Matrix: Solid

Analysis Batch: 7782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7754

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------|-------------|------------|---------------|-------|---|------|--------------|
| Benzene | 0.100 | 0.1032 | | mg/Kg | | 103 | 70 - 130 |
| Toluene | 0.100 | 0.1006 | | mg/Kg | | 101 | 70 - 130 |
| Ethylbenzene | 0.100 | 0.1039 | | mg/Kg | | 104 | 70 - 130 |
| m,p-Xylenes | 0.200 | 0.2182 | | mg/Kg | | 109 | 70 - 130 |
| o-Xylene | 0.100 | 0.1104 | | mg/Kg | | 110 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

| | LCS | LCS | |
|-----------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 4-Bromofluorobenzene (Surr) | 150 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 130 | | 70 - 130 |

Lab Sample ID: LCSD 880-7754/2-A

Matrix: Solid

Analysis Batch: 7782

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7754

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Benzene | 0.100 | 0.08415 | | mg/Kg | | 84 | 70 - 130 | 20 | 35 |
| Toluene | 0.100 | 0.08937 | | mg/Kg | | 89 | 70 - 130 | 12 | 35 |
| Ethylbenzene | 0.100 | 0.1024 | | mg/Kg | | 102 | 70 - 130 | 2 | 35 |
| m,p-Xylenes | 0.200 | 0.2167 | | mg/Kg | | 108 | 70 - 130 | 1 | 35 |
| o-Xylene | 0.100 | 0.1121 | | mg/Kg | | 112 | 70 - 130 | 2 | 35 |

| | LCSD | LCSD | |
|-----------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 4-Bromofluorobenzene (Surr) | 173 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 142 | S1+ | 70 - 130 |

Lab Sample ID: 890-1232-A-1-F MS

Matrix: Solid

Analysis Batch: 7782

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7754

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|-----|-----------|
| Benzene | <0.00200 | U F2 F1 | 0.0998 | 0.06386 | F1 | mg/Kg | | 64 | 70 - 130 | | |
| Toluene | <0.00200 | U F2 F1 | 0.0998 | 0.07082 | | mg/Kg | | 71 | 70 - 130 | | |
| Ethylbenzene | <0.00200 | U F2 F1 | 0.0998 | 0.07998 | | mg/Kg | | 80 | 70 - 130 | | |
| m,p-Xylenes | <0.00399 | U F2 F1 | 0.200 | 0.1674 | | mg/Kg | | 84 | 70 - 130 | | |
| o-Xylene | <0.00200 | U F2 F1 | 0.0998 | 0.08426 | | mg/Kg | | 84 | 70 - 130 | | |

| | MS | MS | |
|-----------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 4-Bromofluorobenzene (Surr) | 159 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 116 | | 70 - 130 |

Lab Sample ID: 890-1232-A-1-G MSD

Matrix: Solid

Analysis Batch: 7782

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7754

| 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 | 0.0994 | 0.03198 | F2 F1 | mg/Kg | | 32 | 70 - 130 | 67 | 35 |
| Toluene | <0.00200 | U F2 F1 | 0.0994 | 0.04428 | F2 F1 | mg/Kg | | 45 | 70 - 130 | 46 | 35 |
| Ethylbenzene | <0.00200 | U F2 F1 | 0.0994 | 0.04603 | F2 F1 | mg/Kg | | 46 | 70 - 130 | 54 | 35 |
| m,p-Xylenes | <0.00399 | U F2 F1 | 0.199 | 0.1011 | F2 F1 | mg/Kg | | 51 | 70 - 130 | 49 | 35 |
| o-Xylene | <0.00200 | U F2 F1 | 0.0994 | 0.05445 | F2 F1 | mg/Kg | | 55 | 70 - 130 | 43 | 35 |

| | MSD | MSD | |
|-----------------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 4-Bromofluorobenzene (Surr) | 143 | S1+ | 70 - 130 |
| 1,4-Difluorobenzene (Surr) | 90 | | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

Lab Sample ID: MB 880-7612/1-A

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7612

| 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 | | 09/07/21 14:13 | 09/08/21 09:35 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 09:35 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 09:35 | 1 |
| Total TPH | <50.0 | U | 50.0 | mg/Kg | | 09/07/21 14:13 | 09/08/21 09:35 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-----------------------|--------------|--------------|----------|----------------|----------------|---------|
| 1-Chlorooctane (Surr) | 97 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 09:35 | 1 |
| o-Terphenyl (Surr) | 106 | | 70 - 130 | 09/07/21 14:13 | 09/08/21 09:35 | 1 |

Lab Sample ID: LCS 880-7612/2-A

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7612

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 912.8 | | mg/Kg | | 91 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | 1000 | 871.9 | | mg/Kg | | 87 | 70 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|-----------------------|---------------|---------------|----------|
| 1-Chlorooctane (Surr) | 105 | | 70 - 130 |
| o-Terphenyl (Surr) | 103 | | 70 - 130 |

Lab Sample ID: LCSD 880-7612/3-A

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7612

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000 | 834.3 | | mg/Kg | | 83 | 70 - 130 | 9 | 20 |
| Diesel Range Organics (Over C10-C28) | 1000 | 915.4 | | mg/Kg | | 92 | 70 - 130 | 5 | 20 |

| Surrogate | LCSD %Recovery | LCSD Qualifier | Limits |
|-----------------------|----------------|----------------|----------|
| 1-Chlorooctane (Surr) | 106 | | 70 - 130 |
| o-Terphenyl (Surr) | 111 | | 70 - 130 |

Lab Sample ID: 880-5798-A-1-E MS

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7612

| 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 | 995 | 968.4 | | mg/Kg | | 95 | 70 - 130 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 995 | 918.1 | | mg/Kg | | 90 | 70 - 130 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

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

Lab Sample ID: 880-5798-A-1-E MS

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 7612

| | MS | MS | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 112 | | 70 - 130 |
| o-Terphenyl (Surr) | 102 | | 70 - 130 |

Lab Sample ID: 880-5798-A-1-F MSD

Matrix: Solid

Analysis Batch: 7632

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 7612

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|--------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 998 | 971.3 | | mg/Kg | | 95 | 70 - 130 | 0 | 20 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 998 | 947.6 | | mg/Kg | | 93 | 70 - 130 | 3 | 20 |

| | MSD | MSD | |
|-----------------------|-----------|-----------|----------|
| Surrogate | %Recovery | Qualifier | Limits |
| 1-Chlorooctane (Surr) | 107 | | 70 - 130 |
| o-Terphenyl (Surr) | 102 | | 70 - 130 |

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7602/1-A

Matrix: Solid

Analysis Batch: 7625

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 | | | 09/08/21 17:53 | 1 |

Lab Sample ID: LCS 880-7602/2-A

Matrix: Solid

Analysis Batch: 7625

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|-------------|------------|---------------|-------|---|------|--------------|
| Chloride | 250 | 253.7 | | mg/Kg | | 101 | 90 - 110 |

Lab Sample ID: LCSD 880-7602/3-A

Matrix: Solid

Analysis Batch: 7625

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|--------------|-----|-----------|
| Chloride | 250 | 254.6 | | mg/Kg | | 102 | 90 - 110 | 0 | 20 |

Lab Sample ID: 880-5805-7 MS

Matrix: Solid

Analysis Batch: 7625

Client Sample ID: BF-7

Prep Type: Soluble

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|--------------|
| Chloride | 26.1 | | 249 | 282.8 | | mg/Kg | | 103 | 90 - 110 |

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5805-7 MSD

Matrix: Solid

Analysis Batch: 7625

Client Sample ID: BF-7

Prep Type: Soluble

| Analyte | Sample
Result | Sample
Qualifier | Spike
Added | MSD
Result | MSD
Qualifier | Unit | D | %Rec | %Rec.
Limits | RPD | RPD
Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|-----------------|-----|--------------|
| Chloride | 26.1 | | 249 | 283.5 | | mg/Kg | | 104 | 90 - 110 | 0 | 20 |

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

GC VOA

Prep Batch: 7644

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-----------------|------------------|-----------|--------|--------|------------|
| MB 880-7644/5-A | Method Blank | Total/NA | Solid | 5035 | |

Prep Batch: 7645

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-1 | BF-1 | Total/NA | Solid | 5035 | |
| 880-5805-2 | BF-2 | Total/NA | Solid | 5035 | |
| 880-5805-3 | BF-3 | Total/NA | Solid | 5035 | |
| 880-5805-4 | BF-4 | Total/NA | Solid | 5035 | |
| 880-5805-8 | BF-8 | Total/NA | Solid | 5035 | |
| 880-5805-9 | BF-9 | Total/NA | Solid | 5035 | |
| MB 880-7645/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7645/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7645/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 880-5804-A-1-G MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 880-5804-A-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Analysis Batch: 7670

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-1 | BF-1 | Total/NA | Solid | 8021B | 7645 |
| 880-5805-2 | BF-2 | Total/NA | Solid | 8021B | 7645 |
| 880-5805-3 | BF-3 | Total/NA | Solid | 8021B | 7645 |
| 880-5805-4 | BF-4 | Total/NA | Solid | 8021B | 7645 |
| 880-5805-8 | BF-8 | Total/NA | Solid | 8021B | 7645 |
| 880-5805-9 | BF-9 | Total/NA | Solid | 8021B | 7645 |
| MB 880-7644/5-A | Method Blank | Total/NA | Solid | 8021B | 7644 |
| MB 880-7645/5-A | Method Blank | Total/NA | Solid | 8021B | 7645 |
| LCS 880-7645/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7645 |
| LCSD 880-7645/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7645 |
| 880-5804-A-1-G MS | Matrix Spike | Total/NA | Solid | 8021B | 7645 |
| 880-5804-A-1-H MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 7645 |

Prep Batch: 7706

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 880-5805-5 | BF-5 | Total/NA | Solid | 5035 | |
| 880-5805-6 | BF-6 | Total/NA | Solid | 5035 | |

Analysis Batch: 7728

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-5 | BF-5 | Total/NA | Solid | 8021B | 7706 |
| 880-5805-6 | BF-6 | Total/NA | Solid | 8021B | 7706 |
| MB 880-7729/5-A | Method Blank | Total/NA | Solid | 8021B | 7729 |
| LCS 880-7729/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7729 |
| LCSD 880-7729/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7729 |
| 890-1230-A-2-C MS | Matrix Spike | Total/NA | Solid | 8021B | 7729 |
| 890-1230-A-2-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 7729 |

Prep Batch: 7729

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| MB 880-7729/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7729/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7729/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

GC VOA (Continued)

Prep Batch: 7729 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-1230-A-2-C MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 890-1230-A-2-D MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Prep Batch: 7754

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-7 | BF-7 | Total/NA | Solid | 5035 | |
| MB 880-7754/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-7754/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-7754/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |
| 890-1232-A-1-F MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 890-1232-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

Analysis Batch: 7782

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-7 | BF-7 | Total/NA | Solid | 8021B | 7754 |
| MB 880-7754/5-A | Method Blank | Total/NA | Solid | 8021B | 7754 |
| LCS 880-7754/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 7754 |
| LCSD 880-7754/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 7754 |
| 890-1232-A-1-F MS | Matrix Spike | Total/NA | Solid | 8021B | 7754 |
| 890-1232-A-1-G MSD | Matrix Spike Duplicate | Total/NA | Solid | 8021B | 7754 |

GC Semi VOA

Prep Batch: 7612

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 880-5805-1 | BF-1 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-2 | BF-2 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-3 | BF-3 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-4 | BF-4 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-5 | BF-5 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-6 | BF-6 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-7 | BF-7 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-8 | BF-8 | Total/NA | Solid | 8015NM Prep | |
| 880-5805-9 | BF-9 | Total/NA | Solid | 8015NM Prep | |
| MB 880-7612/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-7612/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-7612/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 880-5798-A-1-E MS | Matrix Spike | Total/NA | Solid | 8015NM Prep | |
| 880-5798-A-1-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015NM Prep | |

Analysis Batch: 7632

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 880-5805-1 | BF-1 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-2 | BF-2 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-3 | BF-3 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-4 | BF-4 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-5 | BF-5 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-6 | BF-6 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-7 | BF-7 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-8 | BF-8 | Total/NA | Solid | 8015B NM | 7612 |
| 880-5805-9 | BF-9 | Total/NA | Solid | 8015B NM | 7612 |

Eurofins Xenco, Midland

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

GC Semi VOA (Continued)

Analysis Batch: 7632 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| MB 880-7612/1-A | Method Blank | Total/NA | Solid | 8015B NM | 7612 |
| LCS 880-7612/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 7612 |
| LCSD 880-7612/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 7612 |
| 880-5798-A-1-E MS | Matrix Spike | Total/NA | Solid | 8015B NM | 7612 |
| 880-5798-A-1-F MSD | Matrix Spike Duplicate | Total/NA | Solid | 8015B NM | 7612 |

HPLC/IC

Leach Batch: 7602

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------|------------|
| 880-5805-1 | BF-1 | Soluble | Solid | DI Leach | |
| 880-5805-2 | BF-2 | Soluble | Solid | DI Leach | |
| 880-5805-3 | BF-3 | Soluble | Solid | DI Leach | |
| 880-5805-4 | BF-4 | Soluble | Solid | DI Leach | |
| 880-5805-5 | BF-5 | Soluble | Solid | DI Leach | |
| 880-5805-6 | BF-6 | Soluble | Solid | DI Leach | |
| 880-5805-7 | BF-7 | Soluble | Solid | DI Leach | |
| 880-5805-8 | BF-8 | Soluble | Solid | DI Leach | |
| 880-5805-9 | BF-9 | Soluble | Solid | DI Leach | |
| MB 880-7602/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-7602/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-7602/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 880-5805-7 MS | BF-7 | Soluble | Solid | DI Leach | |
| 880-5805-7 MSD | BF-7 | Soluble | Solid | DI Leach | |

Analysis Batch: 7625

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|--------|------------|
| 880-5805-1 | BF-1 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-2 | BF-2 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-3 | BF-3 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-4 | BF-4 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-5 | BF-5 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-6 | BF-6 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-7 | BF-7 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-8 | BF-8 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-9 | BF-9 | Soluble | Solid | 300.0 | 7602 |
| MB 880-7602/1-A | Method Blank | Soluble | Solid | 300.0 | 7602 |
| LCS 880-7602/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 7602 |
| LCSD 880-7602/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 7602 |
| 880-5805-7 MS | BF-7 | Soluble | Solid | 300.0 | 7602 |
| 880-5805-7 MSD | BF-7 | Soluble | Solid | 300.0 | 7602 |

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-1

Lab Sample ID: 880-5805-1

Date Collected: 09/03/21 13:00

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 09:23 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 12:02 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.96 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 18:44 | SC | XEN MID |

Client Sample ID: BF-2

Lab Sample ID: 880-5805-2

Date Collected: 09/03/21 13:01

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 09:43 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 12:22 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.95 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:01 | SC | XEN MID |

Client Sample ID: BF-3

Lab Sample ID: 880-5805-3

Date Collected: 09/03/21 13:02

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 10:04 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.05 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 12:44 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:07 | SC | XEN MID |

Client Sample ID: BF-4

Lab Sample ID: 880-5805-4

Date Collected: 09/03/21 13:03

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 10:24 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 13:06 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.98 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:12 | SC | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-5

Lab Sample ID: 880-5805-5

Date Collected: 09/03/21 13:04

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7706 | 09/09/21 13:47 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7728 | 09/10/21 19:04 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 13:27 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4.99 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:18 | SC | XEN MID |

Client Sample ID: BF-6

Lab Sample ID: 880-5805-6

Date Collected: 09/03/21 13:05

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7706 | 09/09/21 13:47 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7728 | 09/10/21 19:24 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.02 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 13:48 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.01 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:24 | SC | XEN MID |

Client Sample ID: BF-7

Lab Sample ID: 880-5805-7

Date Collected: 09/03/21 13:06

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7754 | 09/10/21 17:00 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7782 | 09/12/21 08:01 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.03 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 14:09 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:29 | SC | XEN MID |

Client Sample ID: BF-8

Lab Sample ID: 880-5805-8

Date Collected: 09/03/21 13:07

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 13:15 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.04 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 14:30 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.05 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:46 | SC | XEN MID |

Eurofins Xenco, Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Client Sample ID: BF-9

Lab Sample ID: 880-5805-9

Date Collected: 09/03/21 13:08

Matrix: Solid

Date Received: 09/07/21 10:26

| 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 | 7645 | 09/08/21 11:57 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 5 mL | 5 mL | 7670 | 09/09/21 13:36 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 10.01 g | 10 mL | 7612 | 09/07/21 14:13 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | | | 7632 | 09/08/21 15:12 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 5.03 g | 50 mL | 7602 | 09/07/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | | | 7625 | 09/08/21 19:52 | SC | XEN MID |

Laboratory References:

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

Laboratory: Eurofins Xenco, 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 |
|-----------------|-------------|--------|------------|
| 8015B NM | 8015NM Prep | Solid | Total TPH |
| 8021B | 5035 | Solid | Total BTEX |

Method Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B | Volatile Organic Compounds (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.

Laboratory References:

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

Eurofins Xenco, Midland

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: SD Frac Pond 13

Job ID: 880-5805-1
SDG: 20-0107-14

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 880-5805-1 | BF-1 | Solid | 09/03/21 13:00 | 09/07/21 10:26 |
| 880-5805-2 | BF-2 | Solid | 09/03/21 13:01 | 09/07/21 10:26 |
| 880-5805-3 | BF-3 | Solid | 09/03/21 13:02 | 09/07/21 10:26 |
| 880-5805-4 | BF-4 | Solid | 09/03/21 13:03 | 09/07/21 10:26 |
| 880-5805-5 | BF-5 | Solid | 09/03/21 13:04 | 09/07/21 10:26 |
| 880-5805-6 | BF-6 | Solid | 09/03/21 13:05 | 09/07/21 10:26 |
| 880-5805-7 | BF-7 | Solid | 09/03/21 13:06 | 09/07/21 10:26 |
| 880-5805-8 | BF-8 | Solid | 09/03/21 13:07 | 09/07/21 10:26 |
| 880-5805-9 | BF-9 | Solid | 09/03/21 13:08 | 09/07/21 10:26 |

Arson & Associates, Inc.

Environmental Consultants

507 N Marengfeld Ste 202
Midland TX 79701
432-687 0901

Data Reported to

DI 880-5805 Chain of Custody
PO# _____ LAB WORK ORDER# _____
PROJECT LOCATION OR NAME SD Fire Pond 13
LAI PROJECT # AC-2167-14 COLLECTOR DSC
PAGE 1 OF 1



No. 2093
CHAIN-OF-CUSTODY

9/13/2021

| TIME ZONE
Time zone/State | TRRP report?
☐ Yes ☒ No | S=SOIL
W=WATER
A=AIR | P=PAINT
SL=SLUDGE
OT=OTHER | Lab # | Date | Time | Matrix | # of Containers | PRESERVATION | | | | ANALYSES | FIELD NOTES |
|---|---|----------------------------|----------------------------------|-------|---------|------|--------|-----------------|--------------|------------------|---|-----|----------|-------------|
| | | | | | | | | | HCl | HNO ₃ | H ₂ SO ₄ ☐ NaOH ☐ | ICE | | |
| NT/OK | | | | | | | | | | | | | | |
| DF-1 | | | | | 9/13/21 | 1300 | | | | | | | | |
| BF-2 | | | | | | 1301 | | | | | | | | |
| BF-3 | | | | | | 1301 | | | | | | | | |
| BF-4 | | | | | | 1303 | | | | | | | | |
| BF-5 | | | | | | 1304 | | | | | | | | |
| BF-6 | | | | | | 1305 | | | | | | | | |
| BF-7 | | | | | | 1306 | | | | | | | | |
| BF-8 | | | | | | 1307 | | | | | | | | |
| BF-9 | | | | | | 1308 | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |
| RELINQUISHED BY (Signature) _____ DATE/TIME <u>9/17/21</u> <u>10:00</u> RECEIVED BY (Signature) _____
RELINQUISHED BY (Signature) _____ DATE/TIME _____ RECEIVED BY (Signature) _____
RELINQUISHED BY (Signature) _____ DATE/TIME _____ RECEIVED BY (Signature) _____
LABORATORY <u>XEN CO</u> | | | | | | | | | | | | | | |

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-5805-1

SDG Number: 20-0107-14

Login Number: 5805

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

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

Appendix D

Photographs

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021

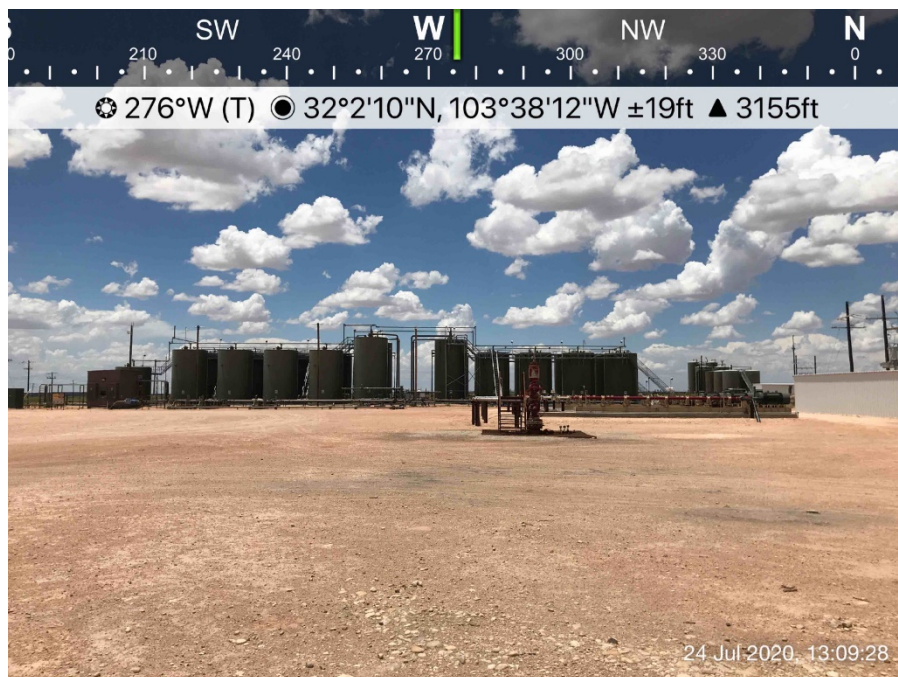


View to the east of the spill area prior to remediation.



View to the southeast of the spill area prior to remediation.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021

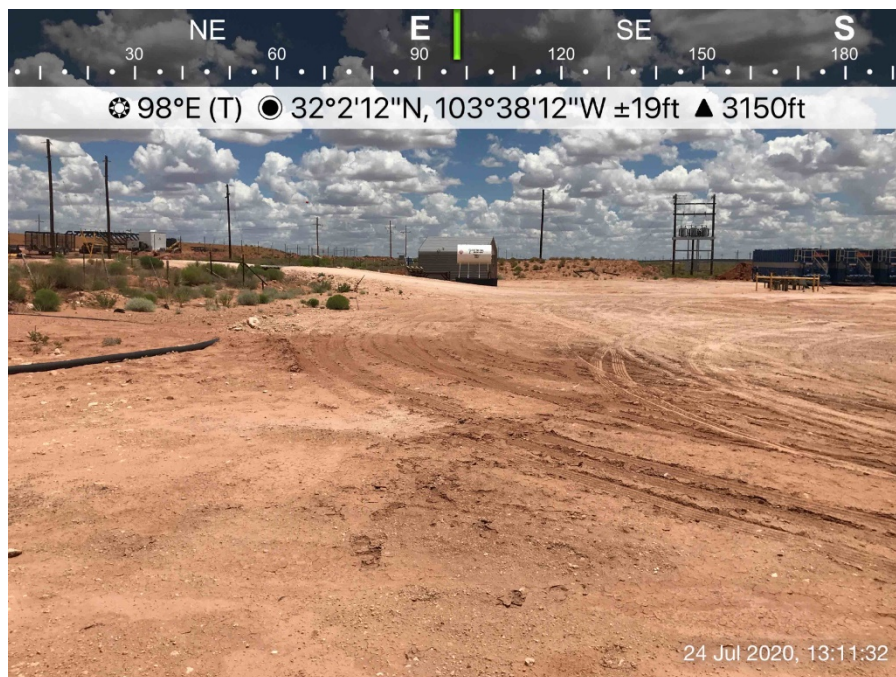


View to the west of the spill area prior to remediation.



View of the equipment to the west of the spill area.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the east of the spill area prior to remediation.



View to the south of the spill area prior to remediation.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the south of the spill area from the frac ponds prior to remediation.



View to the west of the spill area prior to remediation.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north of the spill area including the frac ponds, which are the source of the spill.



View of the ramp leading to the frac ponds, which was removed and replaced with clean soil.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north of the northern 4.1' excavated area.



View to the east of the northern 4.1' excavated area.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north of the northern 2' excavated area.



View to the east of the northern 2' excavated area.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021

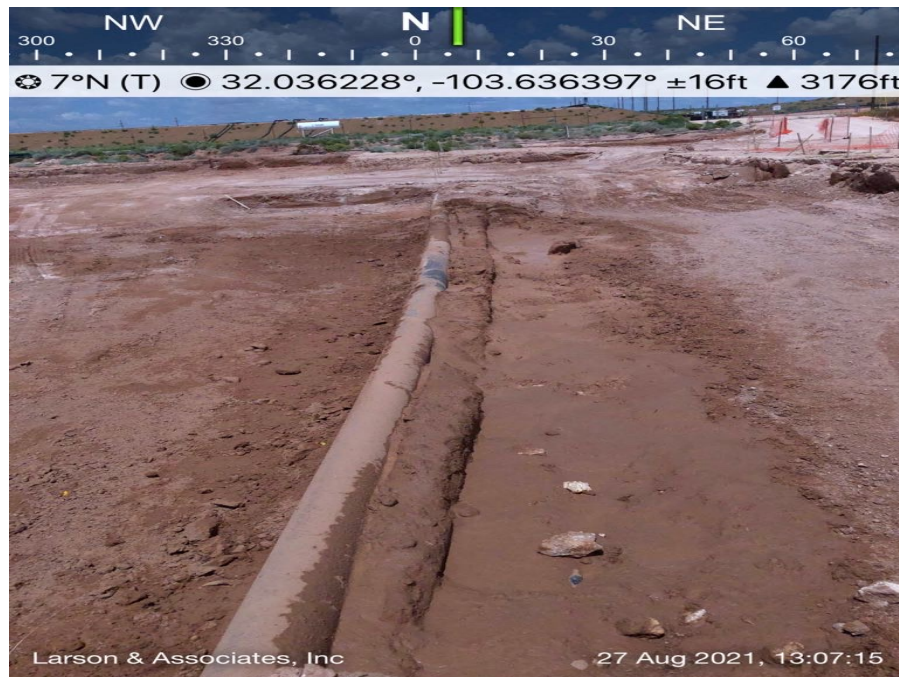


View to the north of the eastern sidewall (4.1') of the most southern portion of the excavation.



View to the north of the eastern sidewall (4.1') of the most southern portion of the excavation.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north of the pipeline (within the southern 4.1' area), which is in the center of the excavation.



View to the southwest of the pipeline and southern sidewall, and includes the southern 4.1' section of the excavation.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north - northwest of the pipeline (within the southern 4.1' area), which is in the center of the excavation.



View to the northwest of the site after being backfilled.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the northwest of the site after being backfilled.



View to the south of the site after being backfilled.

Tracking Number: nCS2003553676
Closure Report
Chevron USA, Inc. Salado Draw 13E Frac Pond
Produced Water Release
October 19, 2021



View to the north of the site after being backfilled.

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 59280

CONDITIONS

| | |
|--|---|
| Operator:
CHEVRON U S A INC
6301 Deauville Blvd
Midland, TX 79706 | OGRID:
4323 |
| | Action Number:
59280 |
| | Action Type:
[C-141] Release Corrective Action (C-141) |

CONDITIONS

| | | |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| chensley | None | 12/6/2021 |