February 7,

2024

Incident ID: NAPP2112649963
Delineation Report and Remediation Plan
NMGSAU 1416, Lea County, New Mexico

Prepared for:

Apache

Apache Corporation
303 Veterans Airpark Drive
Midland, Texas 79705

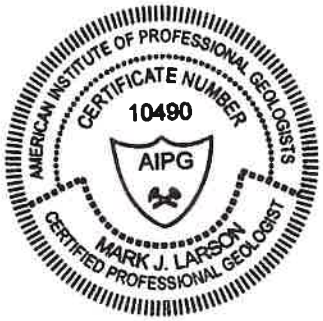
Prepared by:

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Suite 202
Midland, Texas 79701
(432) 687-0901

Mark J Larson
Certified Professional Geologist #10490





LAI Project Number: 21-0119-01

This Page Intentionally Left Blank

Table of Contents

1.0 INTRODUCTION 1
1.1 Background 1
1.2 Physical Setting 1
1.3 Remediation Standards 2
2.0 DELINEATION 2
2.1 Soil Delineation 2
2.2 Groundwater Investigation 3
2.2.1 LNAPL and Depth to Groundwater Measurements 3
2.2.2 LNAPL and Groundwater Sample Analysis 4
3.0 REMEDIATION PLAN 5
3.1 Soil Remediation 5
3.2 LNAPL Remediation 5
3.3 Groundwater Monitoring 5
4.0 REPORTING 6

List of Figures

Figure 1 Topographic Map
Figure 1a Focused Topographic Map
Figure 2 Aerial Map
Figure 2a Focused Aerial Map
Figure 3a Aerial Map Showing Boring Locations
Figure 3b Aerial Map Showing Monitoring Well Locations
Figure 4 Groundwater Potentiometric Surface Map, September 14, 2023

List of Appendices

Appendix A Initial C-141
Appendix B Apache Submittal, July 16, 2021
Appendix C Karst Map
Appendix D Boring Logs and Well Completion Records
Appendix E Laboratory Reports
Appendix F NMSLO Well Permits
Appendix G RX Soil, Inc. Remediation Plan, February 1, 2024

1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this delineation report and remediation plan on behalf of Apache Corporation (Apache) for submittal to the New Mexico Oil Conservation Division (NMOCD) District 1 in Hobbs and Santa Fe, New Mexico. The report presents the results of the investigation and remediation plan for release involving crude oil and produced water from a buried fiberglass flow line associated with the New Mexico Grayburg San Andres Unit (NMGSAU) Well #1416 (Site) located in Unit J (NW/4, SE/4), Section 36, Township 19 South, Range 36 East Lea County, New Mexico. The surface owner is the State of New Mexico administered by the State Land Office (SLO). The geodetic position is North 32.6142911° and West -103.3041812°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

Apache personnel discovered the release on March 25, 2021, and concluded failure of the fiberglass line was the cause for the release of an unknown volume of crude oil and produced water. No fluid was recovered. On May 6, 2021, Apache submitted the initial C-141 to NMOCD District 1 in Hobbs, New Mexico. Apache thought the release to be minor (less than 5 barrels) but when the volume of the release was unknown the release was reported as major causing the delayed notification. On April 29, 2021, Apache provided email notification to NMOCD (Jim Griswold and Mike Bratcher) after visually observing hydrocarbon staining with depth on the excavation sidewalls that confirmed a reportable quantity release. NMOCD assigned the release incident ID NAPP2112649963. Appendix A presents the initial C-141.

On July 16, 2021, Apache submitted the initial investigation data and a remediation plan to NMOCD proposing in-situ soil remediation by RX Soil, Inc. (RX), Fort Worth, Texas, for total petroleum hydrocarbons (TPH) in soil. NMOCD requested additional investigation prior to approving the remediation plan. Appendix B presents the Apache submittal on July 16, 2021.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,585 feet above mean sea level (msl).
- The surface topography slopes gently to the southeast.
- No surface water features are located within 1,000 feet of the Site.
- Karst potential is low.
- Soil is designated as “Berino-Cacique fine sandy loam,” consisting of eight (8) inches of fine sandy loam underlain by twenty (20) inches of sandy clay loam and ten (1) inches of cemented material (caliche) in descending order.
- The surface geology consists of eolian and piedmont deposits (Holocene and lower Pleistocene).
- Groundwater occurs at about 40 feet below ground surface (bgs) based on depth to groundwater measured in three (3) monitoring wells (MW-1, MW-2, and MW-3).

Figure 1a presents a focused topographic map. Figure 2a presents a focused aerial map. Appendix C presents the karst map.

1.3 Remediation Standards

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

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 100 mg/Kg
- Chloride 600 mg/Kg

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

2.0 DELINEATION

2.1 Soil Delineation

Between May 24, 2021 and September 7, 2023, LAI personnel and Scarborough Drilling, Inc. (SDI), a State of New Mexico licensed water well driller (WD-1188), conducted investigations to delineate the release. SDI used an air rotary drilling rig to collect soil samples at the source for the release (Source) and at eleven (11) locations around the Source (SP-1 through SP-11). Samples from the Source were collected every five (5) feet beginning at fifteen (15) feet bgs and terminating at about thirty (30) feet bgs. Samples were collected from SP-1 through SP-11 were collected at one (1) foot bgs and every five (5) feet to a maximum depth of thirty-five (35) feet bgs. Boring logs were prepared based on the Unified Soil Classification System (USCS) in ASTM D2487-17. Landpoint, a State of New Mexico Licensed Land Surveyor (PLS), surveyed the borings for location and elevation. The samples were delivered under preservation and chain of custody (COC) to Eurofins Xenco (Xenco) Laboratories, a national environmental laboratory accreditation conference (NELAC) accredited laboratory, in Midland, Texas, which analyzed the samples for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA SW-846 Method 8021B, total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35), by EPA SW-846 Method 8015 and chloride by EPA Method 300. Table 1 presents the soil sample analytical data summary. Figure 3 presents an aerial drawing showing the boring locations. Appendix D presents the boring logs. Appendix E laboratory reports.

Xenco reported concentrations of benzene and BTEX constituents in all samples below the NMOCD closure limits of 10 milligrams per kilogram (mg/Kg) and 50 mg/Kg, respectively. Concentrations of TPH and chloride were below the NMOCD closure limits in all samples from borings SP-1, SP-2, SP-3, SP-10, and SP-11. TPH concentrations exceeded the NMOCD closure limit of 100 mg/Kg in Source samples from 15 feet (1,030 mg/Kg), 20 feet (511 mg/Kg), 25 feet (790 mg/Kg) and 30 feet (662 mg/Kg).

TPH concentrations exceeded the NMOCD closure limit of 100 mg/Kg in the remaining samples:

Location	Sample Depth (Feet bgs)	TPH, mg/Kg
SP-4	1	1,840
	5	122
SP-5	10	1,480
	15	1,520
	20	221

	35	722
SP-6	1	481
SP-7	1	1,600
	5	250
	15	908
	20	5,250
	25	4,900
	30	1,630
	35	539
SP-8	10	7,500
	15	6,930
	20	6,940
	25	6,850
	30	2,130
	35	1,700
SP-9	10	8,130
	15	107
	25	120

Chloride in the Source samples exceeded the NMOCD closure limit (600 mg/Kg) in samples from 15 feet (618 mg/Kg), 20 feet (790 mg/Kg) and 25 feet (788 mg/Kg). Chloride also exceeded the NMOCD closure limit (600 mg/Kg) in samples from location SP-9 at 10 feet (615 mg/Kg) and 20 feet (784 mg/Kg).

2.2 Groundwater Investigation

On November 10, 2021 (MW-1) and September 6, 2023 (MW-2 and MW-3), SDI used the air rotary rig to drill three (3) monitoring wells between 54.38 feet bgs (MW-1) and 55.65 feet bgs (MW-3). The wells were completed according to ASTM D5092-10 (*Standard Practice for Design and Installation of Groundwater Monitoring Wells*) with about 20 feet of 0.010-inch factory-slotted 2-inch schedule 40 screw-threaded positioned below and above the groundwater level observed during drilling. Graded silica sand as placed from boring around the screen from the bottom to about two (2) feet above the screen. The remainer of the annulus above the sand was filled with bentonite pellets that were hydrated with potable water. The wells are secured with locking steel covers anchored in concrete. Landpoint surveyed the wells for location and elevation, including ground surface and top of casing (TOC). Permits for drilling the monitoring wells were granted by surface owner (NMSLO). Table 2 presents the monitoring well completion details and groundwater/LNAPL gauging summary. Figure 3b presents a focused aerial drawing showing the monitoring well locations. Appendix D presents the well completion records. Appendix F presents the NMSLO well permits.

2.2.1 LNAPL and Depth to Groundwater Measurements

Light nonaqueous phase liquid (LANAPL) in the form of crude oil was gauged in monitoring well MW-1 on December 21, 2021 (2.73 feet), July 19, 2023 (2.82 feet), and September 14, 2023 (2.76) feet. LNAPL was not observed in monitoring wells MW-2 and MW-3.

On September 14, 2023, groundwater was gauged from top of PVC well casing (TOC) at 42.20 feet (MW-1). 39.99 feet (MW-2) and 38.96 feet (MW-3). The groundwater elevation ranged from 3,549.27 feet above mean sea level (MSL) at MW-3 (up gradient) to 3,547.27 feet above MSL at MW-2 (down

gradient). The groundwater surface at MW-1 was slightly depressed from LNAPL with the groundwater elevation calculated at 3,545.98 feet above MSL. The apparent groundwater flow direction was from northwest (upgradient) to southeast (down gradient) at a gradient of about 0.01 feet per foot. Figure 4 presents a groundwater potentiometric map for September 14, 2023.

2.2.2 LNAPL and Groundwater Sample Analysis

On July 19, 2023, LAI personnel collected a sample of LNAPL from monitoring well MW-1 for fingerprint (source) analysis. The LNAPL sample was delivered under preservation and chain of custody to Intertek Laboratories (Intertek), Elmendorf, Texas, which analyzed the sample for detailed hydrocarbon analysis by method ASTM D 7900. Intertek confirmed the sample to be weather crude oil due to the lack of aromatic (light) hydrocarbons.

On December 21, 2021, LAI personnel collected a groundwater sample from monitoring well MW-1 after removing approximately 3-casing volumes of groundwater/LNAPL. Eurofins Xenco Laboratories (Xenco) analyzed the sample for BTEX by EPA SW846 Method 8021B, TPH by Method 8015 including gasoline range organics (C6 to C12), diesel ranged organics (>C12 to C28) and oil range organics (>C28 to C35), and chloride by EPA Method 300. Xenco reported concentrations of BTEX compounds below the analytical method reporting limits (RL) and State of New Mexico Water Quality Control Commission (WQCC) human health standards for benzene of 0.01 milligrams per liter (mg/L), toluene and ethylbenzene (0.75 mg/L), and xylenes (0.62 mg/L). TPH was reported at 3,560 mg/L and likely cross-contaminated from LNAPL. There is no WQCC human health standard for TPH in groundwater. Chloride was reported above the WQCC domestic water quality standard (250 mg/L) at 1,710 mg/L.

On September 14, 2023, LAI personnel collected groundwater samples from monitoring wells MW-2 and MW-3. The samples were collected by the low stress or low flow method following EPA protocol (EQASOP-GW4, Revision 4, September 19, 2017) where an environmental pump is submerged near the middle of the water column and the well is pumped at a low flow rate until environmental parameters stabilize. Groundwater samples were collected from the discharge of dedicated disposable Tygon® tubing. The tubing was discarded after each use and the pump was thoroughly cleaned with a solution of potable water and laboratory grade detergent (Alconox®) and rinsed with distilled water. The samples were transferred to labeled laboratory containers and delivered under chain of custody control and preservation to Xenco which analyzed the samples for BTEX (Method 8260D), chloride (Method 300) and total dissolved solids (TDS) by method SM 2540C. A duplicate sample was collected from MW-3 for laboratory quality assurance and quality control (QA/QC).

Xenco reported concentrations of BTEX compounds below the analytical method reporting limits (RL) and WQCC human health standards. Chloride and TDS were reported above the WQCC domestic water quality standards of 300 mg/L and 1,000 mg/L, respectively, in the sample from upgradient and background monitoring well MW-3 (588 mg/L and 1,490 mg/L). Chloride and TDS were also reported above the WQCC domestic water quality standards and background concentrations in downgradient monitoring well MW-2 (1,270 mg/L and 3,020 mg/L). The duplicate sample from MW-3 was consistent with the original sample from MW-3 with chloride and TDS reported at 361 mg/L and 1,490 mg/L, respectively. Table 2 presents the groundwater sample analytical data summary. Appendix D presents the laboratory reports.

3.0 REMEDIATION PLAN

3.1 Soil Remediation

Apache proposes to utilize RX for in-situ remediation of the TPH impacted soil. RX proposes to utilize its treatment processes in the area of contamination exceeding the NMOCD closure standards in accordance with the RX remediation plan in Appendix F.

3.2 LNAPL Recovery

LNAPL remediation will be performed using high vacuum extraction to remove total fluids (LNAPL and groundwater) and soil vapors using monitoring well MW-1 and extraction well (RW-1) installed near the Source. Liquid (LNAPL and groundwater) and vapor will be extracted using a truck mounted soil vapor extraction (SVE) system operated by EcoVac®, Oklahoma City, Oklahoma. The nominal radius of influence (ROI) of the EcoVac® system is about 150 feet with air flow between about 180 and 200 cubic feet per minute (CFM). The EcoVac® system has an onboard tank for containing fluid. Volatile organic vapors will be managed using an internal combustion engine augmented with propane for vapor destruction. An example from a near-by Site (January 2022) showed the following results:

Duration: 34.25 Hours
Air Flow: 180 - 200 CFM
Organic Vapor (Air) Concentration: >100,000 ppmv (beginning) to 48,000 ppmv (ending)
Average ROI: 220 feet
Volume Recovered:

- Vapor recovered: 2,662 lbs.
- Vapor Equivalent gallons: 439.2 gal.
- LNAPL recovered: 260 gal.
- Groundwater recovered: 709 gal.
- Total hydrocarbons recovered: 699.2 gal.

The EcoVac® process will be performed over a period of three (3) days and recovered liquid will be disposed in an NMOCD permitted Class II saltwater disposal (SWD) well. LNAPL will be gauged weekly for one (1) month in monitoring well MW-1 and the extraction well (RW-1) to evaluate the results of the SVE process. Additional SVE extraction may be performed as deemed necessary fowling LNAPL gauging.

3.3 Groundwater Monitoring

Groundwater monitoring will be performed on a semi-annual (twice yearly) schedule for two (2) years or eight (8) consecutive quarters following soil and LNAPL remediation. Three (3) monitoring wells (MW-1, MW-2, and MW-3) and the extraction well (RW-1) will be gauged for depth to groundwater and groundwater samples will be collected using the low stress or low flow method following EPA protocol (EQASOP-GW4, Revision 4, September 19, 2017) with samples collected from the discharge of dedicated disposable Tygon® tubing. The tubing was discarded after each use and the pump was thoroughly cleaned with a solution of potable water and laboratory grade detergent (Alconox®) and rinsed with distilled water. The samples were transferred to labeled laboratory containers and delivered under chain of custody control and preservation to Xenco which will analyze the samples for BTEX (Method 8260D), chloride (Method 300) and total dissolved solids (TDS) by method SM 2540C. A duplicate sample will be collected for QA/QC protocol. Apache will provide at least seven (7) days' notice to NMOCD prior to each groundwater monitoring event.

4.0 REPORTING

The soil and LNAPL remediation results will be submitted to NMOCD in a closure report following completion of the remediation activities. Semi-annual groundwater monitoring results will be submitted to NMOCD in an annual report.

Figures

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
Source	**32°36'51.366"N**	15	05/24/2021	In-Situ	**0.10100**	**1.3**	**83.4**	**838**	**111**	**1,030**	**618**
	103°18'16.138"W	20	05/24/2021	In-Situ	**0.33800**	**3.48**	<49.9	**452**	**59.1**	**511**	**790**
		25	05/24/2021	In-Situ	**0.27800**	**3.29**	**73.9**	**634**	**82.1**	**790**	**788**
		30	05/25/2021	In-Situ	**0.14800**	**2.07**	<49.9	**590**	**72.2**	**662**	288
SP-1	**32°36'51.052"N**	1	05/24/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	56.8
	103°18'15.949"W	5	05/24/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	13.9
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	10.3
		15	05/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	8.45
		20	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	5.6
		25	05/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	10.1
SP-2	**32°36'51.403"N**	1	05/24/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	12.9
	103°18'16.588"W	5	05/24/2021	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	5.83
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10.3
		15	05/24/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	5.09
		20	05/24/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<4.98
		25	05/24/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	5.64
SP-3	**32°36'51.843"N**	1	05/24/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	7.42
	103°18'16.365"W	5	05/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	5.42
		10	05/24/2021	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	17.8
		15	05/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	42
		20	05/24/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	63.3
		25	05/24/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	86.2

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
SP-4	**32°36'51.548"N**	1	05/24/2021	In-Situ	<0.00202	<0.00403	<49.9	**1,840**	<49.9	**1,840**	224
	103°18'15.824"W	5	05/24/2021	In-Situ	<0.00199	<0.00398	<50.0	**122**	<50.0	**122**	50.4
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	24.8
		15	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	31.7
		20	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	54.6
		25	05/24/2021	In-Situ	**0.00356**	<0.00396	<49.9	<49.9	<49.9	<49.9	75
SP-5	**32°36'51.530"N**	1	09/05/2023	In-Situ	<0.00199	<0.00398	<50.1	**92.4**	<50.1	**92.4**	144
	103°18'16.154"W	5	09/05/2023	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	253
		10	09/05/2023	In-Situ	<0.00201	**0.01640**	<50.2	**1,480**	<50.2	**1,480**	278
		15	09/05/2023	In-Situ	<0.00200	**0.01770**	**54.8**	**1,470**	<50.3	**1,520**	293
		20	09/05/2023	In-Situ	<0.00199	<0.00398	<50.5	**221**	<50.5	**221**	578
		25	09/05/2023	In-Situ	<0.00198	<0.00397	<50.5	<50.5	<50.5	<50.5	437
		30	09/05/2023	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	339
		35	09/05/2023	In-Situ	<0.00200	<0.00400	<49.6	**722**	<49.6	**722**	363
SP-6	**32°36'51.153"N**	1	09/05/2023	In-Situ	<0.00198	<0.00396	<49.8	**481**	<49.8	**481**	249
	103°18'16.206"W	5	09/05/2023	In-Situ	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	508
		10	09/05/2023	In-Situ	<0.00202	<0.00404	<50.1	<50.1	<50.1	<50.1	337
		15	09/05/2023	In-Situ	<0.00202	<0.00403	<50.5	<50.5	<50.5	<50.5	310
		20	09/05/2023	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	487
		25	09/05/2023	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	556
		30	09/05/2023	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	255
		35	09/05/2023	In-Situ	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	159
SP-7	**32°36'51.343"N**	1	09/05/2023	In-Situ	<0.0497	<0.0994	**447**	**1,150**	<50.1	**1,600**	157
	103°18'16.058"W	5	09/05/2023	In-Situ	<0.0495	<0.0990	<50.5	**250**	<50.5	**250**	165

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
		10	09/05/2023	In-Situ	**0.00236**	<0.00398	<50.4	**56.9**	<50.4	**56.9**	431
		15	09/05/2023	In-Situ	<0.0501	<0.100	<49.9	**908**	<49.9	**908**	233
		20	09/05/2023	In-Situ	**0.19200**	**12.4**	**616**	**4,630**	<250	**5,250**	255
		25	09/05/2023	In-Situ	**0.28900**	**11.4**	**460**	**4,440**	<248	**4,900**	462
		30	09/05/2023	In-Situ	**0.26000**	**2.13**	**90.0**	**1,540**	<49.6	**1,630**	484
		35	09/05/2023	In-Situ	**0.06910**	**0.13000**	<50.3	**539**	<50.3	**539**	237
SP-8	**32°36'51.478"N**	1	09/05/2023	In-Situ	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	154
	103°18'16.347"W	5	09/05/2023	In-Situ	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	315
		10	09/05/2023	In-Situ	**0.06930**	**8.12**	**1,270**	**6,230**	<251	**7,500**	114
		15	09/05/2023	In-Situ	**0.14100**	**13.1**	**1,270**	**5,660**	<250	**6,930**	133
		20	09/05/2023	In-Situ	**0.30500**	**10.4**	**1,020**	**5,920**	<249	**6,940**	183
		25	09/05/2023	In-Situ	**0.64100**	**12.8**	**927**	**5,920**	<250	**6,850**	198
		30	09/05/2023	In-Situ	**0.06430**	**2.74**	**166**	**1,820**	**139**	**2,130**	168
		35	09/05/2023	In-Situ	<0.0504	**2.24**	**78.6**	**1,620**	<50.3	**1,700**	197
SP-9	**32°36'51.658"N**	0	09/07/2023	In-Situ	<0.00200	<0.00400	<50.1	<50.1	<50.1	<50.1	80.1
	103°18'16.327"W	5	09/07/2023	In-Situ	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	241
		10	09/07/2023	In-Situ	**0.18400**	**10.2**	**1,400**	**6,290**	**438**	**8,130**	**615**
		15	09/07/2023	In-Situ	<0.0200	<0.0400	<50.5	**107**	<50.5	**107**	450
		20	09/07/2023	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**784**
		25	09/07/2023	In-Situ	<0.0198	<0.0397	<50.0	**120**	<50.0	**120**	550
SP-10	**32°36'51.527"N**	0	09/07/2023	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	245
	103°18'15.936"W	5	09/07/2023	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	118
		10	09/07/2023	In-Situ	<0.00200	<0.00401	<50.2	<50.2	<50.2	<50.2	85.1
		15	09/07/2023	In-Situ	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	104
		20	09/07/2023	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	164

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					***10***	***50***				***100***	***600***
SP-11	**32°36'51.392"N**	0	09/07/2023	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	136
	103°18'16.442"W	5	09/07/2023	In-Situ	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	122
		10	09/07/2023	In-Situ	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	100
		15	09/07/2023	In-Situ	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	87.7
		20	09/07/2023	In-Situ	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	72.7

Notes:

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

Depth in feet below ground surface (bgs)

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

<: indicates parameter concentration is less than analytical method reporting limit

Bold and Highlighted exceeds NMOCD delineation limits

Table 1
Incident No NAPP2112649963
Monitoring Well Completion and Gauging Summary
Apache Corportaion, NMGSAU 1416
Lea County, New Mexico

Well Information									Groundwater Data				
Well No.	Date Drilled	Drilled Depth (Feet BGS)	Well Depth (Feet TOC)	Well Diameter (Inches)	Screen Interval (Feet BGS)	Casing Stickup (Feet)	Surface Elevation (Feet AMSL)	TOC Elevation (Feet AMSL)	Date Gauged	Depth to Product Feet (TOC)	Depth to Water Feet (TOC)	Product Thickness (Feet)	Groundwater Elevation (Feet AMSL)
MW-1	11/10/2021	55.00	54.38	2	33.88 - 53.88	2.95	3,585.04	3,587.99	12/21/2021	38.84	41.57	2.73	*3,546.61
									07/19/2023	39.25	42.07	2.82	*3,546.12
									09/14/2023	39.44	42.20	2.76	*3,545.98
MW-2	09/06/2023	56.00	55.47	2	35.03 - 54.98	2.91	3,584.32	3,587.23	09/07/2023	--	39.95	--	3,547.28
									09/14/2023	Sheen	39.99	Sheen	3,547.24
MW-3	09/06/2023	56.00	55.65	2	35.20 - 55.16	2.98	3,585.25	3,588.23	09/07/2023	--	38.93	--	3,549.30
									09/14/2023	--	38.96	--	3,549.27

Notes: Monitoring wells installed by Scarborough Drilling, Inc., Lamesa, Texas with 2 inch schedule 40 PVC casing and screen
bgs: below ground surface
TOC: top of casing
AMSL: denotes elevation in feet above mean sea level

Table 2
Groundwater Sample Organic and Inorganic Analytical Data Summary
Apache Corporation, NMGSAU 1416
Lea County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C10 (mg/L)	>C10-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)	TDS (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	--	--	--	--	****250**	****1,000**
MW-1	12/21/2021	<0.200	0.391	0.221	<0.400	1,350	2,210	<459	3,560	**1,710**	--
MW-2	09/14/2023	<0.00200	0.00214	<0.00200	<0.00400	--	--	--	--	**1,270**	**3,020**
MW-3	09/14/2023	0.0033	<0.00200	<0.00200	<0.00400	--	--	--	--	**588**	**1,490**
Dup-1 (MW-3)	09/14/2023	0.00357	<0.00200	<0.00200	<0.00400	--	--	--	--	**361**	**1,490**

Notes: Analysis performed by Eurofins - Xenco (Xenco) Laboratories, Midland, Texas, by EPA SW-846 Method 8021B (BTEX), Method 8015M (TPH), Method 300 (chloride), and Method SM 2540C (TDS)
All values reported in milligrams per liter (mg/L) equivelent to parts per million (ppm)
-- No data available
< values - denootes concentration is less than method reporting limit (RL).
* - Human health standard
** - Domestic water quality standard
Bold and highlighted denotes analyte concentration exceeds NMWQCC domestic water quality standard

Tables

Page 18 of 510

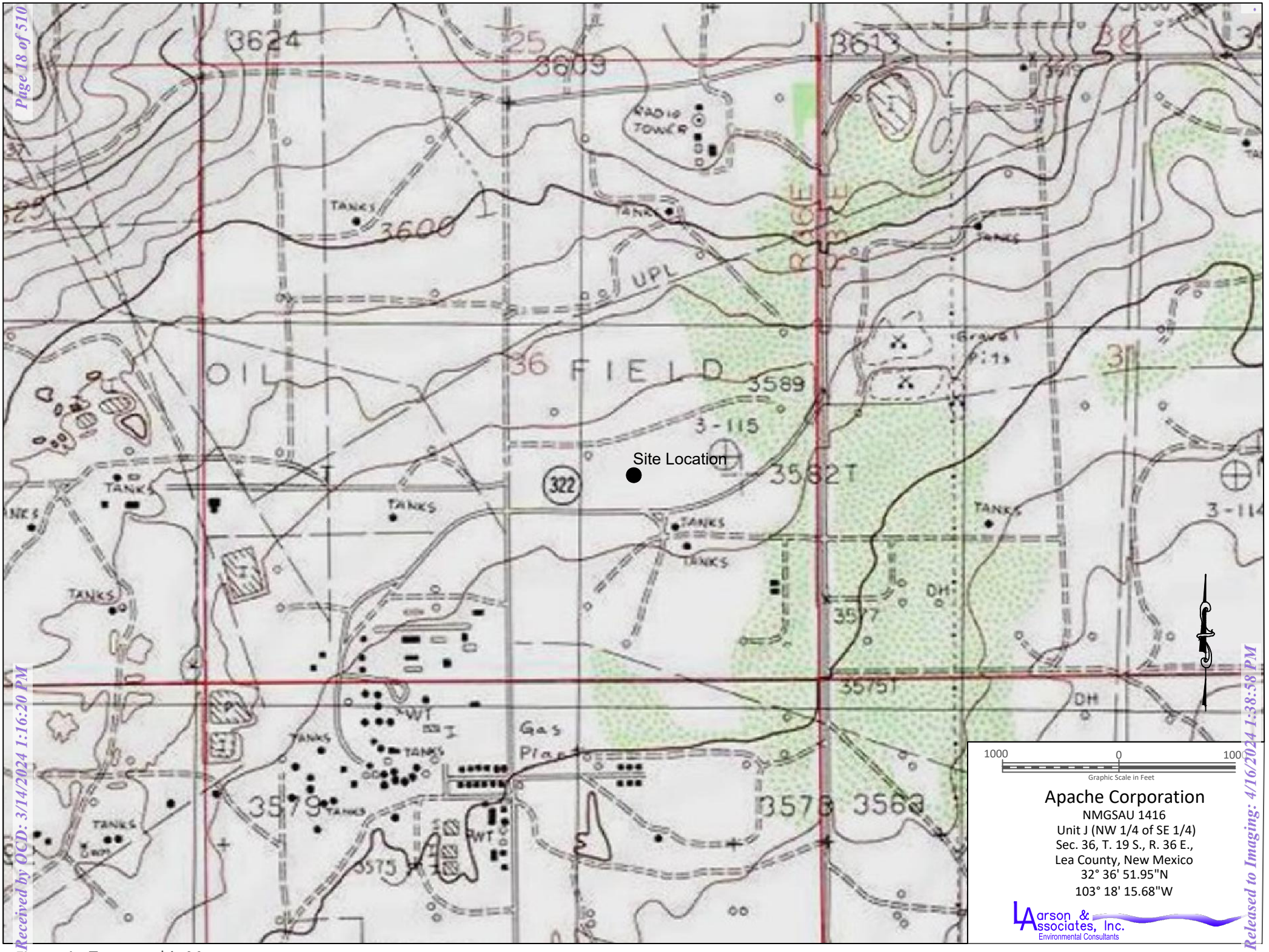
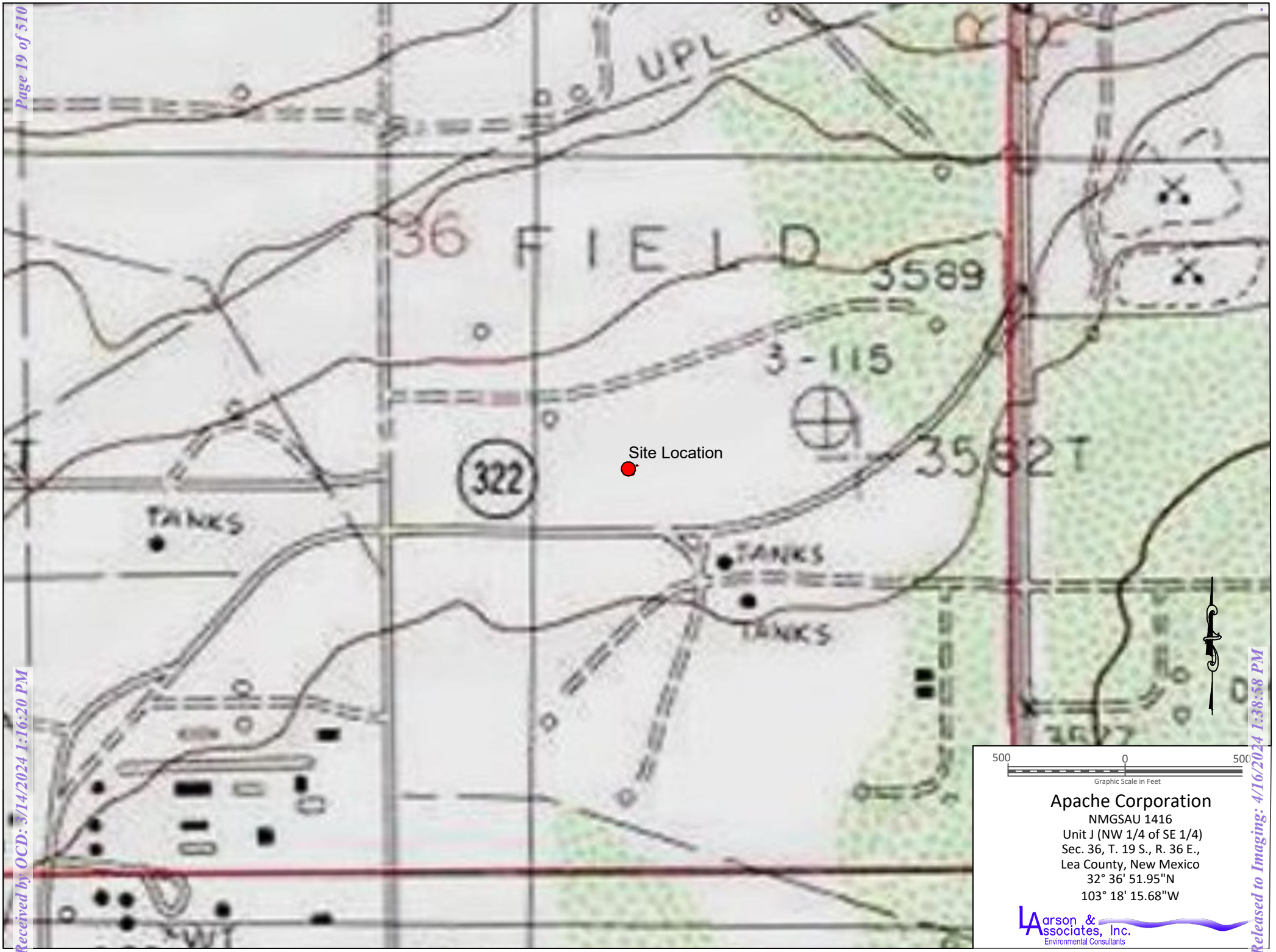


Figure 1 - Topographic Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 19 of 510



Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Figure 1a - Focused Topographic Map

Page 20 of 510

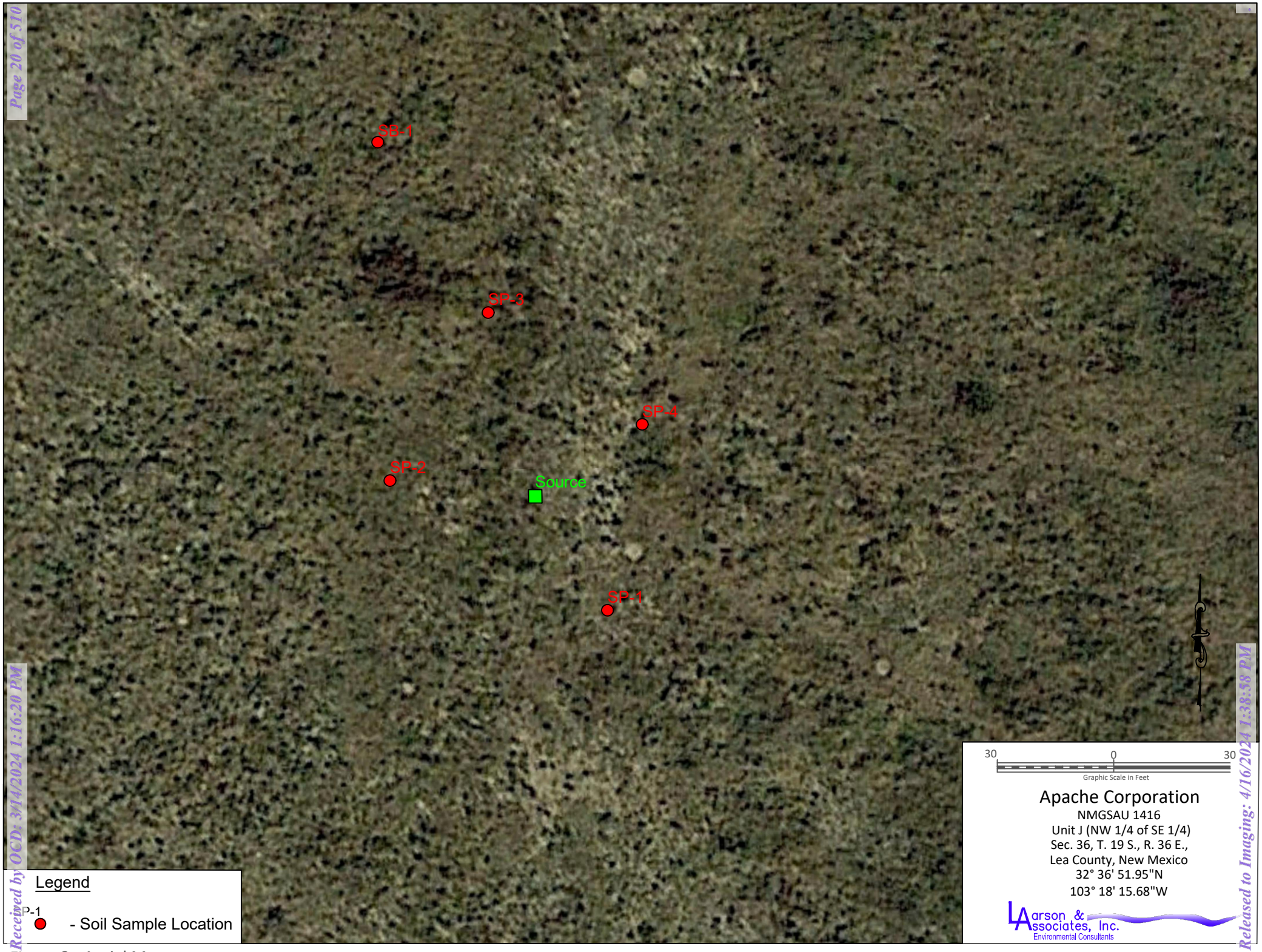


Figure 2 - Aerial Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 21 of 510

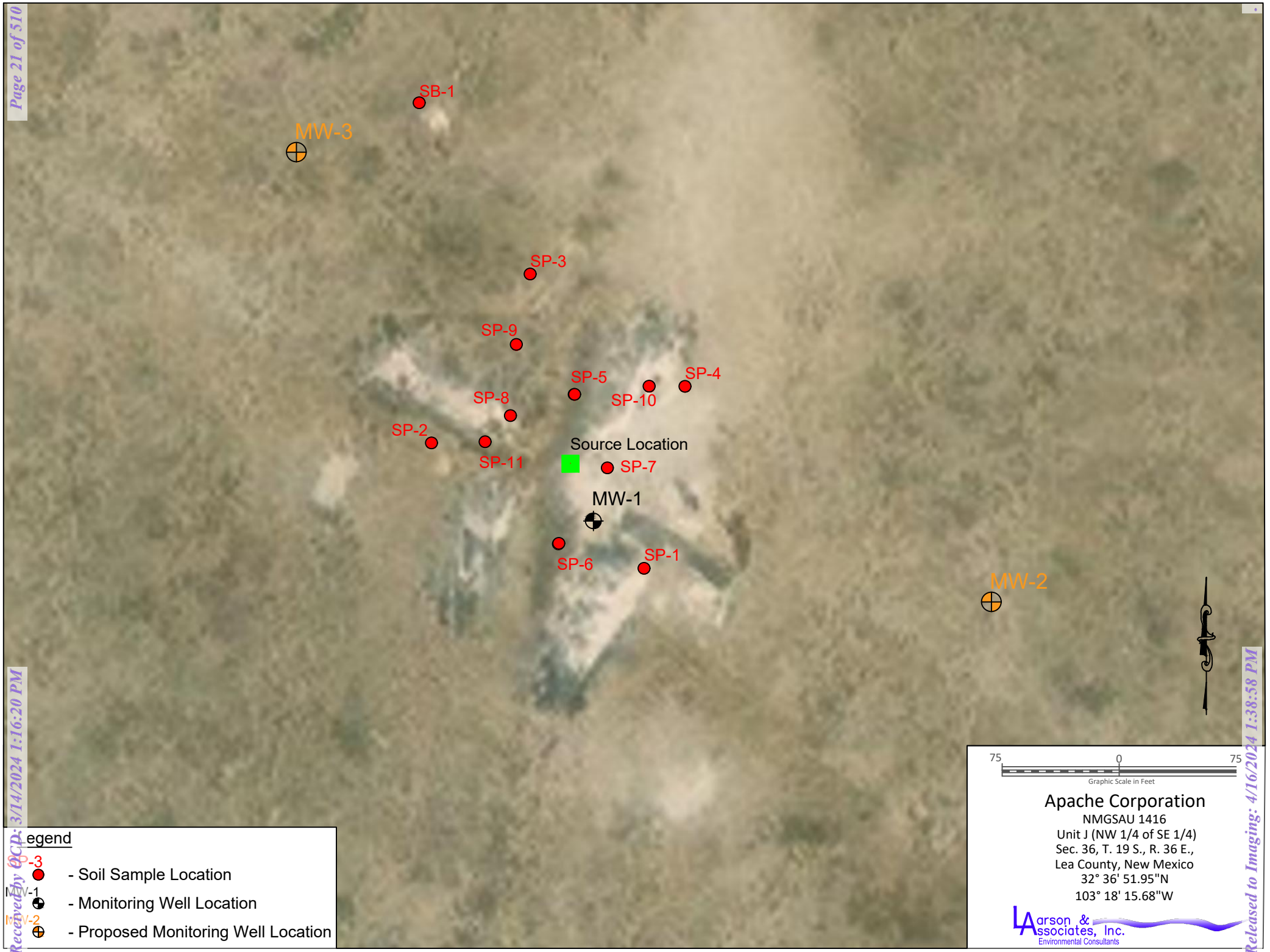
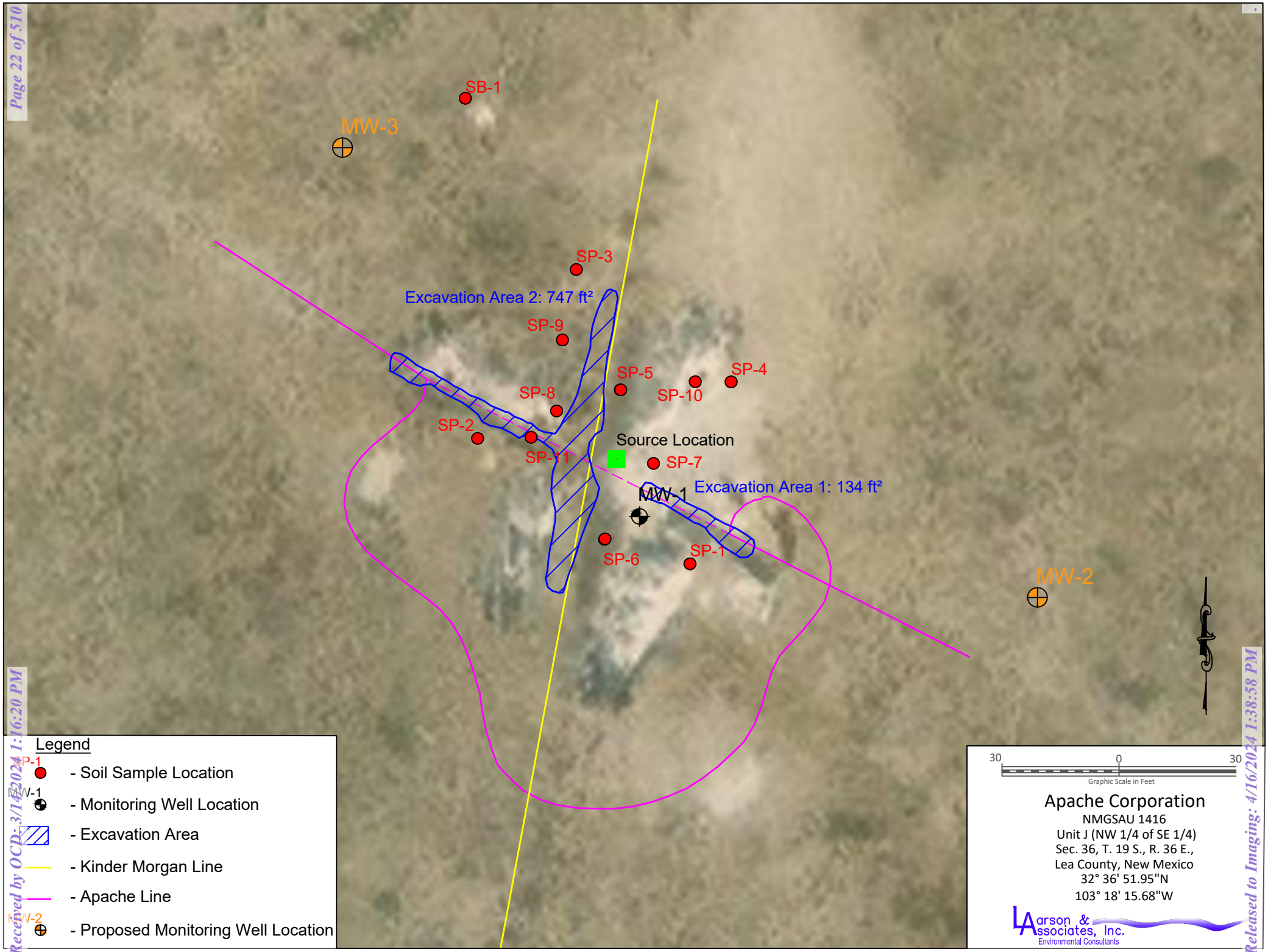


Figure 2a - Focused Aerial Map

Received by OCD: 3/14/2024 1:16:20 PM
Released to Imaging: 4/16/2024 1:38:58 PM

Page 22 of 510



Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Figure 3a - Focused Aerial Map Showing Excavation Areas

Page 23 of 510



Figure 3b - Focused Aerial Map Showing Monitoring Well Locations

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 24 of 510

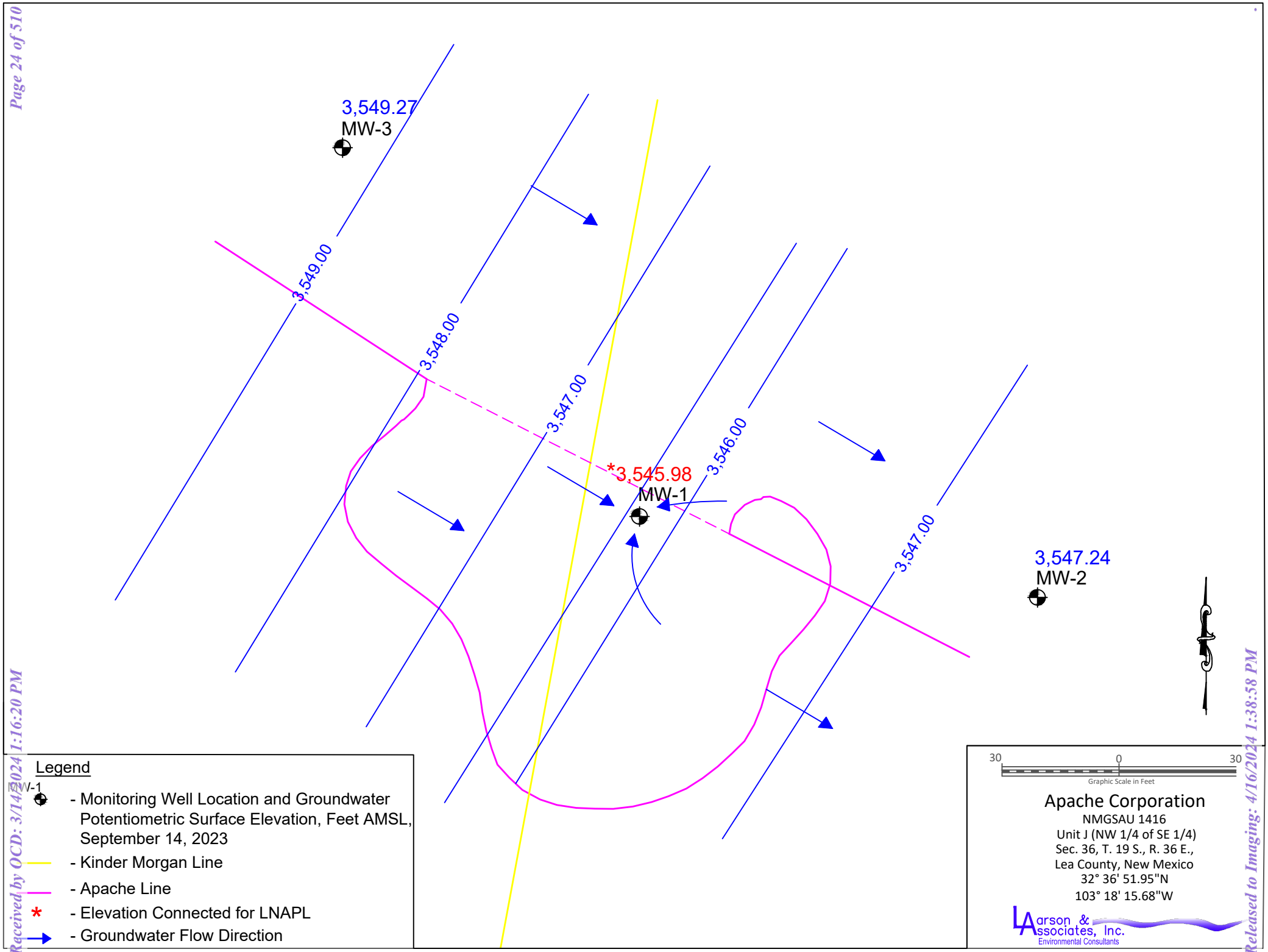


Figure 4 - Groundwater Potentiometric Surface Map, September 14, 2023

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

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	NAPP2112649963
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Apache Corporation	OGRID 873
Contact Name Larry Baker	Contact Telephone 432-631-6982
Contact email larry.baker@apachecorp.com	Incident # *(assigned by OCD)*
Contact mailing address 303 Veterans Airpark Lane Midland, Texas	

Location of Release Source

Latitude 32.6142911 Longitude -103.3041812
(NAD 83 in decimal degrees to 5 decimal places)

Site Name NMGSAU 1416	Site Type Oil
Date Release Discovered 3 /25/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	36	19S	36E	Lea

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

Nature and Volume of Release

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

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

Cause of Release A buried fiberglass flow line failed resulting in the loss of fluid.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2112649963
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The release is of an unknown volume

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Immediate notice was not given due to initial assessment of release was thought to be under 5 barrels. During the line repair visual staining of hydrocarbon with depth suggested a reportable volume. Larry Baker notified Jim Griswold and Mike Bratcher on 4/29/2021 about the change via email.

Initial Response

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

☑ The source of the release has been stopped.
☑ The impacted area has been secured to protect human health and the environment.
☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Larry Baker Title: Environmental Tech. Sr.

Signature: Larry Baker Date: 5/6/2021

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: Ramona Marcus Date: 5/13/2021

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 27207

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
APACHE CORPORATION 303 Veterans Airpark Ln #1000 Midland, TX79705	873	27207	C-141

OCD Reviewer	Condition
rmarcus	None

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
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: Larry Baker Title: Environmental Specialist Sr.

Signature: Larry Baker Date: 3/14/2024

email: larry.baker@apachecorp.com Telephone: 432-250-8384

OCD Only

Received by: _____ Date: _____

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

Signature: Michael Buchanan Date: 04/16/2024

Appendix B

Apache Submittal, July 16, 2021

July 14, 2021

NMOCD Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Remediation Plan
Apache Corporation
NMGSAU 1416
nAPP2112649963

RXSoil, Inc. is pleased to submit the remediation plan for the on-site remediation of impacted soil for the above release in New Mexico.

Sincerely,

Jace Caraway
Chief Operating Officer
RXSoil, Inc.
(940) 210-2051

Zach Robbins
Technical and Engineering Analyst
RXSoil, Inc.
(210) 400-7645

Table of Contents

I. Introduction 3
II. Site Assessment/Characterization 3
III. Remediation 3
IV. Restoration, Reclamation and Re-vegetation 4

Figures

1. Vicinity Map 5
2. Site Overview 6
3. Hydrology Map 7

Appendix

A. C-141 8
B. Larson & Associates Administrative Summary 12

I. Introduction

On behalf of Apache Corporation ("Apache"), RXSoil, Inc. ("RXSoil") has prepared this work plan that describes remediation of the release of produced water and crude oil at the NMGSAU 1416.

The release was discovered on 3/25/2021 in Unit Letter J, Section 36, Township 19S, Range 36E (see *Figure 1* for Vicinity Map) at approximate coordinates 32.61429, -103.30418. It was reported that an unknown amount of crude oil produced water was released. The C-141 is given as *Appendix A*.

II. Site Assessment/Characterization

1. **Site Map** – See *Figure 2*
2. **Depth to ground water** – Remediation standards for <50 feet will be used on this remediation project, based on the borings described in *Appendix B* that encountered groundwater at 35.3 feet BGS.
3. **Wellhead protection area** – There are no known wellheads in the area.
4. **Distance to nearest significant watercourse** – There is no significant watercourse within a half-mile of any horizontal boundary of the release (see *Figure 3*).
5. **Soil/waste characteristics** – Soil samples were collected from five (5) borehole locations. Samples from location "Source" and "SP4" tested above Table 1 thresholds at deepest depths of 30' BGS and 5' BGS, respectively. Full report of soil characteristics can be seen in *Appendix B* "Administrative Summary and Path Forward for NMGSAU #1416, Lea County, New Mexico".

III. Remediation Plan

Due to a buried 20" active gas line running through the area of interest, a full excavation would pose a significant safety risk. RXSoil is proposing a treatment using RXBiotics, RXSoil's naturally occurring, non-genetically modified bioremediation agent to greatly reduce the hydrocarbon concentration in the described affected areas without the need to destabilize the 20" active gas line.

Using the investigative report from Larson & Associates, Inc., the "source" and SP-4 locations were identified as contaminated. "Source" had contamination to a depth of 30' BGS and SP-4 had contamination to a depth of 5' BGS. SP-1 through SP-3 tested below threshold for all contaminants. RXSoil is assuming that each contaminated sample point has impacted soils that will be treated within a radius of 15' from the two contaminated sample points.

Under proper approvals from the pipeline owners, RXSoil will drill a grid of six borings to the depth of contamination stated above for each contaminated area. Slotted or mesh-screen well casings will be installed and stabilized in each hole. A delivery system will be installed within the casing. A solution of RXBiotics, RXSoil's naturally occurring, non-genetically modified blend of bioremediation microbes, will be used to reduce the total petroleum hydrocarbon (TPH) levels in the soil.

Following treatment, all infrastructure will be removed, and the borings will be backfilled per regulatory requirements.

Approximately 90 days following treatment, samples will be collected. RXSoil is proposing collecting remediation samples that represent no more than 100 cubic yards of soil. For example, the volume of soil in a circle with radius of 15' and depth of 30' holds approximately 800 cubic yards. Two evenly-spaced boring locations would be selected and samples would be taken at surface, 10', 20' and 30' depths for a total of eight (8) samples for 800 cubic yards. All tools are to be decontaminated before each sample, as specified in *Field Equipment Cleaning and Decontamination* (EPA, 2015). This includes wiping the equipment clean, water-rinsing the equipment, washing the equipment in detergent and water, and rinsing the equipment in water.

Samples will temporarily be transferred to a new plastic bag in the field. Once in a location safer for handling glass, the samples will be transferred to glass jars, supplied by an approved laboratory. The threads on all jars will be wiped clean to allow an air-tight seal. Samples will be transferred on ice to a third-party laboratory to ensure tests are completed within an appropriate timeline.

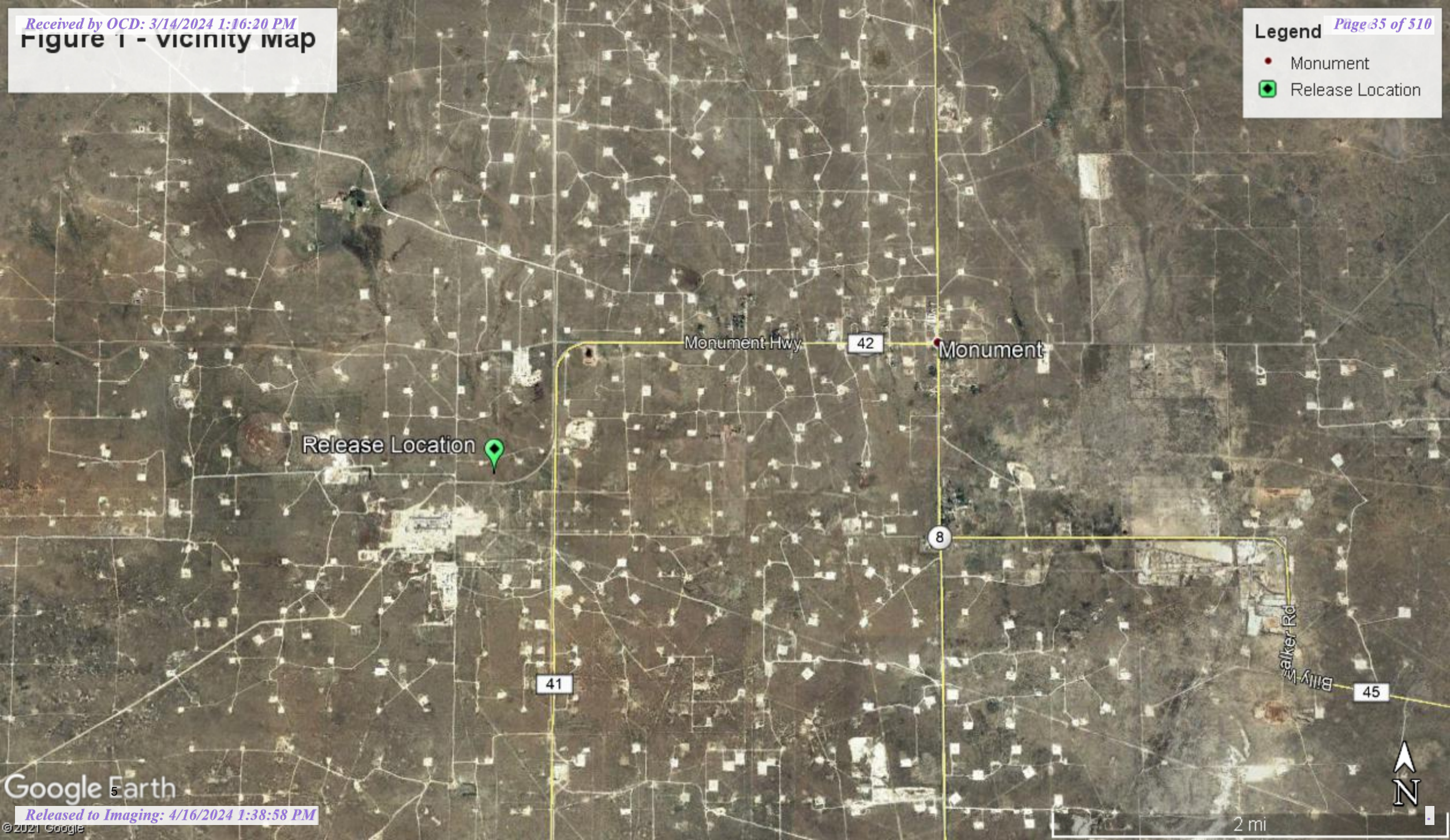
Remediation efforts will commence following the approval of this remediation plan and are estimated to take approximately 90 days. It is estimated that 950 cubic yards will be remediated.

IV. Restoration, Reclamation and Re-Vegetation

Following remediation, in addition to actions described and performed by Larson & Associates, RXSoil will drill in seed to match native vegetation in any affected areas. A closure report will be submitted upon completion of this project.

Received by OCD: 3/14/2024 1:16:20 PM

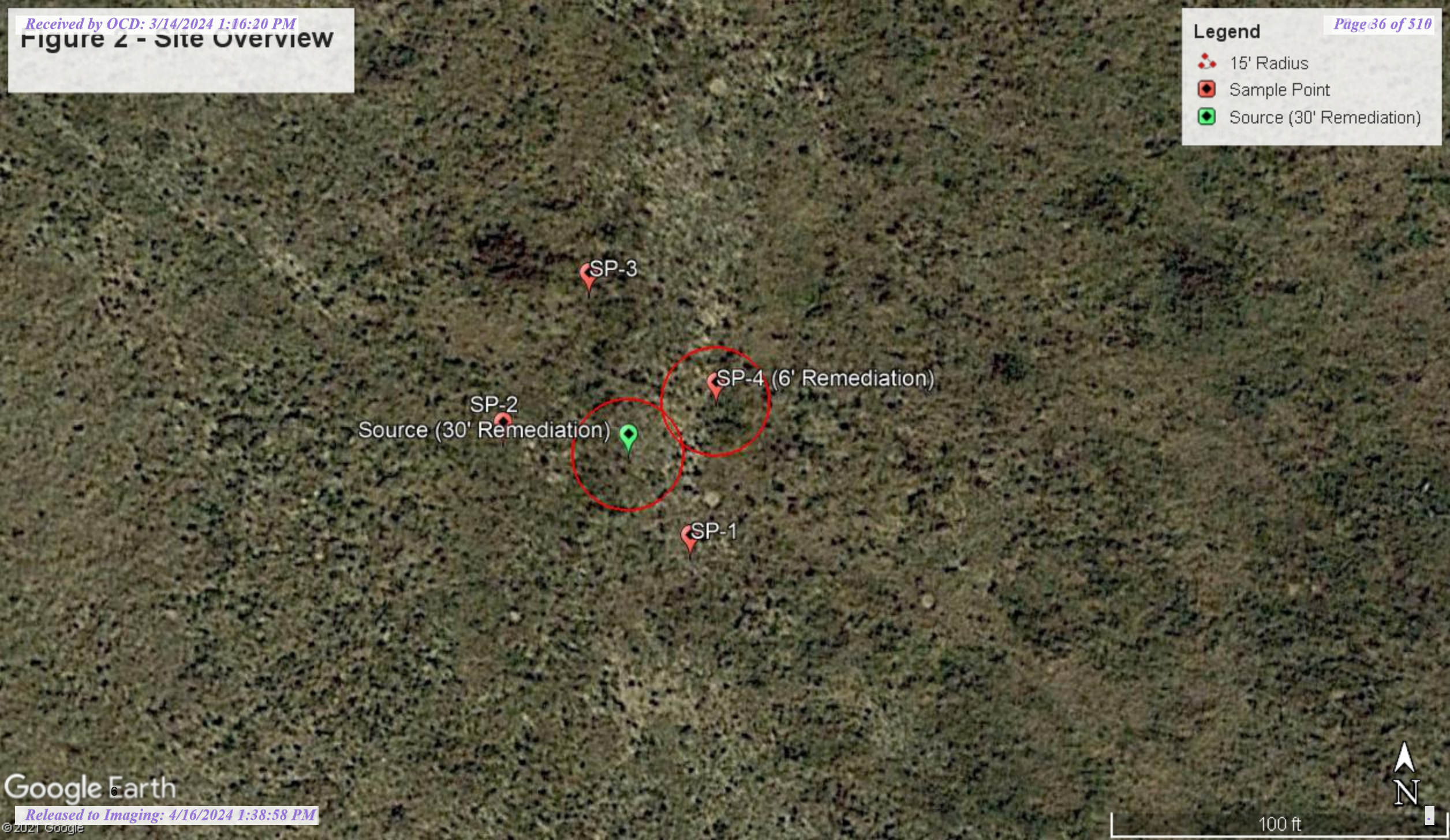
Figure 1 - Vicinity Map



Released to Imaging: 4/16/2024 1:38:58 PM

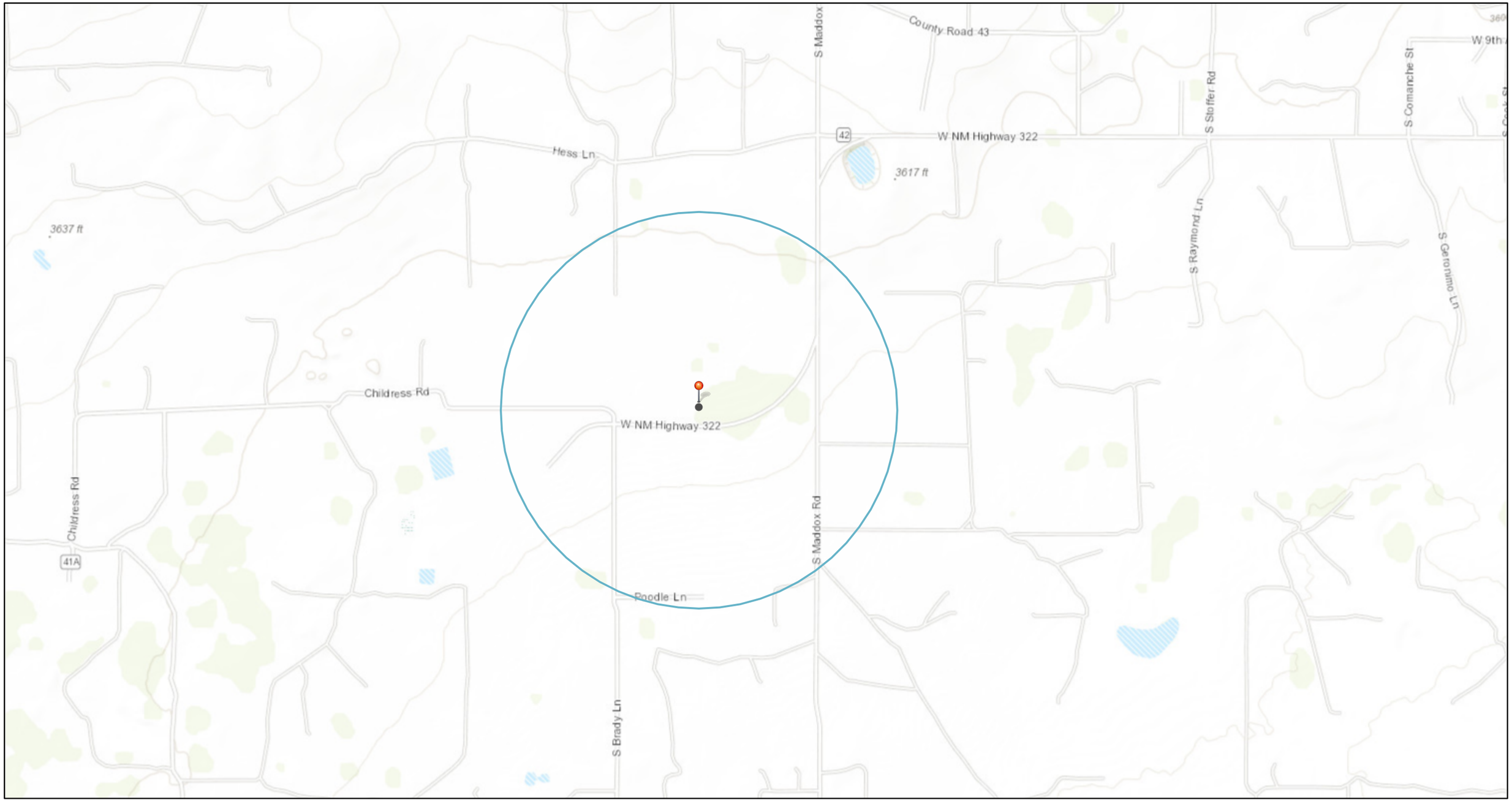
Received by OCD: 3/14/2024 1:16:20 PM

Figure 2 - Site Overview



Released to Imaging: 4/16/2024 1:38:58 PM

Figure 3 - Hydrology Map



7/14/2021, 3:03:26 PM

Override 1

Override 1

OCD District Offices

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, OCD

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

APPENDIX A

C-141

Released to Imaging: 4/16/2024 1:38:58 PM

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2112649963
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?	35.3 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☑ Yes ☐ No

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

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

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

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

Form C-141 State of New Mexico
Page 4 Oil Conservation Division

Incident ID	nAPP2112649963
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: Larry Baker Title: Environmental Tech SR.

Signature: Larry Baker Date: 7/16/2021

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: _____ Date: _____

Released to Imaging: 4/16/2024 1:38:58 PM

Form C-141 State of New Mexico
Page 5 Oil Conservation Division

Incident ID	
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: Larry Baker Title: Environmental Tech SR.

Signature: Larry Baker Date: 7/16/2021

email: larry.baker@apachecorp.com Telephone: 432-631-6982

OCD Only

Received by: Chad Hensley Date: 01/18/2022

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

Signature: Chad Hensley Date: 01/18/2022

APPENDIX B

LARSON & ASSOCIATES ADMINISTRATIVE SUMMARY

Larson & Associates, Inc.
Environmental Consultants

June 2, 2021

VIA EMAIL: Larry.Baker@apachecorp.com

Mr. Bruce Baker
Sr. Environmental Tecnician
Apache Corporation.
2350 W. Marland Blvd.
Hobbs, New Mexico

RE: Administrative Summary and Path Forward for NMGSAU #1416, Lea County, New Mexico

Dear Mr. Baker,

Larson & Associates, Inc. (LAI) submits this summary of the path forward to Apache Corporation (Apache) for monitor well installations and groundwater monitoring at the North Monument Grayburg San Andres Unit (NMGSAU) #1416 (Site) in Lea County, New Mexico.

Physical Setting

- The surface elevation is approximately 3,585 feet above mean sea level (msl).
- The topography slopes gently to southeast.
- No water features are located within 1,000 feet of the Site.
- Soil is designated as "Berino-Cacique fine sandy loams", consisting of 0 to 8 inches of fine sandy loam, underlain by 8 to 28 inches of sandy clay loam, and 28 – 38 inches of cemented material (caliche).
- The surface geology consists of Eolian and piedmont alluvial deposits (Holocene to lower Pleistocene).
- Groundwater occurs at approximately 35.3 feet below ground surface (bgs) based on depth to groundwater measured approximately 72 hours after installing a boring (SB-1) on May 28, 2021.

Figure 1 presents the topographic map. Figure 2 presents an aerial map.

Background

On May 24 and 25, 2021 Scarborough Drilling, Inc. (SDI), under the supervision of LAI, used an air rotary drilling rig to collect soil samples from five (5) locations, including SP-1 through SP-4 and at the Source for the release. Samples were collected from SP-1 through SP-4 at ground surface and at five-foot intervals (i.e., 5, 10, etc.) to 25 feet BGS. Samples at the Source were collected at approximately 14 feet bgs, and at five-foot intervals to approximately 30 feet bgs. An additional soil bore (SB-1) was drilled to 40 feet BGS

about 100 feet northwest from the Source to establish depth to groundwater (35.3 feet bgs). Attachment A presents SB-1 boring log.

Eurofins-Xenco (Xenco) Laboratory in Midland, Texas, analyzed the samples for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C10), diesel range organic (<C10-C28), and oil range organics (<C28-C36), and chloride by EPA SW-846 Methods 8021B, 8015M, M300, respectfully. Table 1 presents the laboratory analytical summary. Attachment B presents the laboratory report.

The laboratory reported benzene, BTEX, TPH, and chloride concentrations in all samples from SP-1 through SP-3 below New Mexico Oil Conservation Division (OCD) closure criteria of 10 mg/Kg, 50 mg/Kg, 100 mg/KG, and 600 mg/Kg, respectfully. The following samples reported TPH concentrations above OCD closure criteria (100 mg/Kg):

Sample	Depth (feet)	TPH (mg/Kg)
SP-4	1	1,840
SP-4	5	122
Source	15	1,030
Source	20	511
Source	25	790
Source	30	662

The following samples were reported chloride concentrations above OCD closure criteria (600 mg/Kg):

Sample	Depth (feet)	Chloride (mg/Kg)
Source	15	618
Source	20	790
Source	25	788
Source	30	288

Path Forward

- Install three (3) groundwater monitoring wells to approximately 50 feet BGS. With one well located hydraulically upgradient (north-northwest) of the Source and two (2) wells hydraulically downgradient (south and southeast) from the Source.
- Complete monitoring wells with 30 feet of 2-inch schedule 40 PVC casing, 20 feet 0.010-inch slotted screen, and locking steel cover.
- Survey the monitoring wells for elevation (ground and top of casing) by New Mexico Licensed Professional Land Surveyor.
- Develop the monitoring wells. Collect depth to groundwater measurements, collect groundwater samples for laboratory analysis, and analyze for BTEX, TPH, chloride and total dissolved solids TDS.
- Prepare four (4) quarterly groundwater monitoring reports and one (1) annual groundwater monitoring report for submittal to the OCD.

Figure 3 presents the proposed monitoring well locations.

Released to Imaging: 4/16/2024 1:38:58 PM

Fee

The cost of installing the monitoring wells, baseline and quarterly groundwater monitoring for 1 year is estimated to be approximately **$ 34,857.02.** Attachment C presents a detailed cost estimate.

AUTHORIZATION

If this proposal is acceptable to you, please sign below as notice to proceed and return one copy of this proposal intact to our office via email, mail or fax. We will proceed with scheduling dates to perform service upon receipt of proposal authorization.

Please contact me or Mark Larson if you have any questions, concerns or if we are approved to proceed.
Respectfully,

LARSON & ASSOCIATES, INC.

Mark J. Larson
President

Daniel St. Germain
Staff Geologist

Please call 432.687.0901 with any questions you may have, or if LAI can be of additional service. We look forward to working with you on this and future projects.

Encl

Authorization to Proceed

AGREED TO, THIS _____ DAY OF _____, 2021

BY (please print): _____

TITLE: _____

COMPANY: _____

SIGNATURE: _____

Tables

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

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**	**600**
Source	15	5/24/2021	In-Situ	0.101	1.3	83.4	838.0	111.0	**1030.0**	**618.0**
	20	5/24/2021	In-Situ	0.338	3.48	<49.9	452.0	59.1	**511.0**	**790.0**
	25	5/24/2021	In-Situ	0.278	3.29	73.9	634.0	82.1	**790.0**	**788.0**
	30	5/25/2021	In-Situ	0.148	2.07	<49.9	590.0	72.2	**662.0**	288.0
S-1	1	5/24/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	56.8
	5	5/24/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	13.9
	10	5/24/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	10.3
	15	5/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	8.5
	20	5/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	5.6
	25	5/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	10.1
S-2	1	5/24/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	12.9
	5	5/24/2021	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	5.8
	10	5/24/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10.3
	15	5/24/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	5.1
	20	5/24/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<4.98
	25	5/24/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	5.6
S-3	1	5/24/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	7.4
	5	5/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	5.4
	10	5/24/2021	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	17.8
	15	5/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	42.0
	20	5/24/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	63.3
	25	5/24/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	86.2

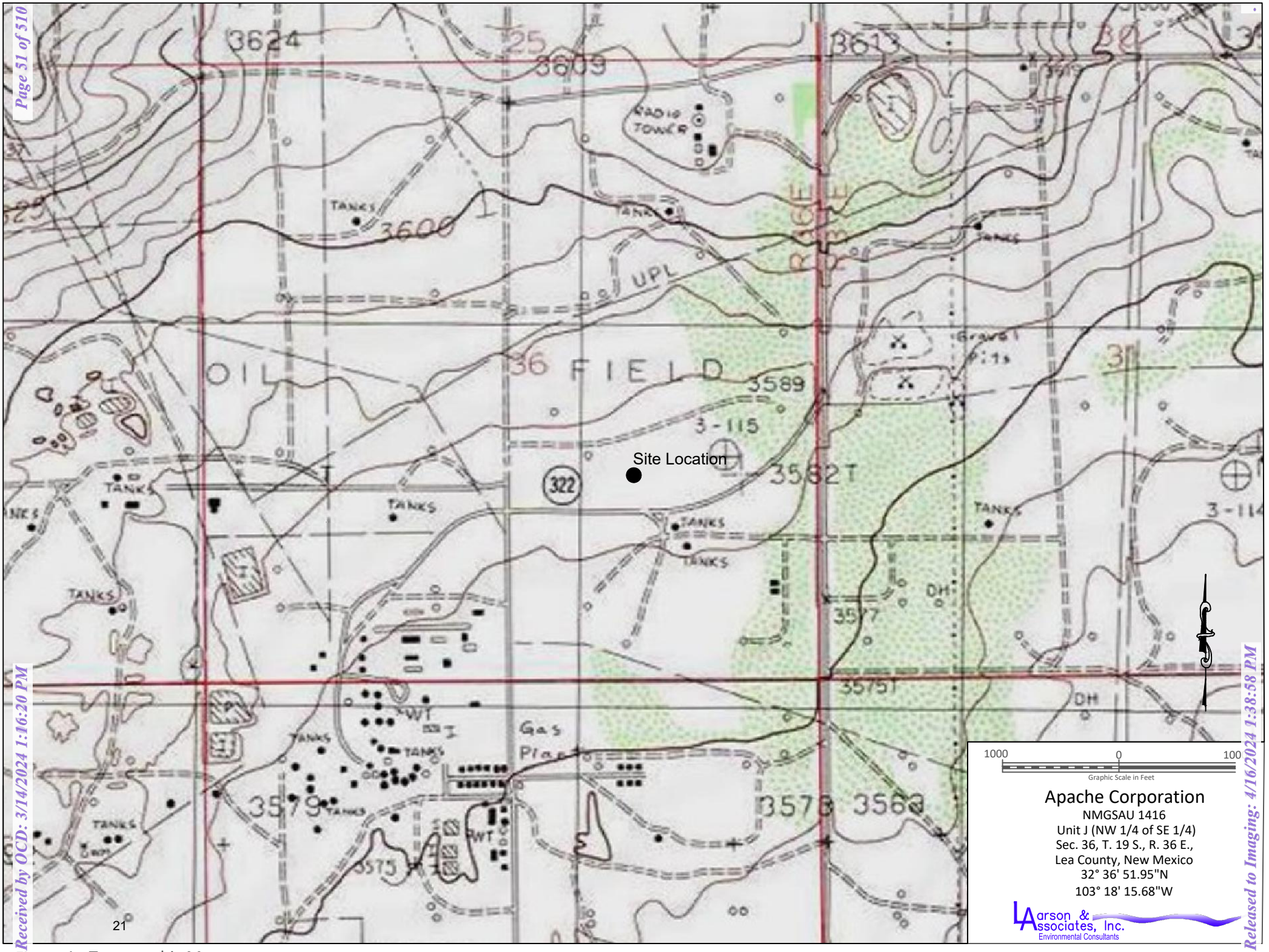
Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

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**	**600**
S-4	1	5/24/2021	In-Situ	<0.00202	<0.00403	<49.9	1840.0	<49.9	**1840.0**	224.0
	5	5/24/2021	In-Situ	<0.00199	<0.00398	<50.0	122.0	<50.0	**122.0**	50.4
	10	5/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	24.8
	15	5/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	31.7
	20	5/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	54.6
	25	5/24/2021	In-Situ	0.00356	<0.00396	<49.9	<49.9	<49.9	<49.9	75.0

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

Figures

Page 51 of 510



Apache Corporation
NMGSAU 1416
Unit J (NW 1/4 of SE 1/4)
Sec. 36, T. 19 S., R. 36 E.,
Lea County, New Mexico
32° 36' 51.95"N
103° 18' 15.68"W

Larson & Associates, Inc.
Environmental Consultants

21

Figure 1 - Topographic Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 52 of 510

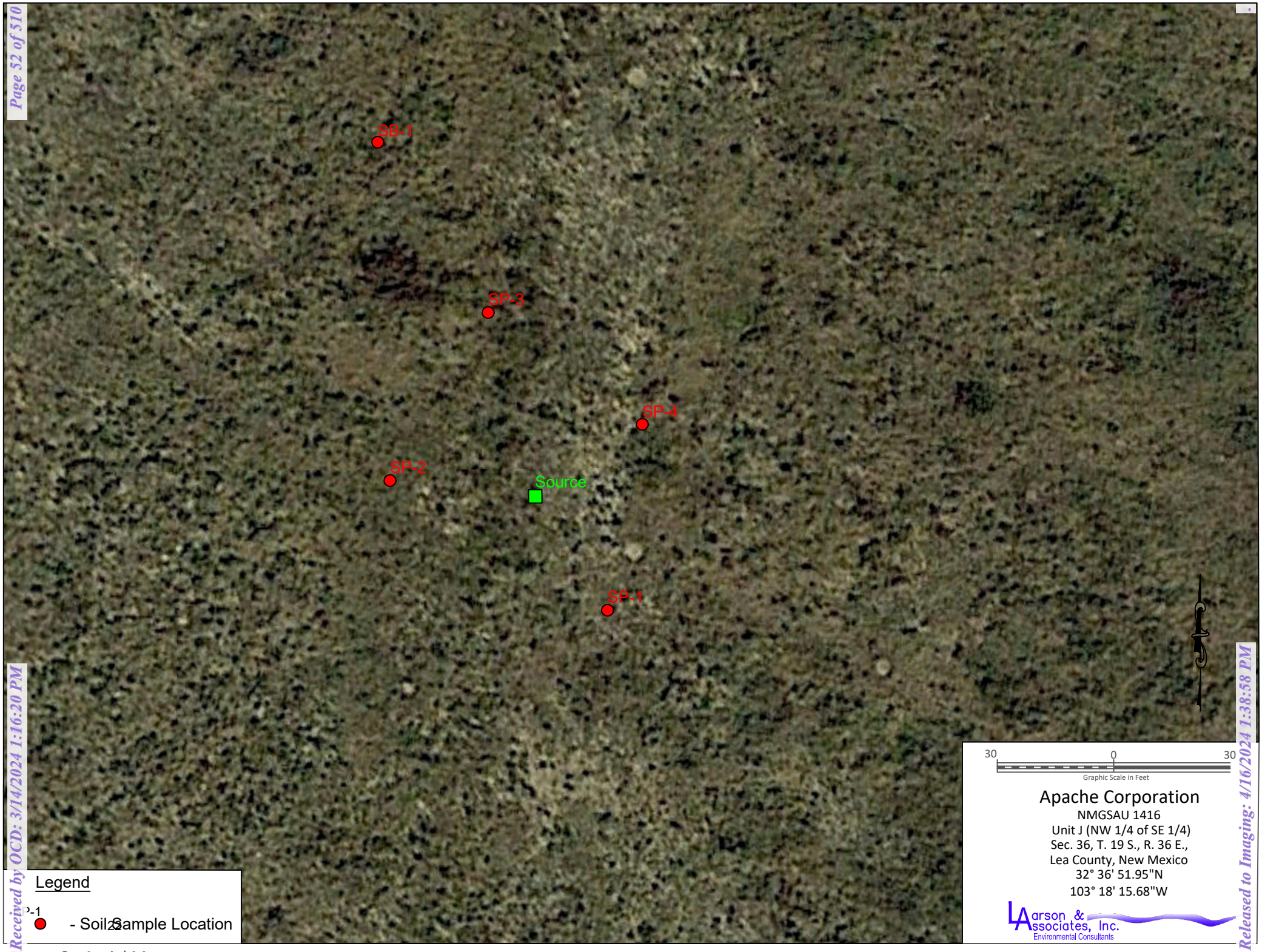


Figure 2 - Aerial Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 53 of 510

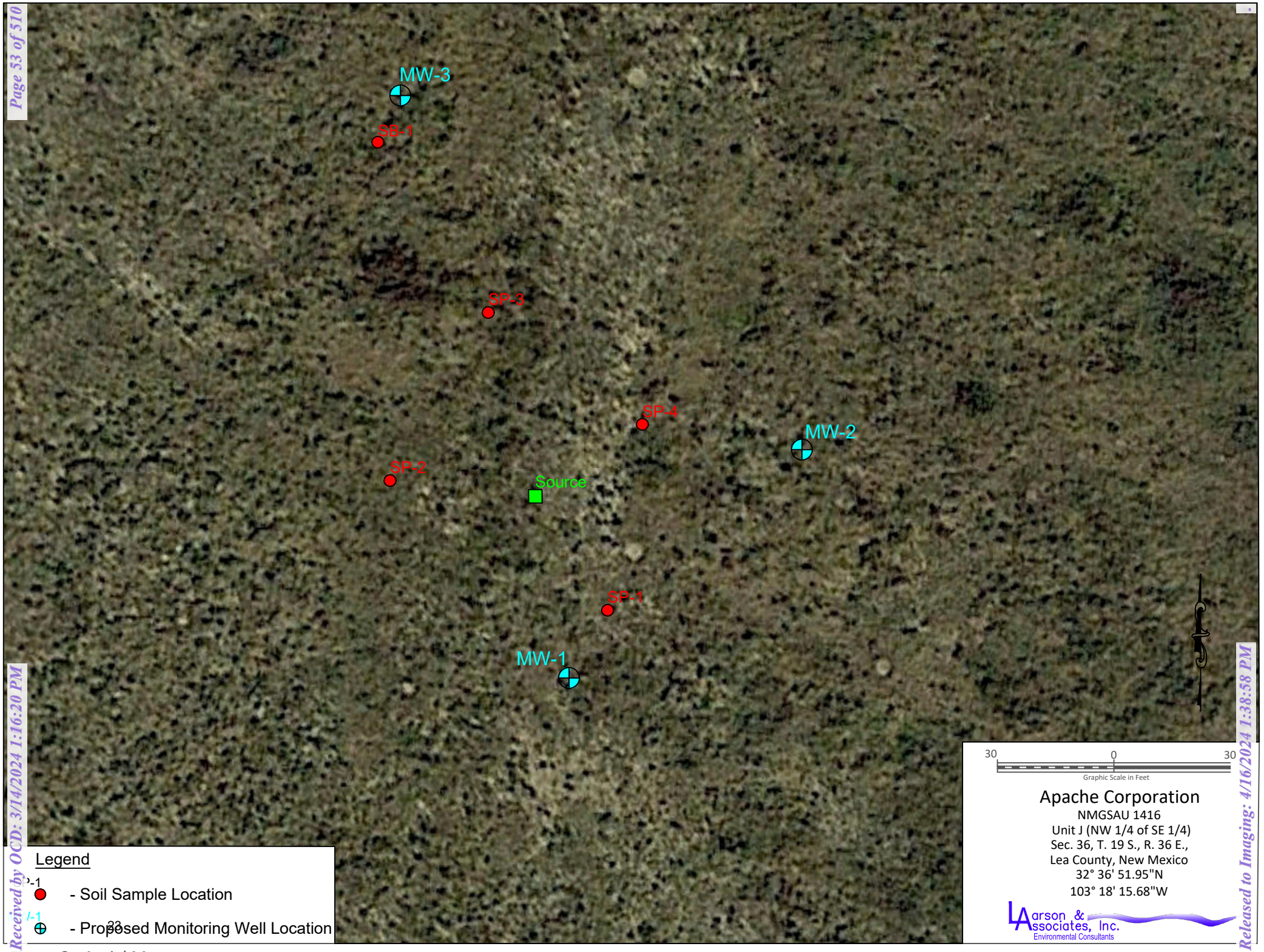


Figure 2 - Aerial Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Attachment A

Boring Log

BORING RECORD

Start: 11:00
Finish: 11:50

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Caliche, 7.5 YR 8/2, Moderately Cemented	Caliche	
	5			
	10			
	15	Sand, 2.5 YR 7/6, Fine to Medium Quartz Sand, Sub Angular to Sub Rounded, Moderately Sorted	SW	
	20			
	25	Sand, 5YR 7/4, Fine Grained Quartz Sand, Sub Rounded to Rounded, Well Sorted		
	30	Fine Grained Quartz Sand, 5 YR 8/3, Sub Rounded to Rounded, Well Sorted		
Depth to Water: 35.3	35	5 YR 8/1, Well Cemented, Quartzite		
	40	TD: 40'		

PID READING — PPM X _____
2 4 6 8 10 12 14 16 18

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SB-1

Attachment B

Laboratory Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2471-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
6/2/2021 10:16:06 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-2471-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 21
QC Sample Results 23
QC Association Summary 31
Lab Chronicle 36
Certification Summary 42
Method Summary 43
Sample Summary 44
Chain of Custody 45
Receipt Checklists 47

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Job ID: 880-2471-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2471-1

Receipt
The samples were received on 5/26/2021 8:47 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
Method 8021B: Surrogate recovery for the following sample was outside control limits: SP-4 25' (880-2471-24). 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. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 1'
Lab Sample ID: 880-2471-1
Date Collected: 05/24/21 15:00 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
m-Xylene & p-Xylene	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Xylenes, Total	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Total BTEX	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.8**		5.03		mg/Kg			05/28/21 01:49	1

Client Sample ID: SP-1 5'
Lab Sample ID: 880-2471-2
Date Collected: 05/24/21 15:03 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 5'
Lab Sample ID: 880-2471-2
Date Collected: 05/24/21 15:03 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 14:54	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.9**		5.05		mg/Kg			05/28/21 02:06	1

Client Sample ID: SP-1 10'
Lab Sample ID: 880-2471-3
Date Collected: 05/24/21 15:05 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.05		mg/Kg			05/28/21 02:11	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 15'
Lab Sample ID: 880-2471-4
Date Collected: 05/24/21 15:10
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*
o-Terphenyl	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.45**		5.00		mg/Kg			05/28/21 02:16	1

Client Sample ID: SP-1 20'
Lab Sample ID: 880-2471-5
Date Collected: 05/24/21 15:15
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*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		05/26/21 10:32	05/26/21 15:59	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 20'
Lab Sample ID: 880-2471-5
Date Collected: 05/24/21 15:15
Matrix: Solid
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 15:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.60**		4.98		mg/Kg			05/28/21 02:21	1

Client Sample ID: SP-1 25'
Lab Sample ID: 880-2471-6
Date Collected: 05/24/21 15:20
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*
o-Terphenyl	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		4.97		mg/Kg			05/28/21 02:26	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 1'

Date Collected: 05/24/21 14:30
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-7
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		05/26/21 09:37	05/27/21 01:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**		4.95		mg/Kg			05/28/21 02:31	1

Client Sample ID: SP-2 5'

Date Collected: 05/24/21 14:32
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-8
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		05/26/21 09:37	05/27/21 01:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*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		05/26/21 10:32	05/26/21 17:03	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 5'
Lab Sample ID: 880-2471-8
Date Collected: 05/24/21 14:32 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 17:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.83**		5.00		mg/Kg			05/28/21 02:35	1

Client Sample ID: SP-2 10'
Lab Sample ID: 880-2471-9
Date Collected: 05/24/21 14:35 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.02		mg/Kg			05/27/21 21:33	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 15'
Lab Sample ID: 880-2471-10
Date Collected: 05/24/21 14:37
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*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		05/26/21 10:32	05/26/21 17:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.09**		5.02		mg/Kg			05/27/21 21:47	1

Client Sample ID: SP-2 20'
Lab Sample ID: 880-2471-11
Date Collected: 05/24/21 14:40
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*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		05/26/21 10:32	05/26/21 18:29	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 20'
Lab Sample ID: 880-2471-11
Date Collected: 05/24/21 14:40 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 18:29	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*
o-Terphenyl	*100*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			05/27/21 21:52	1

Client Sample ID: SP-2 25'
Lab Sample ID: 880-2471-12
Date Collected: 05/24/21 14:46 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:17*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.64**		5.03		mg/Kg			05/27/21 21:57	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 1'
Lab Sample ID: 880-2471-13
Date Collected: 05/24/21 14:10 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*
o-Terphenyl	*102*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.42**		4.98		mg/Kg			05/27/21 22:02	1

Client Sample ID: SP-3 5'
Lab Sample ID: 880-2471-14
Date Collected: 05/24/21 14:12 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 5'
Lab Sample ID: 880-2471-14
Date Collected: 05/24/21 14:12 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 19:33	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*
o-Terphenyl	*79*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.42**		4.98		mg/Kg			05/27/21 22:07	1

Client Sample ID: SP-3 10'
Lab Sample ID: 880-2471-15
Date Collected: 05/24/21 14:15 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.8**		5.05		mg/Kg			05/27/21 22:12	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 15'
Lab Sample ID: 880-2471-16
Date Collected: 05/24/21 14:18
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.0**		4.98		mg/Kg			05/27/21 22:26	1

Client Sample ID: SP-3 20'
Lab Sample ID: 880-2471-17
Date Collected: 05/24/21 14:21
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:59*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 20'
Lab Sample ID: 880-2471-17
Date Collected: 05/24/21 14:21 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 20:37	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.3**		5.00		mg/Kg			05/27/21 22:31	1

Client Sample ID: SP-3 25'
Lab Sample ID: 880-2471-18
Date Collected: 05/24/21 14:25 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*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		05/26/21 10:32	05/26/21 20:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.2**		4.96		mg/Kg			05/27/21 22:46	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 1'
Date Collected: 05/24/21 13:35
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-19
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		05/26/21 09:37	05/27/21 06:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Diesel Range Organics (Over C10-C28)	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Total TPH	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**224**		5.00		mg/Kg			05/27/21 22:51	1

Client Sample ID: SP-4 5'
Date Collected: 05/24/21 13:37
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-20
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 5'
Lab Sample ID: 880-2471-20
Date Collected: 05/24/21 13:37
Matrix: Solid
Date Received: 05/26/21 08:47

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)	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
Total TPH	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.4**		5.00		mg/Kg			05/27/21 22:56	1

Client Sample ID: SP-4 10'
Lab Sample ID: 880-2471-21
Date Collected: 05/24/21 13:40
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*
o-Terphenyl	*92*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.8**		4.97		mg/Kg			05/27/21 23:01	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 15'
Lab Sample ID: 880-2471-22
Date Collected: 05/24/21 13:45 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00267**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*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		05/26/21 10:57	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*
o-Terphenyl	*111*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.7**		4.99		mg/Kg			05/27/21 23:06	1

Client Sample ID: SP-4 20'
Lab Sample ID: 880-2471-23
Date Collected: 05/24/21 13:52 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 20'

Date Collected: 05/24/21 13:52
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-23
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)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*
o-Terphenyl	*101*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.6**		4.95		mg/Kg			05/27/21 23:11	1

Client Sample ID: SP-4 25'

Date Collected: 05/24/21 13:57
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-24
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00356**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.0**		5.00		mg/Kg			05/27/21 23:15	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-2471-1	SP-1 1'	90	93
880-2471-1 MS	SP-1 1'	103	102
880-2471-1 MSD	SP-1 1'	113	108
880-2471-2	SP-1 5'	84	96
880-2471-3	SP-1 10'	90	94
880-2471-4	SP-1 15'	98	98
880-2471-5	SP-1 20'	91	97
880-2471-6	SP-1 25'	96	97
880-2471-7	SP-2 1'	89	101
880-2471-8	SP-2 5'	84	93
880-2471-9	SP-2 10'	96	99
880-2471-10	SP-2 15'	83	95
880-2471-11	SP-2 20'	98	94
880-2471-12	SP-2 25'	100	92
880-2471-13	SP-3 1'	91	97
880-2471-14	SP-3 5'	90	98
880-2471-15	SP-3 10'	95	94
880-2471-16	SP-3 15'	100	97
880-2471-17	SP-3 20'	94	94
880-2471-18	SP-3 25'	89	95
880-2471-19	SP-4 1'	126	105
880-2471-20	SP-4 5'	125	106
880-2471-21	SP-4 10'	90	103
880-2471-21 MS	SP-4 10'	90	126
880-2471-21 MSD	SP-4 10'	86	107
880-2471-22	SP-4 15'	95	122
880-2471-23	SP-4 20'	96	112
880-2471-24	SP-4 25'	102	114
LCS 880-3516/1-A	Lab Control Sample	100	105
LCS 880-3517/1-A	Lab Control Sample	81	116
LCSD 880-3516/2-A	Lab Control Sample Dup	97	104
LCSD 880-3517/2-A	Lab Control Sample Dup	84	117
MB 880-3414/5-A	Method Blank	109	114
MB 880-3494/5-A	Method Blank	88	101
MB 880-3516/5-A	Method Blank	85	94
MB 880-3517/5-A	Method Blank	98	87

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)
880-2471-1	SP-1 1'	94	84
880-2471-1 MS	SP-1 1'	87	69 S1-
880-2471-1 MSD	SP-1 1'	86	69 S1-

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
880-2471-2	SP-1 5'	95	85								
880-2471-3	SP-1 10'	97	88								
880-2471-4	SP-1 15'	98	89								
880-2471-5	SP-1 20'	94	84								
880-2471-6	SP-1 25'	115	98								
880-2471-7	SP-2 1'	95	85								
880-2471-8	SP-2 5'	98	88								
880-2471-9	SP-2 10'	89	78								
880-2471-10	SP-2 15'	97	88								
880-2471-11	SP-2 20'	115	100								
880-2471-12	SP-2 25'	97	86								
880-2471-13	SP-3 1'	120	102								
880-2471-14	SP-3 5'	93	79								
880-2471-15	SP-3 10'	93	81								
880-2471-16	SP-3 15'	96	85								
880-2471-17	SP-3 20'	94	84								
880-2471-18	SP-3 25'	112	95								
880-2471-19	SP-4 1'	111	86								
880-2471-20	SP-4 5'	97	86								
880-2471-21	SP-4 10'	88	92								
880-2471-21 MS	SP-4 10'	78	75								
880-2471-21 MSD	SP-4 10'	95	90								
880-2471-22	SP-4 15'	110	111								
880-2471-23	SP-4 20'	98	101								
880-2471-24	SP-4 25'	98	95								
LCS 880-3521/2-A	Lab Control Sample	93	76								
LCS 880-3527/2-A	Lab Control Sample	100	95								
LCSD 880-3521/3-A	Lab Control Sample Dup	90	77								
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96								
MB 880-3521/1-A	Method Blank	86	77								
MB 880-3527/1-A	Method Blank	100	103								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3414/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3414

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*

Lab Sample ID: MB 880-3494/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3494

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*

Lab Sample ID: MB 880-3516/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3516

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCS 880-3516/1-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1135		mg/Kg		113	70 - 130		
Toluene			0.100	0.1061		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1043		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2163		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130		

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

Lab Sample ID: LCSD 880-3516/2-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1113		mg/Kg		111	70 - 130	2	35
Toluene			0.100	0.1055		mg/Kg		106	70 - 130	1	35
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2076		mg/Kg		104	70 - 130	4	35
o-Xylene			0.100	0.1031		mg/Kg		103	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-2471-1 MS
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.100	0.07297		mg/Kg		73	70 - 130		
Toluene	<0.00198	U F1	0.100	0.06973	F1	mg/Kg		69	70 - 130		
Ethylbenzene	<0.00198	U F1	0.100	0.06514	F1	mg/Kg		65	70 - 130		
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.1332	F1	mg/Kg		66	70 - 130		
o-Xylene	<0.00198	U F1	0.100	0.06707	F1	mg/Kg		67	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0994	0.08519		mg/Kg		86	70 - 130	15	35
Toluene	<0.00198	U F1	0.0994	0.08145		mg/Kg		82	70 - 130	16	35
Ethylbenzene	<0.00198	U F1	0.0994	0.07595		mg/Kg		76	70 - 130	15	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00396	U F1	0.199	0.1574		mg/Kg		79	70 - 130	17	35
o-Xylene	<0.00198	U F1	0.0994	0.07953		mg/Kg		80	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 880-3517/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3517

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*

Lab Sample ID: LCS 880-3517/1-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1039		mg/Kg		104	70 - 130		
Toluene			0.100	0.09244		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.08359		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1660		mg/Kg		83	70 - 130		
o-Xylene			0.100	0.08061		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1097		mg/Kg		110	70 - 130	5	35
Toluene			0.100	0.09767		mg/Kg		98	70 - 130	6	35
Ethylbenzene			0.100	0.08869		mg/Kg		89	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1720		mg/Kg		86	70 - 130	4	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene			0.100	0.08510		mg/Kg		85	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1 F2	0.0990	0.09342		mg/Kg		93	70 - 130
Toluene	<0.00199	U	0.0990	0.08127		mg/Kg		82	70 - 130
Ethylbenzene	<0.00199	U	0.0990	0.07497		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1448		mg/Kg		73	70 - 130
o-Xylene	<0.00199	U F1	0.0990	0.07177		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0990	0.06139	F1 F2	mg/Kg		61	70 - 130	41	35
Toluene	<0.00199	U	0.0990	0.07213		mg/Kg		73	70 - 130	12	35
Ethylbenzene	<0.00199	U	0.0990	0.07003		mg/Kg		71	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1386		mg/Kg		70	70 - 130	4	35
o-Xylene	<0.00199	U F1	0.0990	0.06490	F1	mg/Kg		66	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-3521/1-A
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3521

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	05/26/21 10:32	05/26/21 12:45	1
o-Terphenyl	77		70 - 130	05/26/21 10:32	05/26/21 12:45	1

Lab Sample ID: LCS 880-3521/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.7		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: LCSD 880-3521/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	826.6		mg/Kg		83	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	972.9		mg/Kg		97	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: 880-2471-1 MS — **Client Sample ID: SP-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	888.4		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1027		mg/Kg		103	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	69	S1-	70 - 130

Lab Sample ID: 880-2471-1 MSD — **Client Sample ID: SP-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	881.3		mg/Kg		88	70 - 130	1	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1029		mg/Kg		103	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*69*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-3527/1-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1073		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	96		70 - 130

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	90		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3525/1-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 23:43	1

Lab Sample ID: LCS 880-3525/2-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	266.2		mg/Kg		106	90 - 110

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-3525/3-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	267.6		mg/Kg		107	90 - 110	1	20

Lab Sample ID: 880-2469-A-2-B MS
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.2		mg/Kg		107	90 - 110		

Lab Sample ID: 880-2469-A-2-C MSD
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.4		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-3528/1-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 20:49	1

Lab Sample ID: LCS 880-3528/2-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	255.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-3528/3-A
Matrix: Solid
Analysis Batch: 3578

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	255.7		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-2471-15 MS
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	17.8		253	277.3		mg/Kg		103	90 - 110		

Lab Sample ID: 880-2471-15 MSD
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17.8		253	277.1		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA

Prep Batch: 3414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3414/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 3494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3494/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 3496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-2	SP-1 5'	Total/NA	Solid	8021B	3516
880-2471-3	SP-1 10'	Total/NA	Solid	8021B	3516
880-2471-4	SP-1 15'	Total/NA	Solid	8021B	3516
880-2471-5	SP-1 20'	Total/NA	Solid	8021B	3516
880-2471-6	SP-1 25'	Total/NA	Solid	8021B	3516
880-2471-7	SP-2 1'	Total/NA	Solid	8021B	3516
880-2471-8	SP-2 5'	Total/NA	Solid	8021B	3516
880-2471-9	SP-2 10'	Total/NA	Solid	8021B	3516
880-2471-10	SP-2 15'	Total/NA	Solid	8021B	3516
880-2471-11	SP-2 20'	Total/NA	Solid	8021B	3516
880-2471-12	SP-2 25'	Total/NA	Solid	8021B	3516
880-2471-13	SP-3 1'	Total/NA	Solid	8021B	3516
880-2471-14	SP-3 5'	Total/NA	Solid	8021B	3516
880-2471-15	SP-3 10'	Total/NA	Solid	8021B	3516
880-2471-16	SP-3 15'	Total/NA	Solid	8021B	3516
880-2471-17	SP-3 20'	Total/NA	Solid	8021B	3516
880-2471-18	SP-3 25'	Total/NA	Solid	8021B	3516
880-2471-19	SP-4 1'	Total/NA	Solid	8021B	3516
880-2471-20	SP-4 5'	Total/NA	Solid	8021B	3516
MB 880-3494/5-A	Method Blank	Total/NA	Solid	8021B	3494
MB 880-3516/5-A	Method Blank	Total/NA	Solid	8021B	3516
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	8021B	3516
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3516
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8021B	3516

Analysis Batch: 3497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-22	SP-4 15'	Total/NA	Solid	8021B	3517
880-2471-23	SP-4 20'	Total/NA	Solid	8021B	3517
880-2471-24	SP-4 25'	Total/NA	Solid	8021B	3517
MB 880-3414/5-A	Method Blank	Total/NA	Solid	8021B	3414
MB 880-3517/5-A	Method Blank	Total/NA	Solid	8021B	3517
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	8021B	3517
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3517
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8021B	3517

Prep Batch: 3516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA (Continued)

Prep Batch: 3516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-2	SP-1 5'	Total/NA	Solid	5035	
880-2471-3	SP-1 10'	Total/NA	Solid	5035	
880-2471-4	SP-1 15'	Total/NA	Solid	5035	
880-2471-5	SP-1 20'	Total/NA	Solid	5035	
880-2471-6	SP-1 25'	Total/NA	Solid	5035	
880-2471-7	SP-2 1'	Total/NA	Solid	5035	
880-2471-8	SP-2 5'	Total/NA	Solid	5035	
880-2471-9	SP-2 10'	Total/NA	Solid	5035	
880-2471-10	SP-2 15'	Total/NA	Solid	5035	
880-2471-11	SP-2 20'	Total/NA	Solid	5035	
880-2471-12	SP-2 25'	Total/NA	Solid	5035	
880-2471-13	SP-3 1'	Total/NA	Solid	5035	
880-2471-14	SP-3 5'	Total/NA	Solid	5035	
880-2471-15	SP-3 10'	Total/NA	Solid	5035	
880-2471-16	SP-3 15'	Total/NA	Solid	5035	
880-2471-17	SP-3 20'	Total/NA	Solid	5035	
880-2471-18	SP-3 25'	Total/NA	Solid	5035	
880-2471-19	SP-4 1'	Total/NA	Solid	5035	
880-2471-20	SP-4 5'	Total/NA	Solid	5035	
MB 880-3516/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	5035	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	5035	

Prep Batch: 3517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	5035	
880-2471-22	SP-4 15'	Total/NA	Solid	5035	
880-2471-23	SP-4 20'	Total/NA	Solid	5035	
880-2471-24	SP-4 25'	Total/NA	Solid	5035	
MB 880-3517/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	5035	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 3502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-2	SP-1 5'	Total/NA	Solid	8015B NM	3521
880-2471-3	SP-1 10'	Total/NA	Solid	8015B NM	3521
880-2471-4	SP-1 15'	Total/NA	Solid	8015B NM	3521
880-2471-5	SP-1 20'	Total/NA	Solid	8015B NM	3521
880-2471-6	SP-1 25'	Total/NA	Solid	8015B NM	3521
880-2471-7	SP-2 1'	Total/NA	Solid	8015B NM	3521
880-2471-8	SP-2 5'	Total/NA	Solid	8015B NM	3521
880-2471-9	SP-2 10'	Total/NA	Solid	8015B NM	3521
880-2471-10	SP-2 15'	Total/NA	Solid	8015B NM	3521

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Analysis Batch: 3502 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-11	SP-2 20'	Total/NA	Solid	8015B NM	3521
880-2471-12	SP-2 25'	Total/NA	Solid	8015B NM	3521
880-2471-13	SP-3 1'	Total/NA	Solid	8015B NM	3521
880-2471-14	SP-3 5'	Total/NA	Solid	8015B NM	3521
880-2471-15	SP-3 10'	Total/NA	Solid	8015B NM	3521
880-2471-16	SP-3 15'	Total/NA	Solid	8015B NM	3521
880-2471-17	SP-3 20'	Total/NA	Solid	8015B NM	3521
880-2471-18	SP-3 25'	Total/NA	Solid	8015B NM	3521
880-2471-19	SP-4 1'	Total/NA	Solid	8015B NM	3521
880-2471-20	SP-4 5'	Total/NA	Solid	8015B NM	3521
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015B NM	3521
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3521
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3521
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015B NM	3521

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-22	SP-4 15'	Total/NA	Solid	8015B NM	3527
880-2471-23	SP-4 20'	Total/NA	Solid	8015B NM	3527
880-2471-24	SP-4 25'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015B NM	3527

Prep Batch: 3521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-2	SP-1 5'	Total/NA	Solid	8015NM Prep	
880-2471-3	SP-1 10'	Total/NA	Solid	8015NM Prep	
880-2471-4	SP-1 15'	Total/NA	Solid	8015NM Prep	
880-2471-5	SP-1 20'	Total/NA	Solid	8015NM Prep	
880-2471-6	SP-1 25'	Total/NA	Solid	8015NM Prep	
880-2471-7	SP-2 1'	Total/NA	Solid	8015NM Prep	
880-2471-8	SP-2 5'	Total/NA	Solid	8015NM Prep	
880-2471-9	SP-2 10'	Total/NA	Solid	8015NM Prep	
880-2471-10	SP-2 15'	Total/NA	Solid	8015NM Prep	
880-2471-11	SP-2 20'	Total/NA	Solid	8015NM Prep	
880-2471-12	SP-2 25'	Total/NA	Solid	8015NM Prep	
880-2471-13	SP-3 1'	Total/NA	Solid	8015NM Prep	
880-2471-14	SP-3 5'	Total/NA	Solid	8015NM Prep	
880-2471-15	SP-3 10'	Total/NA	Solid	8015NM Prep	
880-2471-16	SP-3 15'	Total/NA	Solid	8015NM Prep	
880-2471-17	SP-3 20'	Total/NA	Solid	8015NM Prep	
880-2471-18	SP-3 25'	Total/NA	Solid	8015NM Prep	
880-2471-19	SP-4 1'	Total/NA	Solid	8015NM Prep	
880-2471-20	SP-4 5'	Total/NA	Solid	8015NM Prep	
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Prep Batch: 3521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015NM Prep	

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-22	SP-4 15'	Total/NA	Solid	8015NM Prep	
880-2471-23	SP-4 20'	Total/NA	Solid	8015NM Prep	
880-2471-24	SP-4 25'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	DI Leach	
880-2471-2	SP-1 5'	Soluble	Solid	DI Leach	
880-2471-3	SP-1 10'	Soluble	Solid	DI Leach	
880-2471-4	SP-1 15'	Soluble	Solid	DI Leach	
880-2471-5	SP-1 20'	Soluble	Solid	DI Leach	
880-2471-6	SP-1 25'	Soluble	Solid	DI Leach	
880-2471-7	SP-2 1'	Soluble	Solid	DI Leach	
880-2471-8	SP-2 5'	Soluble	Solid	DI Leach	
MB 880-3525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 3528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	DI Leach	
880-2471-10	SP-2 15'	Soluble	Solid	DI Leach	
880-2471-11	SP-2 20'	Soluble	Solid	DI Leach	
880-2471-12	SP-2 25'	Soluble	Solid	DI Leach	
880-2471-13	SP-3 1'	Soluble	Solid	DI Leach	
880-2471-14	SP-3 5'	Soluble	Solid	DI Leach	
880-2471-15	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-16	SP-3 15'	Soluble	Solid	DI Leach	
880-2471-17	SP-3 20'	Soluble	Solid	DI Leach	
880-2471-18	SP-3 25'	Soluble	Solid	DI Leach	
880-2471-19	SP-4 1'	Soluble	Solid	DI Leach	
880-2471-20	SP-4 5'	Soluble	Solid	DI Leach	
880-2471-21	SP-4 10'	Soluble	Solid	DI Leach	
880-2471-22	SP-4 15'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

HPLC/IC (Continued)

Leach Batch: 3528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-23	SP-4 20'	Soluble	Solid	DI Leach	
880-2471-24	SP-4 25'	Soluble	Solid	DI Leach	
MB 880-3528/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2471-15 MS	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-15 MSD	SP-3 10'	Soluble	Solid	DI Leach	

Analysis Batch: 3552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	300.0	3525
880-2471-2	SP-1 5'	Soluble	Solid	300.0	3525
880-2471-3	SP-1 10'	Soluble	Solid	300.0	3525
880-2471-4	SP-1 15'	Soluble	Solid	300.0	3525
880-2471-5	SP-1 20'	Soluble	Solid	300.0	3525
880-2471-6	SP-1 25'	Soluble	Solid	300.0	3525
880-2471-7	SP-2 1'	Soluble	Solid	300.0	3525
880-2471-8	SP-2 5'	Soluble	Solid	300.0	3525
MB 880-3525/1-A	Method Blank	Soluble	Solid	300.0	3525
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	300.0	3525
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3525
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	3525
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	3525

Analysis Batch: 3578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	300.0	3528
880-2471-10	SP-2 15'	Soluble	Solid	300.0	3528
880-2471-11	SP-2 20'	Soluble	Solid	300.0	3528
880-2471-12	SP-2 25'	Soluble	Solid	300.0	3528
880-2471-13	SP-3 1'	Soluble	Solid	300.0	3528
880-2471-14	SP-3 5'	Soluble	Solid	300.0	3528
880-2471-15	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-16	SP-3 15'	Soluble	Solid	300.0	3528
880-2471-17	SP-3 20'	Soluble	Solid	300.0	3528
880-2471-18	SP-3 25'	Soluble	Solid	300.0	3528
880-2471-19	SP-4 1'	Soluble	Solid	300.0	3528
880-2471-20	SP-4 5'	Soluble	Solid	300.0	3528
880-2471-21	SP-4 10'	Soluble	Solid	300.0	3528
880-2471-22	SP-4 15'	Soluble	Solid	300.0	3528
880-2471-23	SP-4 20'	Soluble	Solid	300.0	3528
880-2471-24	SP-4 25'	Soluble	Solid	300.0	3528
MB 880-3528/1-A	Method Blank	Soluble	Solid	300.0	3528
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	300.0	3528
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3528
880-2471-15 MS	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-15 MSD	SP-3 10'	Soluble	Solid	300.0	3528

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 1'

Lab Sample ID: 880-2471-1
Matrix: Solid
Date Collected: 05/24/21 15:00
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 01:49	CH	XEN MID

Client Sample ID: SP-1 5'

Lab Sample ID: 880-2471-2
Matrix: Solid
Date Collected: 05/24/21 15:03
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:06	CH	XEN MID

Client Sample ID: SP-1 10'

Lab Sample ID: 880-2471-3
Matrix: Solid
Date Collected: 05/24/21 15:05
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:11	CH	XEN MID

Client Sample ID: SP-1 15'

Lab Sample ID: 880-2471-4
Matrix: Solid
Date Collected: 05/24/21 15:10
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:16	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 20'

Lab Sample ID: 880-2471-5
Matrix: Solid
Date Collected: 05/24/21 15:15
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:53	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:21	CH	XEN MID

Client Sample ID: SP-1 25'

Lab Sample ID: 880-2471-6
Matrix: Solid
Date Collected: 05/24/21 15:20
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:26	CH	XEN MID

Client Sample ID: SP-2 1'

Lab Sample ID: 880-2471-7
Matrix: Solid
Date Collected: 05/24/21 14:30
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:31	CH	XEN MID

Client Sample ID: SP-2 5'

Lab Sample ID: 880-2471-8
Matrix: Solid
Date Collected: 05/24/21 14:32
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:35	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 10'

Lab Sample ID: 880-2471-9
Matrix: Solid
Date Collected: 05/24/21 14:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:14	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:33	CH	XEN MID

Client Sample ID: SP-2 15'

Lab Sample ID: 880-2471-10
Matrix: Solid
Date Collected: 05/24/21 14:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:47	CH	XEN MID

Client Sample ID: SP-2 20'

Lab Sample ID: 880-2471-11
Matrix: Solid
Date Collected: 05/24/21 14:40
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 03:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:52	CH	XEN MID

Client Sample ID: SP-2 25'

Lab Sample ID: 880-2471-12
Matrix: Solid
Date Collected: 05/24/21 14:46
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:57	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 1'

Date Collected: 05/24/21 14:10
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:02	CH	XEN MID

Client Sample ID: SP-3 5'

Date Collected: 05/24/21 14:12
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:07	CH	XEN MID

Client Sample ID: SP-3 10'

Date Collected: 05/24/21 14:15
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:12	CH	XEN MID

Client Sample ID: SP-3 15'

Date Collected: 05/24/21 14:18
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:26	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 20'

Lab Sample ID: 880-2471-17
Matrix: Solid
Date Collected: 05/24/21 14:21
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:31	CH	XEN MID

Client Sample ID: SP-3 25'

Lab Sample ID: 880-2471-18
Matrix: Solid
Date Collected: 05/24/21 14:25
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:46	CH	XEN MID

Client Sample ID: SP-4 1'

Lab Sample ID: 880-2471-19
Matrix: Solid
Date Collected: 05/24/21 13:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:51	CH	XEN MID

Client Sample ID: SP-4 5'

Lab Sample ID: 880-2471-20
Matrix: Solid
Date Collected: 05/24/21 13:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 07:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:56	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 10'

Lab Sample ID: 880-2471-21
Matrix: Solid
Date Collected: 05/24/21 13:40
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/26/21 23:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:01	CH	XEN MID

Client Sample ID: SP-4 15'

Lab Sample ID: 880-2471-22
Matrix: Solid
Date Collected: 05/24/21 13:45
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:06	CH	XEN MID

Client Sample ID: SP-4 20'

Lab Sample ID: 880-2471-23
Matrix: Solid
Date Collected: 05/24/21 13:52
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:11	CH	XEN MID

Client Sample ID: SP-4 25'

Lab Sample ID: 880-2471-24
Matrix: Solid
Date Collected: 05/24/21 13:57
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:15	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: NMGSAU 1416

Job ID: 880-2471-1

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: NMGSAU 1416

Job ID: 880-2471-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2471-1	SP-1 1'	Solid	05/24/21 15:00	05/26/21 08:47	
880-2471-2	SP-1 5'	Solid	05/24/21 15:03	05/26/21 08:47	
880-2471-3	SP-1 10'	Solid	05/24/21 15:05	05/26/21 08:47	
880-2471-4	SP-1 15'	Solid	05/24/21 15:10	05/26/21 08:47	
880-2471-5	SP-1 20'	Solid	05/24/21 15:15	05/26/21 08:47	
880-2471-6	SP-1 25'	Solid	05/24/21 15:20	05/26/21 08:47	
880-2471-7	SP-2 1'	Solid	05/24/21 14:30	05/26/21 08:47	
880-2471-8	SP-2 5'	Solid	05/24/21 14:32	05/26/21 08:47	
880-2471-9	SP-2 10'	Solid	05/24/21 14:35	05/26/21 08:47	
880-2471-10	SP-2 15'	Solid	05/24/21 14:37	05/26/21 08:47	
880-2471-11	SP-2 20'	Solid	05/24/21 14:40	05/26/21 08:47	
880-2471-12	SP-2 25'	Solid	05/24/21 14:46	05/26/21 08:47	
880-2471-13	SP-3 1'	Solid	05/24/21 14:10	05/26/21 08:47	
880-2471-14	SP-3 5'	Solid	05/24/21 14:12	05/26/21 08:47	
880-2471-15	SP-3 10'	Solid	05/24/21 14:15	05/26/21 08:47	
880-2471-16	SP-3 15'	Solid	05/24/21 14:18	05/26/21 08:47	
880-2471-17	SP-3 20'	Solid	05/24/21 14:21	05/26/21 08:47	
880-2471-18	SP-3 25'	Solid	05/24/21 14:25	05/26/21 08:47	
880-2471-19	SP-4 1'	Solid	05/24/21 13:35	05/26/21 08:47	
880-2471-20	SP-4 5'	Solid	05/24/21 13:37	05/26/21 08:47	
880-2471-21	SP-4 10'	Solid	05/24/21 13:40	05/26/21 08:47	
880-2471-22	SP-4 15'	Solid	05/24/21 13:45	05/26/21 08:47	
880-2471-23	SP-4 20'	Solid	05/24/21 13:52	05/26/21 08:47	
880-2471-24	SP-4 25'	Solid	05/24/21 13:57	05/26/21 08:47	

Page 101 of 510

880-2471

484

STODY

880-2471 Chain of Custody

Larson & Associates, Inc.
Environmental Consultants
Midland, TX
432-687-0901

Data Reported to

DATE: 5/25/2021 PAGE 1 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR: DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State: MST / NM

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ | OTHER LIST ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | TCLP ☐ | RCI ☐ | TOX ☐ | FLASHPOINT ☐ | TDS ☐ | TSS ☐ | % MOISTURE ☐ | CYANIDE ☐ | pH ☐ | HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDES ☒ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	BTEX	MTBE	GASOLINE MOD 8015	DIESEL - MOD 8015	OIL - MOD 8015	CHLORIDES	FIELD NOTES
SP-1 1'		5/24/21	1500	S	1				X		X		X	X	X	X	# Direct Bill to Apache #
SP-1 5'			1503														
SP-1 10'			1505														
SP 1 15'			1510														
SP-1 20'			1515														
SP-1 25'			1520														
SP-2 1'			1430														
SP-2 5'			1432														
SP-2 10'			1435														
SP-2 15'			1437														
SP-2 20'			1440														
SP-2 25			1446														
SP-3 1'			1416														
SP-3 5'			1412														
SP-3 10'			1415														
TOTAL	15																

RELINQUISHED BY (Signature) DATE/TIME 5/26/21 8:47 RECEIVED BY (Signature)

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

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

LABORATORY XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Page 45 of 47

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

6/2/2021

Page 102 of 510

Loc: 880
2471

№1485

-OF-CUSTODY

6/2/2021

Larson & Associates, Inc.
Environmental Consultants

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

Data Reported to

DATE: 5/25/2021 PAGE 2 OF 2

PO#.

LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR. DSG

TRRP report? ☐ Yes ☒ No

TIME ZONE
Time zone/State
MST

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

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | TOTAL METALS (RCRA) ☐ | Semi-VOC ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | OTHER LIST ☐ | RCI ☐ | TOX ☐ | TCLP ☐ | TDS ☐ | FLASHPOINT ☐ | TSS ☐ | % MOISTURE ☐ | pH ☐ | HEXAVALENT CHROMIUM ☐ | CYANIDE ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDE ☒ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
SP-3 15'		5/24/2	1418	S	1				X		BTEX, GASOLINE MOD 8015, DIESEL - MOD 8015, CHLORIDE	* Direct Bill to Apache *
SP-3 20'		"	1421									
SP-3 25'			1425									
SP-4 1'			1335									
SP-4 5'			1337									
SP-4 10'			1340									
SP-4 15'			1345									
SP-4 20'			1352									
SP-4 25			1357									

TOTAL 9

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	5/26/21 8:07	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4 3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Page 46 of 47

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-2471-1

Login Number: 2471
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	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2472-1
Client Project/Site: Apache - NMUSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
5/28/2021 5:10:39 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: Apache - NMUSAU 1416

Laboratory Job ID: 880-2472-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 13
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 20

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Job ID: 880-2472-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2472-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2021 8:47 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 3.9º C.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3530 recovered above the upper control limit for Toluene 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 880-3530/20).

Method 8021B: Surrogate recovery for the following samples were outside control limits: Source 15' (880-2472-1), Source 20' (880-2472-2), Source 25' (880-2472-3) and Source 30' (880-2472-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described 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: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 15'

Date Collected: 05/24/21 13:00
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.101**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Toluene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Ethylbenzene	**0.625**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
m-Xylene & p-Xylene	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
o-Xylene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Xylenes, Total	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Total BTEX	**1.30**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**83.4**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	**838**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Oil Range Organics (Over C28-C36)	**111**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Total TPH	**1030**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*23*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**618**	**F1**	4.97		mg/Kg			05/26/21 13:30	1

Client Sample ID: Source 20'

Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.338**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Toluene	**0.392**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Ethylbenzene	**0.591**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
m-Xylene & p-Xylene	**1.61**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
o-Xylene	**0.553**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Xylenes, Total	**2.16**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Total BTEX	**3.48**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 20'

Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
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)	452		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	59.1		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Total TPH	511		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	790		5.03		mg/Kg			05/26/21 13:57	1

Client Sample ID: Source 25'

Date Collected: 05/24/21 13:20
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.278		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Toluene	1.41		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Ethylbenzene	0.267		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
m-Xylene & p-Xylene	0.697		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
o-Xylene	0.641		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Xylenes, Total	1.34		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Total BTEX	3.29		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*240*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	73.9		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Diesel Range Organics (Over C10-C28)	634		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Oil Range Organics (Over C28-C36)	82.1		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Total TPH	790		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	788		5.02		mg/Kg			05/26/21 13:57	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 30'

Date Collected: 05/24/21 09:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.148**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Toluene	**0.775**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Ethylbenzene	<0.0994	U	0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
m-Xylene & p-Xylene	**0.975**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
o-Xylene	**0.171**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Xylenes, Total	**1.15**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Total BTEX	**2.07**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	**590**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Oil Range Organics (Over C28-C36)	**72.2**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Total TPH	**662**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		5.05		mg/Kg			05/26/21 14:02	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2472-1	Source 15'	208 S1+	70
880-2472-2	Source 20'	144 S1+	71
880-2472-3	Source 25'	240 S1+	72
880-2472-4	Source 30'	146 S1+	76
890-730-A-1-B MS	Matrix Spike	60 S1-	95
890-730-A-1-C MSD	Matrix Spike Duplicate	62 S1-	95
LCS 880-3520/1-A	Lab Control Sample	108	98
LCS 880-3520/2-A	Lab Control Sample	103	95
MB 880-3520/5-A	Method Blank	70	82

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2471-A-21-F MS	Matrix Spike	78	75
880-2471-A-21-G MSD	Matrix Spike Duplicate	95	90
880-2472-1	Source 15'	23 S1-	21 S1-
880-2472-2	Source 20'	21 S1-	21 S1-
880-2472-3	Source 25'	21 S1-	21 S1-
880-2472-4	Source 30'	95	97
LCS 880-3527/2-A	Lab Control Sample	100	95
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96
MB 880-3527/1-A	Method Blank	100	103

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3520/5-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3520

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*

Lab Sample ID: LCS 880-3520/1-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1159		mg/Kg		116	70 - 130		
Toluene			0.100	0.09439		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.1041		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2101		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1016		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 880-3520/2-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1131		mg/Kg		113	70 - 130		
Toluene			0.100	0.09802		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1016		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.2052		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1001		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U F1	0.100	0.07893		mg/Kg		79	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U F1	0.100	0.06278	F1	mg/Kg		63	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.05543	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1111	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05683	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-C MSD
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0998	0.06735	F1	mg/Kg		67	70 - 130	16	35
Toluene	<0.00199	U F1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.0998	0.04920	F1	mg/Kg		49	70 - 130	12	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09888	F1	mg/Kg		50	70 - 130	12	35
o-Xylene	<0.00199	U F1	0.0998	0.05191	F1	mg/Kg		52	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-3527/1-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1073		mg/Kg		107	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

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

Lab Sample ID: 880-2471-A-21-F MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-2471-A-21-G MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3519/1-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/26/21 13:14	1

Lab Sample ID: LCS 880-3519/2-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	242.4		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-3519/3-A
Matrix: Solid
Analysis Batch: 3522

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	241.4		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-2472-1 MS
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110		

Lab Sample ID: 880-2472-1 MSD
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

GC VOA

Prep Batch: 3520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	5035	
880-2472-2	Source 20'	Total/NA	Solid	5035	
880-2472-3	Source 25'	Total/NA	Solid	5035	
880-2472-4	Source 30'	Total/NA	Solid	5035	
MB 880-3520/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	5035	
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 3530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8021B	3520
880-2472-2	Source 20'	Total/NA	Solid	8021B	3520
880-2472-3	Source 25'	Total/NA	Solid	8021B	3520
880-2472-4	Source 30'	Total/NA	Solid	8021B	3520
MB 880-3520/5-A	Method Blank	Total/NA	Solid	8021B	3520
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	8021B	3520
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	8021B	3520
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	3520
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3520

GC Semi VOA

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015B NM	3527
880-2472-2	Source 20'	Total/NA	Solid	8015B NM	3527
880-2472-3	Source 25'	Total/NA	Solid	8015B NM	3527
880-2472-4	Source 30'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015B NM	3527
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	3527

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015NM Prep	
880-2472-2	Source 20'	Total/NA	Solid	8015NM Prep	
880-2472-3	Source 25'	Total/NA	Solid	8015NM Prep	
880-2472-4	Source 30'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

HPLC/IC

Leach Batch: 3519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	DI Leach	
880-2472-2	Source 20'	Soluble	Solid	DI Leach	
880-2472-3	Source 25'	Soluble	Solid	DI Leach	
880-2472-4	Source 30'	Soluble	Solid	DI Leach	
MB 880-3519/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2472-1 MS	Source 15'	Soluble	Solid	DI Leach	
880-2472-1 MSD	Source 15'	Soluble	Solid	DI Leach	

Analysis Batch: 3522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	300.0	3519
880-2472-2	Source 20'	Soluble	Solid	300.0	3519
880-2472-3	Source 25'	Soluble	Solid	300.0	3519
880-2472-4	Source 30'	Soluble	Solid	300.0	3519
MB 880-3519/1-A	Method Blank	Soluble	Solid	300.0	3519
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	300.0	3519
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3519
880-2472-1 MS	Source 15'	Soluble	Solid	300.0	3519
880-2472-1 MSD	Source 15'	Soluble	Solid	300.0	3519

Lab Chronicle

Client: Larson & Associates, Inc.
Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

Client Sample ID: Source 15'
Lab Sample ID: 880-2472-1
Date Collected: 05/24/21 13:00
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:30	CH	XEN MID

Client Sample ID: Source 20'
Lab Sample ID: 880-2472-2
Date Collected: 05/24/21 13:16
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 25'
Lab Sample ID: 880-2472-3
Date Collected: 05/24/21 13:20
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:19	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 30'
Lab Sample ID: 880-2472-4
Date Collected: 05/24/21 09:16
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:45	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 14:02	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.
Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

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: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2472-1	Source 15'	Solid	05/24/21 13:00	05/26/21 08:47	
880-2472-2	Source 20'	Solid	05/24/21 13:16	05/26/21 08:47	
880-2472-3	Source 25'	Solid	05/24/21 13:20	05/26/21 08:47	
880-2472-4	Source 30'	Solid	05/24/21 09:16	05/26/21 08:47	

Page 122 of 510



880-2472 №1483

CHAIN-OF-CUSTODY

5/28/2021

Larson & Associates, Inc.
Environmental Consultants

Data Reported to

Midland, TX 79701
432-687-0901

Date: 5/25/2021 PAGE 1 OF 1

PO#. _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #. 21-0119-01 COLLECTOR DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MST / NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐	TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D W 200 8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
~~Source~~ Source 15		5/24/21	1300	S	1				X		X		X	X	X												X		* Direct Bill to Apache *
Source 20'		5/24/21	1316	S	↓				↓		↓		↓	↓	↓												↓		
Source 25'		5/24/21	1320	S	↓				↓		↓		↓	↓	↓												↓		
Source 30'		5/25/21	0916	S	↓				↓		↓		↓	↓	↓												↓		

TOTAL 4

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
[signature]	5/26/21 8:47	[signature]
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8 92
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Page 19 of 20

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-2472-1

Login Number: 2472 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Phillips, Kerianna

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	

END OF REPORT

Table 2
Groundwater Sample Organic and Inorganic Analytical Data Summary
Apache Corporation, NMGSAU 1416
Lea County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C10 (mg/L)	>C10-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)	TDS (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	--	--	--	--	****250**	****1,000**
MW-1	12/21/2021	<0.200	0.391	0.221	<0.400	1,350	2,210	<459	3,560	**1,710**	--

Notes: Analysis performed by Eurofins - Xenco (Xenco) Laboratories, Midland, Texas, by EPA SW-846 Method 8021B (BTEX), Method 8015M (TPH) and Method 300 (chloride)
All values reported in milligrams per liter (mg/L) equivelent to parts per million (ppm)
-- No data available
< values - denootes concentration is less than method reporting limit (RL).
* - Human health standard
** - Domestic water quality standard
Bold and highlighted denotes analyte concentration exceeds NMWQCC domestic water quality standard

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-9659-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
1/5/2022 8:47:48 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-9659-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 6
QC Sample Results 7
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Job ID: 880-9659-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-9659-1

Receipt
The sample was received on 12/22/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.7°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-15649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-1 (880-9659-1) and (880-9698-B-1). 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: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Toluene	**0.221**		0.200		mg/L			12/29/21 07:35	100
Ethylbenzene	**0.391**		0.200		mg/L			12/29/21 07:35	100
m,p-Xylenes	<0.400	U	0.400		mg/L			12/29/21 07:35	100
o-Xylene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Xylenes, Total	<0.400	U	0.400		mg/L			12/29/21 07:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*12/29/21 07:35*	*100*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*		*12/29/21 07:35*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.612**		0.400		mg/L			12/30/21 10:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3560**		459		mg/L			01/04/22 15:21	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	**1350**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Diesel Range Organics (Over C10-C28)	**2210**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Oil Range Organics (Over C28-C36)	<459	U	459		mg/L		01/03/22 14:39	01/04/22 01:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0*	*S1-*	*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*
o-Terphenyl	*123*		*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		25.0		mg/L			12/30/21 15:56	50

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	108	78
880-9698-B-1 MS	Matrix Spike	125	71
880-9698-B-1 MSD	Matrix Spike Duplicate	118	92
LCS 880-15649/34	Lab Control Sample	130	70
LCSD 880-15649/35	Lab Control Sample Dup	129	71
MB 880-15649/39	Method Blank	100	64 S1-
MB 880-15650/5-A	Method Blank	108	60 S1-

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	0 S1-	123

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-15919/2-A	Lab Control Sample	102	93
LCSD 880-15919/3-A	Lab Control Sample Dup	109	100
MB 880-15919/1-A	Method Blank	120	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15649/39
Matrix: Water
Analysis Batch: 15649

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Toluene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*12/29/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*64*	*S1-*	*70 - 130*		*12/29/21 06:40*	*1*

Lab Sample ID: LCS 880-15649/34
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07587		mg/L		76	70 - 130		
Toluene			0.100	0.08056		mg/L		81	70 - 130		
Ethylbenzene			0.100	0.07723		mg/L		77	70 - 130		
m,p-Xylenes			0.200	0.1542		mg/L		77	70 - 130		
o-Xylene			0.100	0.07294		mg/L		73	70 - 130		

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

Lab Sample ID: LCSD 880-15649/35
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07470		mg/L		75	70 - 130	2	20
Toluene			0.100	0.08077		mg/L		81	70 - 130	0	20
Ethylbenzene			0.100	0.08063		mg/L		81	70 - 130	4	20
m,p-Xylenes			0.200	0.1579		mg/L		79	70 - 130	2	20
o-Xylene			0.100	0.08143		mg/L		81	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.00223	F1 F2	0.100	0.06449	F1	mg/L		62	70 - 130		
Toluene	0.0252	F1 F2	0.100	0.08513	F1	mg/L		60	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.00902	F1 F2	0.100	0.07678	F1	mg/L		68	70 - 130
m,p-Xylenes	0.0668	F1	0.200	0.1957	F1	mg/L		64	70 - 130
o-Xylene	0.00311	F1	0.100	0.07003	F1	mg/L		67	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MSD
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00223	F1 F2	0.100	0.08628	F2	mg/L		84	70 - 130	29	25
Toluene	0.0252	F1 F2	0.100	0.1488	F2	mg/L		124	70 - 130	54	25
Ethylbenzene	0.00902	F1 F2	0.100	0.1839	F1 F2	mg/L		175	70 - 130	82	25
m,p-Xylenes	0.0668	F1	0.200	0.2512		mg/L		92	70 - 130	25	25
o-Xylene	0.00311	F1	0.100	0.08910		mg/L		86	70 - 130	24	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-15650/5-A
Matrix: Water
Analysis Batch: 15649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15650

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L		12/28/21 12:49	12/28/21 16:34	1
Toluene	<0.00200	U	0.00200		mg/L		12/28/21 12:49	12/28/21 16:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/L		12/28/21 12:49	12/28/21 16:34	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L		12/28/21 12:49	12/28/21 16:34	1
o-Xylene	<0.00200	U	0.00200		mg/L		12/28/21 12:49	12/28/21 16:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/L		12/28/21 12:49	12/28/21 16:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*
1,4-Difluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1
Oil Range Organics (Over C28-C36)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*
o-Terphenyl	*126*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*

Lab Sample ID: LCS 880-15919/2-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			91.7	87.97		mg/L		96	75 - 125		
Diesel Range Organics (Over C10-C28)			91.7	92.37		mg/L		101	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-15919/3-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			92.0	87.57		mg/L		95	75 - 125	0	20
Diesel Range Organics (Over C10-C28)			92.0	90.57		mg/L		98	75 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15806/3
Matrix: Water
Analysis Batch: 15806

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/30/21 12:24	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-15806/4
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	24.54		mg/L		98	90 - 110		

Lab Sample ID: LCSD 880-15806/5
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	24.59		mg/L		98	90 - 110	0	20

Lab Sample ID: 880-9657-B-3 MS
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	284		250	535.7		mg/L		101	90 - 110		

Lab Sample ID: 880-9657-B-3 MSD
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	284		250	532.8		mg/L		100	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

GC VOA

Analysis Batch: 15649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8021B	
MB 880-15649/39	Method Blank	Total/NA	Water	8021B	
MB 880-15650/5-A	Method Blank	Total/NA	Water	8021B	15650
LCS 880-15649/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-15649/35	Lab Control Sample Dup	Total/NA	Water	8021B	
880-9698-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-9698-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Prep Batch: 15650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15650/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 15797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 15869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015B NM	15919
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015B NM	15919
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015B NM	15919
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	15919

Analysis Batch: 15912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015 NM	

Prep Batch: 15919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015NM Aq Prep	
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 15806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	300.0	
MB 880-15806/3	Method Blank	Total/NA	Water	300.0	
LCS 880-15806/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-15806/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-9657-B-3 MS	Matrix Spike	Total/NA	Water	300.0	
880-9657-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	5 mL	5 mL	15649	12/29/21 07:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15797	12/30/21 10:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Aq Prep			32.7 mL	3 mL	15919	01/03/22 14:39	DM	XEN MID
Total/NA	Analysis	8015B NM		100			15869	01/04/22 01:17	AJ	XEN MID
Total/NA	Analysis	300.0		50			15806	12/30/21 15:56	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. Job ID: 880-9659-1
Project/Site: NMGSAU 1416

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
8015 NM		Water	Total TPH
Total BTEX		Water	Total BTEX

Method Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID
8015NM Aq Prep	Microextraction	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9659-1	MW-1	Water	12/21/21 12:33	12/22/21 15:50

Page 141 of 510

No. 2299

9659 CHAIN-OF-CUSTODY

1/5/2022

Larson & Associates, Inc.
Environmental Consultants

507 N Marienfeld Ste 202
Midland TX 79701
432-687 0901

Data Reported to

DATE 12/22/2021 PAGE 1 OF 1

PO#: LAB WORK ORDER#

PROJECT LOCATION OR NAME NMGSAU 1416

LAI PROJECT # 21-0119-01 COLLECTOR DS & JR

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MST/MDT

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL MOD 8015 ☐	OIL MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐	PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐	8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ DW 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☐ ANIONS ☐ ALK/ALINITY ☐	FIELD NOTES
MW-1		12/21/21	1233	W	2				X		X		X	X	X												X		X			Direct Bill to Apache
TOTAL																																

880-9659 Chain of Custody

RELINQUISHED BY (Signature)	DATE/TIME 12/22/21 1550	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 7.6/7.7 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Page 16 of 17

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-9659-1

Login Number: 9659 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Teel, Brianna

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").	True	

Page 143 of 510

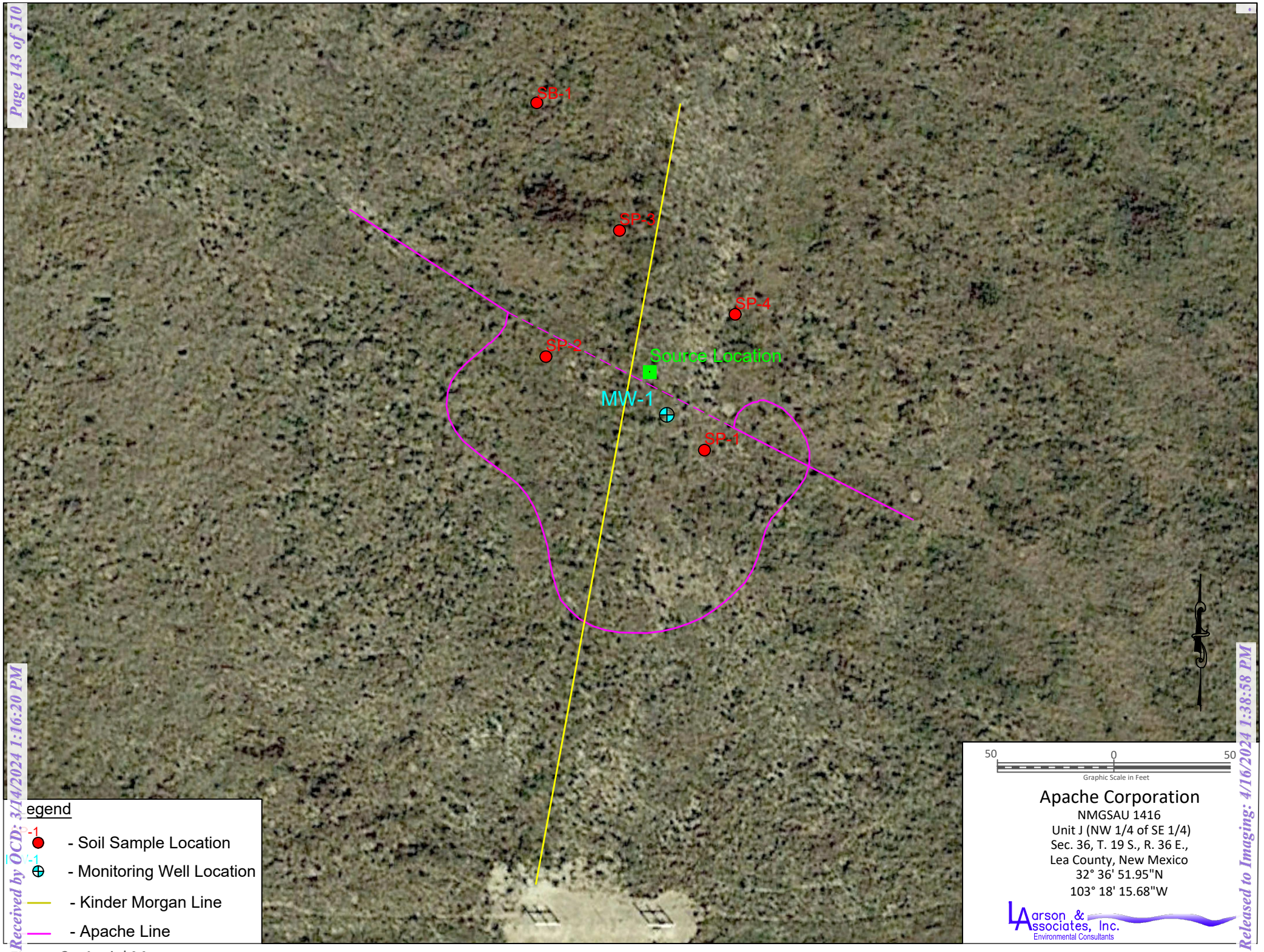


Figure 2 - Aerial Map

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

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

COMMENTS

Action 36698

COMMENTS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 36698
	Action Type: [C-141] Release Corrective Action (C-141)

COMMENTS

Created By	Comment	Comment Date
chensley	Get with Bradford, contamination reach DTW.	8/20/2021
chensley	Spoke with Larry Barker and requested a MW at the source. Requested water sample before continuing.	8/25/2021

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 36698

CONDITIONS

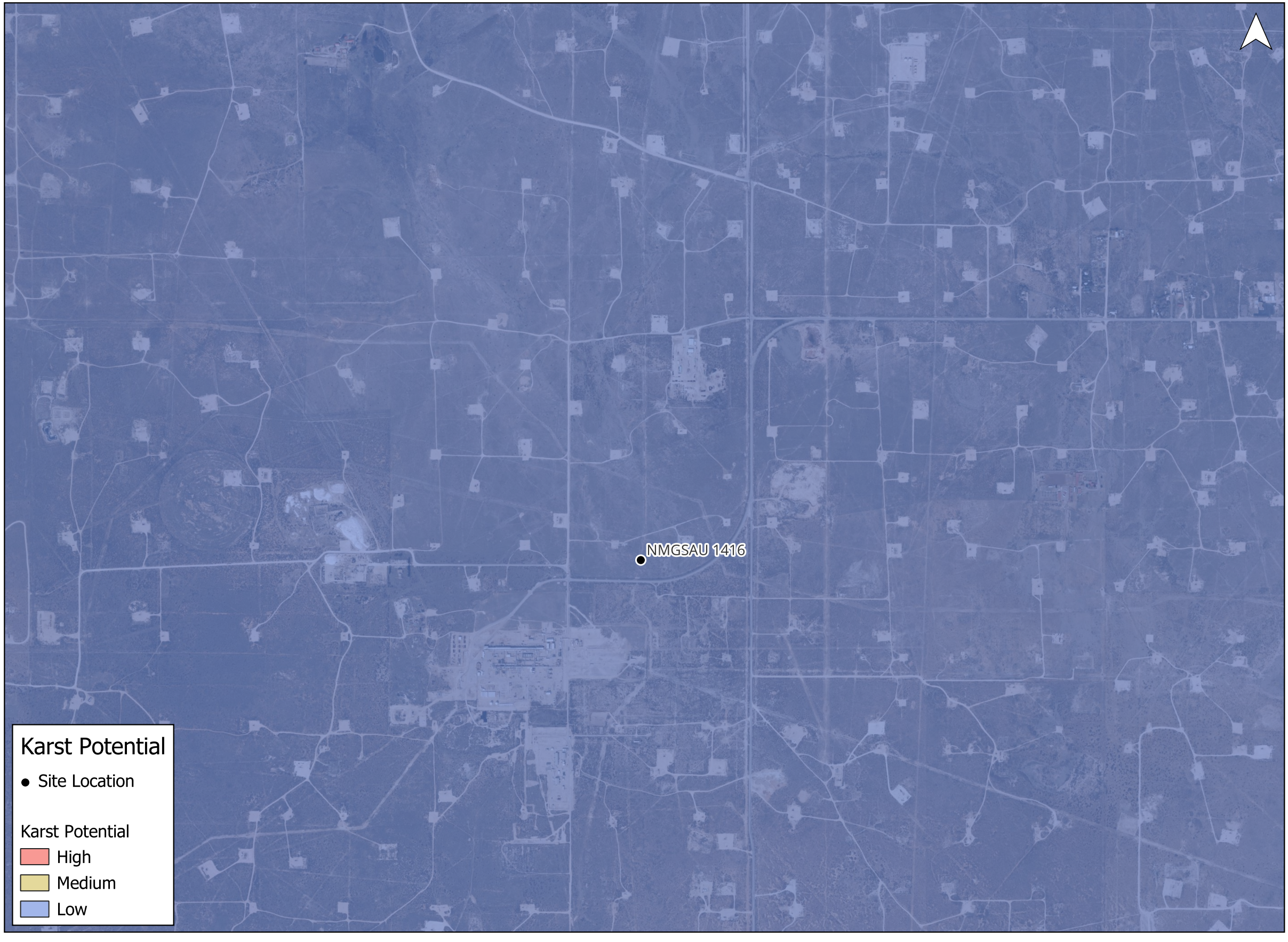
Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 36698
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	The OCD request samples as near as possible to (no greater than 5ft) source starting with samples (full panel per rule part 29) at 1ft, 3ft, 5ft, 10ft, 15ft, 20ft, 25ft, 30ft, 35ft, 40ft. If MW at source has been backfilled use this new bore hole as a standard monitoring well.	1/18/2022
chensley	Move MW #2 southwest by 30 feet as per MW2 current proposed location on map.	1/18/2022
chensley	Water samples must identify levels at standard minimally for WQCC. Example Benzene is now 5 ppb.	1/18/2022
chensley	The OCD request the lab utilize the chromatographic to identify specific chemistry of heavy and and carbon chains if possible.	1/18/2022

Appendix C

Karst Map


NMGSAU 1416
Karst Potential
Site Location
Karst Potential
High
Medium
Low

Appendix D

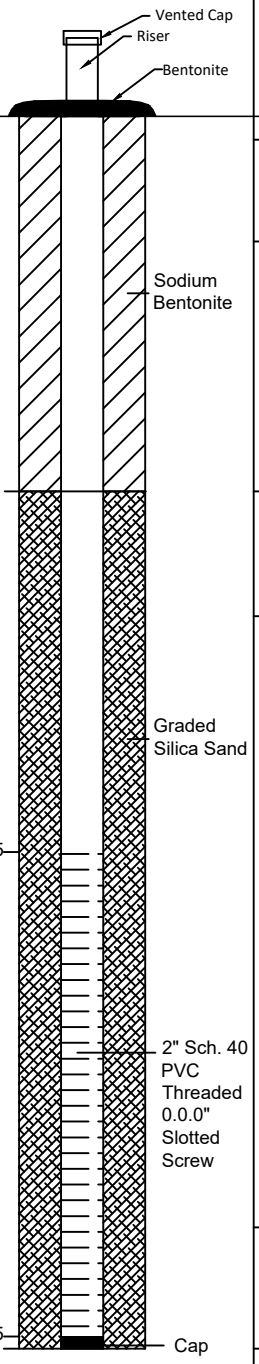
Borings Logs and Well Completion Records

BORING RECORD

Start: 9:20 MST
Finish:10:22 MST

Surface Elevation:
TOC Elecation:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil, 7.5YR 3/2, Dark Brown, Poorly Cemented, Fine Grained Quartz Sand	Top Soil	
	5	Caliche, 7.5YR 8/1, White, Well Cemented 7.5YR 6/1, Gray, Very Coarse, Subangular to Subrounded, Poorly Sorted 7.5YR 6/6, Reddish Yellow, Moderately Sorted, Subrounded,	Caliche	
	15	Sand Coarse to Medium, Poorly Cemented	SW	
	20	Sand, 7.5 YR 7/4, Pink, Well Cemented, Medium, to Fine Grained Quartz Sand, Subrounded, Poorly Sorted 7.5YR 6/4, Light Brown, Subrounded to Rounded, Moderately Cemented, Medium Grained Quartz Sand, Poorly Sorted		
	30	Caliche, 7.5YR 7/3, Pink, Very Coarse Sand, Subangular to Subrounded, Poorly Sorted 7.5YR 6/3, Light Brown, Subangular, Moderately Sorted, Well Cemented 7.5YR 8/1, White, Moderately Sorted, Angular to Subangular	Caliche	
	45	Clayey Sand, 7.5 YR 6/6, Reddish Yellow, Well Sorted, Poorly Cemented, Coarse Grained, Subrounded to Rounded	SC	
	50	TD: 50'		
	55			



NUMBER	RECOVERY	DEPTH	REMARKS
1		1	9:20 MST
2		5	
3		15	
4		20	
5		45	
6		50	10:22

BACKGROUND PID READING
SOIL : _____ PPM
SOIL : _____ PPM

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

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 4"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : T. Peters
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 11/10/21

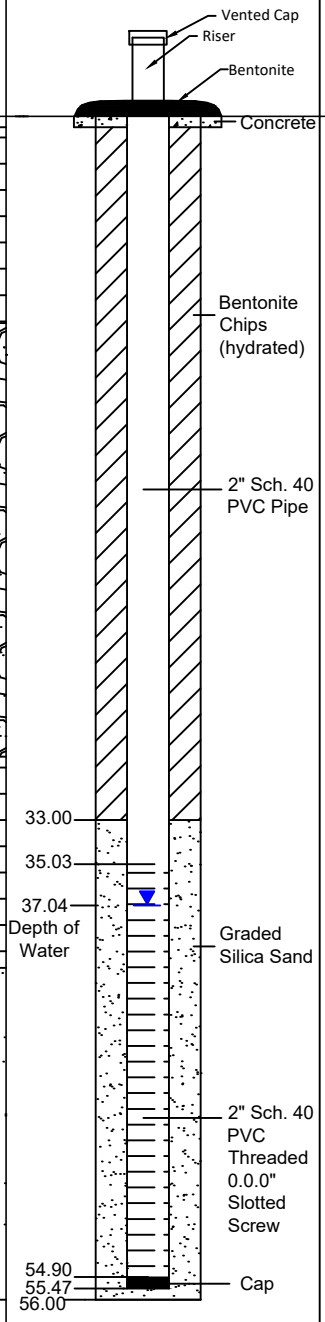
BORING NUMBER : MW-1

BORING RECORD

Start: 10:15
Finish: 12:15

Surface Elevation: 3,584.32'
TOC Elecation: 3,587.23'

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS
	0		
	1	Top Soil, 5YR 3/3, Brown	
	5	Caliche, 5YR 8/1, White with Small Amounts of Quartz Sand	Caliche
	10	Gravelly Sand, 5YR 8/3, Pink, Very Fine to Coarse Gravel, Poorly Sorted, Angular to Subrounded with Caliche Clasts	SP
	15		
	20		
	25		
	30	Caliche, 5YR 8/1, Pinkish White with Small Amounts of Quartz Sand	Caliche
37.04 ▼	35		
	40	Sand, 2YR 7/4, Light Reddish Brown, Fine to Coarse, Poorly Sorted, Angular to Rounded with Caliche Clasts	SP
	45		
	50	Sand, 2.5YR 5/6, Red, Fine to Coarse, Poorly Sorted, Subangular to Rounded	
	55	*Water Injected @ 53'*	
		TD: 56.00'	
	60		
	65		



NUMBER | RECOVERY | DEPTH

REMARKS
BACKGROUND PID READING
SOIL : PPM
SOIL : PPM

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

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDC
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/06/2023

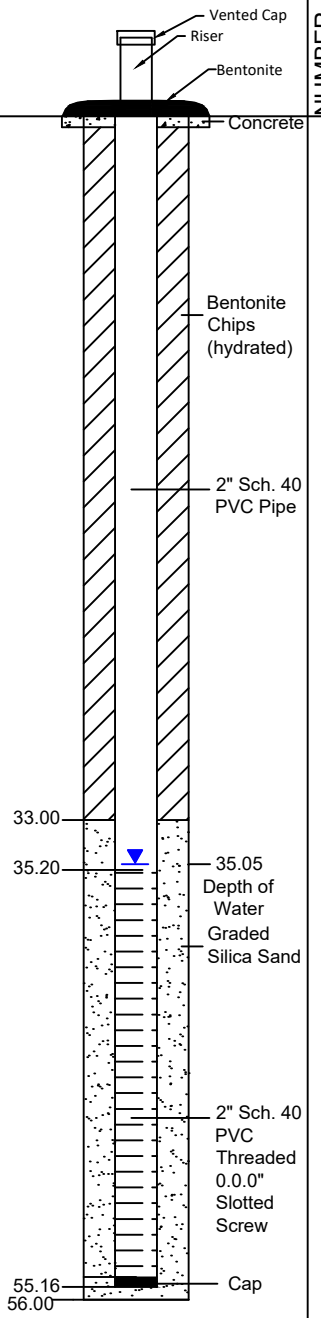
BORING NUMBER : MW-2

BORING RECORD

Start: 13:30
Finish: 14:50

Surface Elevation: 3,585.25'
TOC Elecation: 3,588.25'

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0			
	1	Top Soil, 5YR 3/3, Brown		
	5	Caliche, 5YR 8/2, Pinkish White with Small Amounts of Very Fine Grained Quartz Sand	Caliche	
	10	Sand, 5YR 8/3, Pink, Very Fine to Medium Grained Quartz Sand, Moderately Sorted, Subrounded to Rounded	SM	
	15			
	20	Gravelly Sand, 5YR 8/3, Pink, Fine to Coarse Gravel, Poorly Sorted, Subangular to Rounded	SP	
	25	Caliche, 5YR 8/2, Pinkish White with Small Amounts of Quartz Sand		
35.05	30		Caliche	
	35			
	40	Sand, 2YR 7/4, Light Reddish Brown, Fine to Coarse, Poorly Sorted, Angular to Rounded with Caliche Clasts		
	45	*Injected Water at 43'bgs*	SP	
	50			
	55			
		TD: 56.00'		
	60			
	65			



NUMBER	RECOVERY	DEPTH

REMARKS

BACKGROUND PID READING
SOIL : _____ PPM
SOIL : _____ PPM

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

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDC
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/06/2023

BORING NUMBER : MW-3

BORING RECORD

Start: 11:00
Finish: 11:50

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Caliche, 7.5 YR 8/2, Moderately Cemented	Caliche	
	15	Sand, 2.5 YR 7/6, Fine to Medium Quartz Sand, Sub Angular to Sub Rounded, Moderately Sorted	SW	
	25	Sand, 5YR 7/4, Fine Grained Quartz Sand, Sub Rounded to Rounded, Well Sorted		
	30	Fine Grained Quartz Sand, 5 YR 8/3, Sub Rounded to Rounded, Well Sorted		
Depth to Water: 35.3	35	5 YR 8/1, Well Cemented, Quartzite		
	40	TD: 40'		

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SB-1

BORING RECORD

Start: 14:30
Finish: 14:45

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil Caliche, 7.5 YR 3/1, Darkish Reddish Gray, Well Cemented		
	5	7.5 8/1, White	Caliche	
	10	7.5 8/2, Light Pink, Moderately Cemented		
	15			
	20	Sand, 10YR 4/6, Red, Poorly Cemented, Well Rounded, Moderately Sorted	SM	
	25			
	30	Caliche, 7.5 YR 8/1, White, Well Cemented	Caliche	
	35	TD: 35'		
	40			

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

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SP-2

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 14:05
Finish: 14:25

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil Caliche, 7.5 YR 3/1, Darkish Reddish Gray, Well Cemented		
	5	7.5 8/1, White	Caliche	
	10	7.5 8/2, Light Pink, Moderately Cemented		
	15			
	20	Sand, 10YR 4/6, Red, Poorly Cemented, Well Rounded, Moderately Sorted	SM	
	25			
	30	Caliche, 7.5 YR 8/1, White, Well Cemented	Caliche	
	35	TD: 35'		
	40			

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

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SP-3

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 13:35
Finish: 13:57

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil Caliche, 7.5 YR 3/1, Darkish Reddish Gray, Well Cemented		
	5	7.5 8/1, White	Caliche	
	10	7.5 8/2, Light Pink, Moderately Cemented		
	15			
	20	Sand, 10YR 4/6, Red, Poorly Cemented, Well Rounded, Moderately Sorted	SM	
	25			
	30	Caliche, 7.5 YR 8/1, White, Well Cemented	Caliche	
	35	TD: 35'		
	40			

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

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SP-4

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 10:15
Finish: 10:50

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil 5YR 3/3, Brown		
	5	Caliche , 5YR 6/4, Light Reddish Brown, Hydrocarbon Stained	Caliche	
	10	Sand, 5YR 7/6, Reddish Yellow, Very Fine to Medium Grained Quartz Sand, Poorly Sorted, Subangular to Subrounded, Hydrocarbon Smell	SP	
	15			
	20	2YR 4/8, Red, Very Fine to Medium Quartz Grained Sand, Moderately Sorted, Subrounded to Rounded, Hydrocarbon Smell	SM	
	25	Caliche, 5YR 8/2, Pinkish White, with Small Amounts of Quartz Sand Clasts 5-10mm, Hydrocarbon Smell		
	30	5YR 8/1, White, Small Amounts of Quartz, Hydrocarbon Smell	Caliche	
	35	TD: 35'		
	40			

PID READING
PPM X _____
2 4 6 8 10 12 14 16 18

SAMPLE
NUMBER | PID READING | RECOVERY | DEPTH

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

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

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/05/2023

BORING NUMBER : SP-5

BORING RECORD

Start: 11:00
Finish: 11:35

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil 5YR 8/3, Brown		
	5	Caliche , 5YR 6/4, Light Reddish Brown, Very Fine Graded Quartz Sand, Hydrocarbon Stained	Caliche	
	10	Gravelly Sand, 5YR 7/6, Reddish Yellow, Very Fine to Moderate Gravel, Poorly Sorted, Angular to Subangular, Hydrocarbon Stained	SP	
	15	Sand, 5YR 6/6, Reddish Yellow, Very Fine to Coarse Grained Quartz Sand, Poorly Sorted, Subangular to Subrounded, Hydrocarbon Stained	SP	
	20	2YR 3/8, Red, Very Fine to Mediem Grained Quartz Sand, Moderately Sorted, Subrounded to Rounded, Hydrocarbon Smell	SP	
	25	5YR 6/6, Reddish Yellow, Very Fine to Coarse Grained Quartz Sand, Poorly Sorted, Subangular to Subrounded with Caliche Clasts, Hydrocarbon Smell	SP	
	30	Caliche, 5YR 8/1, White, Well Indurated, Small Amounts of Quartz	Caliche	
	35	TD: 35'		
	40			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/05/2023

BORING NUMBER : SP-6

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 13:20
Finish: 14:00

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil 5YR 3/3, Brown with Caliche Clasts		
	5	Caliche, 5YR 8/2, Pinkish White, with Small Amount of Very Fine Graded Quartz Sand, Hydrocarbon Stained	Caliche	
	10	Gravelly Sand, 5YR 7/6, Reddish Yellow, Very Fine to Coarse Gravel, Poorly Sorted, Angular to Subrounded, Hydrocarbon Stained	SP	
	15			
	20	Sand, 2YR 4/8, Red, Very Fine to Medium Grained Quartz Sand, Moderately Sorted, Subrounded to Rounded, Hydrocarbon Smell	SM	
	25			
	30	Caliche, 5YR 8/2, Pinkish White, with Small Amounts of Quartz, Hydrocarbon Smell	Caliche	
	35	5YR 8/1, White, Well Indurated, with Small Amounts of Quartz		
	40	TD: 40'		

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/05/2023

BORING NUMBER : SP-7

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 11:45
Finish: 12:25

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Top Soil 5YR 3/3, Brown with Caliche Clasts		
	5	Caliche, 5YR 8/2, Pinkish White, with Very Fine Graded Quartz Sand, Hydrocarbon Stained	Caliche	
	10	Gravelly Sand, 5YR 7/6, Reddish Yellow, Very Fine to Coarse Gravel, Poorly Sorted, Angular to Subangular Hydrocarbon Stained	SP	
	15	Sand, 5YR 6/6, Reddish Yellow, Very Fine to Coarse Grained Quartz Sand, Poorly Sorted, Subangular to Subrounded, Hydrocarbon Stained		
	20			
	25	5YR 6/6, Reddish Yellow, Very Fine to Coarse Grained Quartz Sand, Poorly Sorted, Subangular to Subrounded with Caliche Clast, Hydrocarbon Smell	SM	
	30	Caliche, 5YR 8/1, White, Well Indurated, with Small Amounts of Quartz	Caliche	
	35	TD: 35'		
	40			

PID READING
PPM X _____
2 4 6 8 10 12 14 16 18

SAMPLE
NUMBER | PID READING | RECOVERY | DEPTH

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/05/2023
BORING NUMBER : SP-8

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 10:20
Finish: 10:34

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 5YR 4/4, Reddish Brown, Very Fine Graded Quartz Sand, Dry	CL			1	Ø		1	10:22
	5	Caliche, 5YR 5/8, Pinkish White, Interbred Sandy, Fine to Medium Grained Quartz Sand, Subrounded	Caliche			2	Ø		5	10:23
	10	Sand, 7.5YR 7/3 to 6/3, Light Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Rounded, Loose to Moderately Sorted, Composite dated between 20', Dry	SP			3	5		10	10:25
	15					4	3		15	10:27
	20					5	Ø		20	10:29
	25	TD: 25'				6	Ø		25	10:34
	30									
	35									
	40									

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

SOIL : _____ PPM
SOIL : _____ PPM

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/07/2023

BORING NUMBER : SP-9

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : M. Larson
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 9:50
Finish: 10:09

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 5YR 4/4, Reddish Brown, Very Fine Graded Quartz Sand, Dry	CL			1	Ø		1	9:53
	5	Caliche, 5YR 8/2, Pinkish White, Indenated, Dry, Sandy, Fine to Medium Grained Quartz Sand, Subrounded	Caliche			2	Ø		5	9:58
	10	Sand, 7.5YR 7/3 to 6/3, Light Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Rounded, Dry, Unconsolidated	SP			3	Ø		10	10:04
	15					4	Ø		15	10:06
	20	TD: 20'				5	Ø		20	10:09
	25									
	30									
	35									
	40									

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

SOIL : _____ PPM
SOIL : _____ PPM

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 09/07/2023

BORING NUMBER : SP-10

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : M. Larson
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

BORING RECORD

Start: 10:48
Finish: 10:57

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 5YR 4/4, Reddish Brown, Very Fine Graded Quartz Sand, Dry	CL			1	Ø		1	10:45
	5	Caliche, 5YR 8/8, Pinkish White, Indenated, Sandy with Fine to Medium Grained Quartz Sand, Subrounded, Dry	Caliche			2	Ø		5	10:50
	10	Sand, 7.5YR 4/3 to 6/3, Reddish Brown, Very Fine Grained Quartz Sand, Poorly Sorted, Subrounded to Rounded, looks Dry	SP			3	Ø		10	10:54
	15					4	Ø		15	10:55
	20	TD: 20'				5	Ø		20	10:37
	25									
	30									
	35									
	40									

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

SOIL : _____ PPM
SOIL : _____ PPM

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

Larson & Associates, Inc.
Environmental Consultants

DRILL DATE : 09/07/2023

BORING NUMBER : SP-11

JOB NUMBER : Apache / 21-0119-01
HOLE DIAMETER : 5"
LOCATION : NMGSAU 1416
LAI GEOLOGIST : M. Larson
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

Appendix E

Laboratory Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2471-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
6/2/2021 10:16:06 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-2471-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 21
QC Sample Results 23
QC Association Summary 31
Lab Chronicle 36
Certification Summary 42
Method Summary 43
Sample Summary 44
Chain of Custody 45
Receipt Checklists 47

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Job ID: 880-2471-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2471-1

Receipt
The samples were received on 5/26/2021 8:47 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
Method 8021B: Surrogate recovery for the following sample was outside control limits: SP-4 25' (880-2471-24). 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. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 1'
Lab Sample ID: 880-2471-1
Date Collected: 05/24/21 15:00 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
m-Xylene & p-Xylene	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Xylenes, Total	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Total BTEX	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.8**		5.03		mg/Kg			05/28/21 01:49	1

Client Sample ID: SP-1 5'
Lab Sample ID: 880-2471-2
Date Collected: 05/24/21 15:03 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 5'
Lab Sample ID: 880-2471-2
Date Collected: 05/24/21 15:03 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 14:54	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.9**		5.05		mg/Kg			05/28/21 02:06	1

Client Sample ID: SP-1 10'
Lab Sample ID: 880-2471-3
Date Collected: 05/24/21 15:05 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.05		mg/Kg			05/28/21 02:11	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 15'
Lab Sample ID: 880-2471-4
Date Collected: 05/24/21 15:10 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*
o-Terphenyl	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.45**		5.00		mg/Kg			05/28/21 02:16	1

Client Sample ID: SP-1 20'
Lab Sample ID: 880-2471-5
Date Collected: 05/24/21 15:15 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*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		05/26/21 10:32	05/26/21 15:59	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 20'
Lab Sample ID: 880-2471-5
Date Collected: 05/24/21 15:15 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 15:59	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.60**		4.98		mg/Kg			05/28/21 02:21	1

Client Sample ID: SP-1 25'
Lab Sample ID: 880-2471-6
Date Collected: 05/24/21 15:20 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*
o-Terphenyl	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		4.97		mg/Kg			05/28/21 02:26	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 1'
Lab Sample ID: 880-2471-7
Date Collected: 05/24/21 14:30 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**		4.95		mg/Kg			05/28/21 02:31	1

Client Sample ID: SP-2 5'
Lab Sample ID: 880-2471-8
Date Collected: 05/24/21 14:32 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*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		05/26/21 10:32	05/26/21 17:03	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 5'
Lab Sample ID: 880-2471-8
Date Collected: 05/24/21 14:32 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 17:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.83**		5.00		mg/Kg			05/28/21 02:35	1

Client Sample ID: SP-2 10'
Lab Sample ID: 880-2471-9
Date Collected: 05/24/21 14:35 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.02		mg/Kg			05/27/21 21:33	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 15'
Lab Sample ID: 880-2471-10
Date Collected: 05/24/21 14:37
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*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		05/26/21 10:32	05/26/21 17:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.09**		5.02		mg/Kg			05/27/21 21:47	1

Client Sample ID: SP-2 20'
Lab Sample ID: 880-2471-11
Date Collected: 05/24/21 14:40
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*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		05/26/21 10:32	05/26/21 18:29	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 20'
Lab Sample ID: 880-2471-11
Date Collected: 05/24/21 14:40 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 18:29	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*
o-Terphenyl	*100*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			05/27/21 21:52	1

Client Sample ID: SP-2 25'
Lab Sample ID: 880-2471-12
Date Collected: 05/24/21 14:46 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:17*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.64**		5.03		mg/Kg			05/27/21 21:57	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 1'
Lab Sample ID: 880-2471-13
Date Collected: 05/24/21 14:10
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*
o-Terphenyl	*102*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.42**		4.98		mg/Kg			05/27/21 22:02	1

Client Sample ID: SP-3 5'
Lab Sample ID: 880-2471-14
Date Collected: 05/24/21 14:12
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 5'
Lab Sample ID: 880-2471-14
Date Collected: 05/24/21 14:12 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 19:33	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*
o-Terphenyl	*79*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.42**		4.98		mg/Kg			05/27/21 22:07	1

Client Sample ID: SP-3 10'
Lab Sample ID: 880-2471-15
Date Collected: 05/24/21 14:15 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.8**		5.05		mg/Kg			05/27/21 22:12	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 15'
Lab Sample ID: 880-2471-16
Date Collected: 05/24/21 14:18 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.0**		4.98		mg/Kg			05/27/21 22:26	1

Client Sample ID: SP-3 20'
Lab Sample ID: 880-2471-17
Date Collected: 05/24/21 14:21 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:59*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-3 20'
Lab Sample ID: 880-2471-17
Date Collected: 05/24/21 14:21 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 20:37	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.3**		5.00		mg/Kg			05/27/21 22:31	1

Client Sample ID: SP-3 25'
Lab Sample ID: 880-2471-18
Date Collected: 05/24/21 14:25 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*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		05/26/21 10:32	05/26/21 20:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.2**		4.96		mg/Kg			05/27/21 22:46	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 1'
Lab Sample ID: 880-2471-19
Date Collected: 05/24/21 13:35
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Diesel Range Organics (Over C10-C28)	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Total TPH	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**224**		5.00		mg/Kg			05/27/21 22:51	1

Client Sample ID: SP-4 5'
Lab Sample ID: 880-2471-20
Date Collected: 05/24/21 13:37
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 5'
Lab Sample ID: 880-2471-20
Date Collected: 05/24/21 13:37
Matrix: Solid
Date Received: 05/26/21 08:47

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)	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
Total TPH	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.4**		5.00		mg/Kg			05/27/21 22:56	1

Client Sample ID: SP-4 10'
Lab Sample ID: 880-2471-21
Date Collected: 05/24/21 13:40
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*
o-Terphenyl	*92*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.8**		4.97		mg/Kg			05/27/21 23:01	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 15'
Lab Sample ID: 880-2471-22
Date Collected: 05/24/21 13:45 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00267**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*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		05/26/21 10:57	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*
o-Terphenyl	*111*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.7**		4.99		mg/Kg			05/27/21 23:06	1

Client Sample ID: SP-4 20'
Lab Sample ID: 880-2471-23
Date Collected: 05/24/21 13:52 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 20'
Lab Sample ID: 880-2471-23
Date Collected: 05/24/21 13:52 **Matrix: Solid**
Date Received: 05/26/21 08:47

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		05/26/21 10:57	05/26/21 15:37	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*
o-Terphenyl	*101*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.6**		4.95		mg/Kg			05/27/21 23:11	1

Client Sample ID: SP-4 25'
Lab Sample ID: 880-2471-24
Date Collected: 05/24/21 13:57 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00356**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.0**		5.00		mg/Kg			05/27/21 23:15	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-2471-1	SP-1 1'	90	93
880-2471-1 MS	SP-1 1'	103	102
880-2471-1 MSD	SP-1 1'	113	108
880-2471-2	SP-1 5'	84	96
880-2471-3	SP-1 10'	90	94
880-2471-4	SP-1 15'	98	98
880-2471-5	SP-1 20'	91	97
880-2471-6	SP-1 25'	96	97
880-2471-7	SP-2 1'	89	101
880-2471-8	SP-2 5'	84	93
880-2471-9	SP-2 10'	96	99
880-2471-10	SP-2 15'	83	95
880-2471-11	SP-2 20'	98	94
880-2471-12	SP-2 25'	100	92
880-2471-13	SP-3 1'	91	97
880-2471-14	SP-3 5'	90	98
880-2471-15	SP-3 10'	95	94
880-2471-16	SP-3 15'	100	97
880-2471-17	SP-3 20'	94	94
880-2471-18	SP-3 25'	89	95
880-2471-19	SP-4 1'	126	105
880-2471-20	SP-4 5'	125	106
880-2471-21	SP-4 10'	90	103
880-2471-21 MS	SP-4 10'	90	126
880-2471-21 MSD	SP-4 10'	86	107
880-2471-22	SP-4 15'	95	122
880-2471-23	SP-4 20'	96	112
880-2471-24	SP-4 25'	102	114
LCS 880-3516/1-A	Lab Control Sample	100	105
LCS 880-3517/1-A	Lab Control Sample	81	116
LCSD 880-3516/2-A	Lab Control Sample Dup	97	104
LCSD 880-3517/2-A	Lab Control Sample Dup	84	117
MB 880-3414/5-A	Method Blank	109	114
MB 880-3494/5-A	Method Blank	88	101
MB 880-3516/5-A	Method Blank	85	94
MB 880-3517/5-A	Method Blank	98	87

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)
880-2471-1	SP-1 1'	94	84
880-2471-1 MS	SP-1 1'	87	69 S1-
880-2471-1 MSD	SP-1 1'	86	69 S1-

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
880-2471-2	SP-1 5'	95	85								
880-2471-3	SP-1 10'	97	88								
880-2471-4	SP-1 15'	98	89								
880-2471-5	SP-1 20'	94	84								
880-2471-6	SP-1 25'	115	98								
880-2471-7	SP-2 1'	95	85								
880-2471-8	SP-2 5'	98	88								
880-2471-9	SP-2 10'	89	78								
880-2471-10	SP-2 15'	97	88								
880-2471-11	SP-2 20'	115	100								
880-2471-12	SP-2 25'	97	86								
880-2471-13	SP-3 1'	120	102								
880-2471-14	SP-3 5'	93	79								
880-2471-15	SP-3 10'	93	81								
880-2471-16	SP-3 15'	96	85								
880-2471-17	SP-3 20'	94	84								
880-2471-18	SP-3 25'	112	95								
880-2471-19	SP-4 1'	111	86								
880-2471-20	SP-4 5'	97	86								
880-2471-21	SP-4 10'	88	92								
880-2471-21 MS	SP-4 10'	78	75								
880-2471-21 MSD	SP-4 10'	95	90								
880-2471-22	SP-4 15'	110	111								
880-2471-23	SP-4 20'	98	101								
880-2471-24	SP-4 25'	98	95								
LCS 880-3521/2-A	Lab Control Sample	93	76								
LCS 880-3527/2-A	Lab Control Sample	100	95								
LCSD 880-3521/3-A	Lab Control Sample Dup	90	77								
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96								
MB 880-3521/1-A	Method Blank	86	77								
MB 880-3527/1-A	Method Blank	100	103								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3414/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3414

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*

Lab Sample ID: MB 880-3494/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3494

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*

Lab Sample ID: MB 880-3516/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3516

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCS 880-3516/1-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1135		mg/Kg		113	70 - 130		
Toluene			0.100	0.1061		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1043		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2163		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130		

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

Lab Sample ID: LCSD 880-3516/2-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1113		mg/Kg		111	70 - 130	2	35
Toluene			0.100	0.1055		mg/Kg		106	70 - 130	1	35
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2076		mg/Kg		104	70 - 130	4	35
o-Xylene			0.100	0.1031		mg/Kg		103	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-2471-1 MS
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.100	0.07297		mg/Kg		73	70 - 130		
Toluene	<0.00198	U F1	0.100	0.06973	F1	mg/Kg		69	70 - 130		
Ethylbenzene	<0.00198	U F1	0.100	0.06514	F1	mg/Kg		65	70 - 130		
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.1332	F1	mg/Kg		66	70 - 130		
o-Xylene	<0.00198	U F1	0.100	0.06707	F1	mg/Kg		67	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0994	0.08519		mg/Kg		86	70 - 130	15	35
Toluene	<0.00198	U F1	0.0994	0.08145		mg/Kg		82	70 - 130	16	35
Ethylbenzene	<0.00198	U F1	0.0994	0.07595		mg/Kg		76	70 - 130	15	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00396	U F1	0.199	0.1574		mg/Kg		79	70 - 130	17	35
o-Xylene	<0.00198	U F1	0.0994	0.07953		mg/Kg		80	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 880-3517/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3517

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*

Lab Sample ID: LCS 880-3517/1-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1039		mg/Kg		104	70 - 130		
Toluene			0.100	0.09244		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.08359		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1660		mg/Kg		83	70 - 130		
o-Xylene			0.100	0.08061		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1097		mg/Kg		110	70 - 130	5	35
Toluene			0.100	0.09767		mg/Kg		98	70 - 130	6	35
Ethylbenzene			0.100	0.08869		mg/Kg		89	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1720		mg/Kg		86	70 - 130	4	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene			0.100	0.08510		mg/Kg		85	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1 F2	0.0990	0.09342		mg/Kg		93	70 - 130
Toluene	<0.00199	U	0.0990	0.08127		mg/Kg		82	70 - 130
Ethylbenzene	<0.00199	U	0.0990	0.07497		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1448		mg/Kg		73	70 - 130
o-Xylene	<0.00199	U F1	0.0990	0.07177		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0990	0.06139	F1 F2	mg/Kg		61	70 - 130	41	35
Toluene	<0.00199	U	0.0990	0.07213		mg/Kg		73	70 - 130	12	35
Ethylbenzene	<0.00199	U	0.0990	0.07003		mg/Kg		71	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1386		mg/Kg		70	70 - 130	4	35
o-Xylene	<0.00199	U F1	0.0990	0.06490	F1	mg/Kg		66	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-3521/1-A
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3521

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	05/26/21 10:32	05/26/21 12:45	1
o-Terphenyl	77		70 - 130	05/26/21 10:32	05/26/21 12:45	1

Lab Sample ID: LCS 880-3521/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.7		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: LCSD 880-3521/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	826.6		mg/Kg		83	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	972.9		mg/Kg		97	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: 880-2471-1 MS — **Client Sample ID: SP-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	888.4		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1027		mg/Kg		103	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	69	S1-	70 - 130

Lab Sample ID: 880-2471-1 MSD — **Client Sample ID: SP-1 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 3502 — **Prep Batch: 3521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	881.3		mg/Kg		88	70 - 130	1	20

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

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

Lab Sample ID: 880-2471-1 MSD **Client Sample ID: SP-1 1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 3502 **Prep Batch: 3521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1029		mg/Kg		103	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*69*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-3527/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 3504 **Prep Batch: 3527**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 3504 **Prep Batch: 3527**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1073		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 3504 **Prep Batch: 3527**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3525/1-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 23:43	1

Lab Sample ID: LCS 880-3525/2-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	266.2		mg/Kg		106	90 - 110

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-3525/3-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	267.6		mg/Kg		107	90 - 110	1	20

Lab Sample ID: 880-2469-A-2-B MS
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.2		mg/Kg		107	90 - 110		

Lab Sample ID: 880-2469-A-2-C MSD
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.4		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-3528/1-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 20:49	1

Lab Sample ID: LCS 880-3528/2-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	255.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-3528/3-A
Matrix: Solid
Analysis Batch: 3578

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	255.7		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-2471-15 MS
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	17.8		253	277.3		mg/Kg		103	90 - 110		

Lab Sample ID: 880-2471-15 MSD
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17.8		253	277.1		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA

Prep Batch: 3414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3414/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 3494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3494/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 3496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-2	SP-1 5'	Total/NA	Solid	8021B	3516
880-2471-3	SP-1 10'	Total/NA	Solid	8021B	3516
880-2471-4	SP-1 15'	Total/NA	Solid	8021B	3516
880-2471-5	SP-1 20'	Total/NA	Solid	8021B	3516
880-2471-6	SP-1 25'	Total/NA	Solid	8021B	3516
880-2471-7	SP-2 1'	Total/NA	Solid	8021B	3516
880-2471-8	SP-2 5'	Total/NA	Solid	8021B	3516
880-2471-9	SP-2 10'	Total/NA	Solid	8021B	3516
880-2471-10	SP-2 15'	Total/NA	Solid	8021B	3516
880-2471-11	SP-2 20'	Total/NA	Solid	8021B	3516
880-2471-12	SP-2 25'	Total/NA	Solid	8021B	3516
880-2471-13	SP-3 1'	Total/NA	Solid	8021B	3516
880-2471-14	SP-3 5'	Total/NA	Solid	8021B	3516
880-2471-15	SP-3 10'	Total/NA	Solid	8021B	3516
880-2471-16	SP-3 15'	Total/NA	Solid	8021B	3516
880-2471-17	SP-3 20'	Total/NA	Solid	8021B	3516
880-2471-18	SP-3 25'	Total/NA	Solid	8021B	3516
880-2471-19	SP-4 1'	Total/NA	Solid	8021B	3516
880-2471-20	SP-4 5'	Total/NA	Solid	8021B	3516
MB 880-3494/5-A	Method Blank	Total/NA	Solid	8021B	3494
MB 880-3516/5-A	Method Blank	Total/NA	Solid	8021B	3516
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	8021B	3516
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3516
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8021B	3516

Analysis Batch: 3497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-22	SP-4 15'	Total/NA	Solid	8021B	3517
880-2471-23	SP-4 20'	Total/NA	Solid	8021B	3517
880-2471-24	SP-4 25'	Total/NA	Solid	8021B	3517
MB 880-3414/5-A	Method Blank	Total/NA	Solid	8021B	3414
MB 880-3517/5-A	Method Blank	Total/NA	Solid	8021B	3517
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	8021B	3517
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3517
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8021B	3517

Prep Batch: 3516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA (Continued)

Prep Batch: 3516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-2	SP-1 5'	Total/NA	Solid	5035	
880-2471-3	SP-1 10'	Total/NA	Solid	5035	
880-2471-4	SP-1 15'	Total/NA	Solid	5035	
880-2471-5	SP-1 20'	Total/NA	Solid	5035	
880-2471-6	SP-1 25'	Total/NA	Solid	5035	
880-2471-7	SP-2 1'	Total/NA	Solid	5035	
880-2471-8	SP-2 5'	Total/NA	Solid	5035	
880-2471-9	SP-2 10'	Total/NA	Solid	5035	
880-2471-10	SP-2 15'	Total/NA	Solid	5035	
880-2471-11	SP-2 20'	Total/NA	Solid	5035	
880-2471-12	SP-2 25'	Total/NA	Solid	5035	
880-2471-13	SP-3 1'	Total/NA	Solid	5035	
880-2471-14	SP-3 5'	Total/NA	Solid	5035	
880-2471-15	SP-3 10'	Total/NA	Solid	5035	
880-2471-16	SP-3 15'	Total/NA	Solid	5035	
880-2471-17	SP-3 20'	Total/NA	Solid	5035	
880-2471-18	SP-3 25'	Total/NA	Solid	5035	
880-2471-19	SP-4 1'	Total/NA	Solid	5035	
880-2471-20	SP-4 5'	Total/NA	Solid	5035	
MB 880-3516/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	5035	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	5035	

Prep Batch: 3517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	5035	
880-2471-22	SP-4 15'	Total/NA	Solid	5035	
880-2471-23	SP-4 20'	Total/NA	Solid	5035	
880-2471-24	SP-4 25'	Total/NA	Solid	5035	
MB 880-3517/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	5035	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 3502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-2	SP-1 5'	Total/NA	Solid	8015B NM	3521
880-2471-3	SP-1 10'	Total/NA	Solid	8015B NM	3521
880-2471-4	SP-1 15'	Total/NA	Solid	8015B NM	3521
880-2471-5	SP-1 20'	Total/NA	Solid	8015B NM	3521
880-2471-6	SP-1 25'	Total/NA	Solid	8015B NM	3521
880-2471-7	SP-2 1'	Total/NA	Solid	8015B NM	3521
880-2471-8	SP-2 5'	Total/NA	Solid	8015B NM	3521
880-2471-9	SP-2 10'	Total/NA	Solid	8015B NM	3521
880-2471-10	SP-2 15'	Total/NA	Solid	8015B NM	3521

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Analysis Batch: 3502 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-11	SP-2 20'	Total/NA	Solid	8015B NM	3521
880-2471-12	SP-2 25'	Total/NA	Solid	8015B NM	3521
880-2471-13	SP-3 1'	Total/NA	Solid	8015B NM	3521
880-2471-14	SP-3 5'	Total/NA	Solid	8015B NM	3521
880-2471-15	SP-3 10'	Total/NA	Solid	8015B NM	3521
880-2471-16	SP-3 15'	Total/NA	Solid	8015B NM	3521
880-2471-17	SP-3 20'	Total/NA	Solid	8015B NM	3521
880-2471-18	SP-3 25'	Total/NA	Solid	8015B NM	3521
880-2471-19	SP-4 1'	Total/NA	Solid	8015B NM	3521
880-2471-20	SP-4 5'	Total/NA	Solid	8015B NM	3521
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015B NM	3521
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3521
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3521
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015B NM	3521

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-22	SP-4 15'	Total/NA	Solid	8015B NM	3527
880-2471-23	SP-4 20'	Total/NA	Solid	8015B NM	3527
880-2471-24	SP-4 25'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015B NM	3527

Prep Batch: 3521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-2	SP-1 5'	Total/NA	Solid	8015NM Prep	
880-2471-3	SP-1 10'	Total/NA	Solid	8015NM Prep	
880-2471-4	SP-1 15'	Total/NA	Solid	8015NM Prep	
880-2471-5	SP-1 20'	Total/NA	Solid	8015NM Prep	
880-2471-6	SP-1 25'	Total/NA	Solid	8015NM Prep	
880-2471-7	SP-2 1'	Total/NA	Solid	8015NM Prep	
880-2471-8	SP-2 5'	Total/NA	Solid	8015NM Prep	
880-2471-9	SP-2 10'	Total/NA	Solid	8015NM Prep	
880-2471-10	SP-2 15'	Total/NA	Solid	8015NM Prep	
880-2471-11	SP-2 20'	Total/NA	Solid	8015NM Prep	
880-2471-12	SP-2 25'	Total/NA	Solid	8015NM Prep	
880-2471-13	SP-3 1'	Total/NA	Solid	8015NM Prep	
880-2471-14	SP-3 5'	Total/NA	Solid	8015NM Prep	
880-2471-15	SP-3 10'	Total/NA	Solid	8015NM Prep	
880-2471-16	SP-3 15'	Total/NA	Solid	8015NM Prep	
880-2471-17	SP-3 20'	Total/NA	Solid	8015NM Prep	
880-2471-18	SP-3 25'	Total/NA	Solid	8015NM Prep	
880-2471-19	SP-4 1'	Total/NA	Solid	8015NM Prep	
880-2471-20	SP-4 5'	Total/NA	Solid	8015NM Prep	
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Prep Batch: 3521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015NM Prep	

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-22	SP-4 15'	Total/NA	Solid	8015NM Prep	
880-2471-23	SP-4 20'	Total/NA	Solid	8015NM Prep	
880-2471-24	SP-4 25'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	DI Leach	
880-2471-2	SP-1 5'	Soluble	Solid	DI Leach	
880-2471-3	SP-1 10'	Soluble	Solid	DI Leach	
880-2471-4	SP-1 15'	Soluble	Solid	DI Leach	
880-2471-5	SP-1 20'	Soluble	Solid	DI Leach	
880-2471-6	SP-1 25'	Soluble	Solid	DI Leach	
880-2471-7	SP-2 1'	Soluble	Solid	DI Leach	
880-2471-8	SP-2 5'	Soluble	Solid	DI Leach	
MB 880-3525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 3528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	DI Leach	
880-2471-10	SP-2 15'	Soluble	Solid	DI Leach	
880-2471-11	SP-2 20'	Soluble	Solid	DI Leach	
880-2471-12	SP-2 25'	Soluble	Solid	DI Leach	
880-2471-13	SP-3 1'	Soluble	Solid	DI Leach	
880-2471-14	SP-3 5'	Soluble	Solid	DI Leach	
880-2471-15	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-16	SP-3 15'	Soluble	Solid	DI Leach	
880-2471-17	SP-3 20'	Soluble	Solid	DI Leach	
880-2471-18	SP-3 25'	Soluble	Solid	DI Leach	
880-2471-19	SP-4 1'	Soluble	Solid	DI Leach	
880-2471-20	SP-4 5'	Soluble	Solid	DI Leach	
880-2471-21	SP-4 10'	Soluble	Solid	DI Leach	
880-2471-22	SP-4 15'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

HPLC/IC (Continued)

Leach Batch: 3528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-23	SP-4 20'	Soluble	Solid	DI Leach	
880-2471-24	SP-4 25'	Soluble	Solid	DI Leach	
MB 880-3528/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2471-15 MS	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-15 MSD	SP-3 10'	Soluble	Solid	DI Leach	

Analysis Batch: 3552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	300.0	3525
880-2471-2	SP-1 5'	Soluble	Solid	300.0	3525
880-2471-3	SP-1 10'	Soluble	Solid	300.0	3525
880-2471-4	SP-1 15'	Soluble	Solid	300.0	3525
880-2471-5	SP-1 20'	Soluble	Solid	300.0	3525
880-2471-6	SP-1 25'	Soluble	Solid	300.0	3525
880-2471-7	SP-2 1'	Soluble	Solid	300.0	3525
880-2471-8	SP-2 5'	Soluble	Solid	300.0	3525
MB 880-3525/1-A	Method Blank	Soluble	Solid	300.0	3525
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	300.0	3525
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3525
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	3525
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	3525

Analysis Batch: 3578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	300.0	3528
880-2471-10	SP-2 15'	Soluble	Solid	300.0	3528
880-2471-11	SP-2 20'	Soluble	Solid	300.0	3528
880-2471-12	SP-2 25'	Soluble	Solid	300.0	3528
880-2471-13	SP-3 1'	Soluble	Solid	300.0	3528
880-2471-14	SP-3 5'	Soluble	Solid	300.0	3528
880-2471-15	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-16	SP-3 15'	Soluble	Solid	300.0	3528
880-2471-17	SP-3 20'	Soluble	Solid	300.0	3528
880-2471-18	SP-3 25'	Soluble	Solid	300.0	3528
880-2471-19	SP-4 1'	Soluble	Solid	300.0	3528
880-2471-20	SP-4 5'	Soluble	Solid	300.0	3528
880-2471-21	SP-4 10'	Soluble	Solid	300.0	3528
880-2471-22	SP-4 15'	Soluble	Solid	300.0	3528
880-2471-23	SP-4 20'	Soluble	Solid	300.0	3528
880-2471-24	SP-4 25'	Soluble	Solid	300.0	3528
MB 880-3528/1-A	Method Blank	Soluble	Solid	300.0	3528
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	300.0	3528
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3528
880-2471-15 MS	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-15 MSD	SP-3 10'	Soluble	Solid	300.0	3528

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 1'

Date Collected: 05/24/21 15:00
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-1
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			5.05 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 01:49	CH	XEN MID

Client Sample ID: SP-1 5'

Date Collected: 05/24/21 15:03
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-2
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			5.00 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:06	CH	XEN MID

Client Sample ID: SP-1 10'

Date Collected: 05/24/21 15:05
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:11	CH	XEN MID

Client Sample ID: SP-1 15'

Date Collected: 05/24/21 15:10
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-4
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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:16	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 20'

Lab Sample ID: 880-2471-5
Matrix: Solid
Date Collected: 05/24/21 15:15
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:53	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:21	CH	XEN MID

Client Sample ID: SP-1 25'

Lab Sample ID: 880-2471-6
Matrix: Solid
Date Collected: 05/24/21 15:20
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:26	CH	XEN MID

Client Sample ID: SP-2 1'

Lab Sample ID: 880-2471-7
Matrix: Solid
Date Collected: 05/24/21 14:30
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:31	CH	XEN MID

Client Sample ID: SP-2 5'

Lab Sample ID: 880-2471-8
Matrix: Solid
Date Collected: 05/24/21 14:32
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:35	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 10'

Lab Sample ID: 880-2471-9
Matrix: Solid
Date Collected: 05/24/21 14:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:14	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:33	CH	XEN MID

Client Sample ID: SP-2 15'

Lab Sample ID: 880-2471-10
Matrix: Solid
Date Collected: 05/24/21 14:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:47	CH	XEN MID

Client Sample ID: SP-2 20'

Lab Sample ID: 880-2471-11
Matrix: Solid
Date Collected: 05/24/21 14:40
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 03:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:52	CH	XEN MID

Client Sample ID: SP-2 25'

Lab Sample ID: 880-2471-12
Matrix: Solid
Date Collected: 05/24/21 14:46
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:57	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 1'

Lab Sample ID: 880-2471-13
Matrix: Solid
Date Collected: 05/24/21 14:10
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:02	CH	XEN MID

Client Sample ID: SP-3 5'

Lab Sample ID: 880-2471-14
Matrix: Solid
Date Collected: 05/24/21 14:12
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:07	CH	XEN MID

Client Sample ID: SP-3 10'

Lab Sample ID: 880-2471-15
Matrix: Solid
Date Collected: 05/24/21 14:15
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:12	CH	XEN MID

Client Sample ID: SP-3 15'

Lab Sample ID: 880-2471-16
Matrix: Solid
Date Collected: 05/24/21 14:18
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:26	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 20'

Lab Sample ID: 880-2471-17
Matrix: Solid
Date Collected: 05/24/21 14:21
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:31	CH	XEN MID

Client Sample ID: SP-3 25'

Lab Sample ID: 880-2471-18
Matrix: Solid
Date Collected: 05/24/21 14:25
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:46	CH	XEN MID

Client Sample ID: SP-4 1'

Lab Sample ID: 880-2471-19
Matrix: Solid
Date Collected: 05/24/21 13:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:51	CH	XEN MID

Client Sample ID: SP-4 5'

Lab Sample ID: 880-2471-20
Matrix: Solid
Date Collected: 05/24/21 13:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 07:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:56	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc. Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 10' Lab Sample ID: 880-2471-21

Date Collected: 05/24/21 13:40 **Matrix: Solid**
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/26/21 23:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:01	CH	XEN MID

Client Sample ID: SP-4 15' Lab Sample ID: 880-2471-22

Date Collected: 05/24/21 13:45 **Matrix: Solid**
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:06	CH	XEN MID

Client Sample ID: SP-4 20' Lab Sample ID: 880-2471-23

Date Collected: 05/24/21 13:52 **Matrix: Solid**
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:11	CH	XEN MID

Client Sample ID: SP-4 25' Lab Sample ID: 880-2471-24

Date Collected: 05/24/21 13:57 **Matrix: Solid**
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:15	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: NMGSAU 1416

Job ID: 880-2471-1

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: NMGSAU 1416

Job ID: 880-2471-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2471-1	SP-1 1'	Solid	05/24/21 15:00	05/26/21 08:47	
880-2471-2	SP-1 5'	Solid	05/24/21 15:03	05/26/21 08:47	
880-2471-3	SP-1 10'	Solid	05/24/21 15:05	05/26/21 08:47	
880-2471-4	SP-1 15'	Solid	05/24/21 15:10	05/26/21 08:47	
880-2471-5	SP-1 20'	Solid	05/24/21 15:15	05/26/21 08:47	
880-2471-6	SP-1 25'	Solid	05/24/21 15:20	05/26/21 08:47	
880-2471-7	SP-2 1'	Solid	05/24/21 14:30	05/26/21 08:47	
880-2471-8	SP-2 5'	Solid	05/24/21 14:32	05/26/21 08:47	
880-2471-9	SP-2 10'	Solid	05/24/21 14:35	05/26/21 08:47	
880-2471-10	SP-2 15'	Solid	05/24/21 14:37	05/26/21 08:47	
880-2471-11	SP-2 20'	Solid	05/24/21 14:40	05/26/21 08:47	
880-2471-12	SP-2 25'	Solid	05/24/21 14:46	05/26/21 08:47	
880-2471-13	SP-3 1'	Solid	05/24/21 14:10	05/26/21 08:47	
880-2471-14	SP-3 5'	Solid	05/24/21 14:12	05/26/21 08:47	
880-2471-15	SP-3 10'	Solid	05/24/21 14:15	05/26/21 08:47	
880-2471-16	SP-3 15'	Solid	05/24/21 14:18	05/26/21 08:47	
880-2471-17	SP-3 20'	Solid	05/24/21 14:21	05/26/21 08:47	
880-2471-18	SP-3 25'	Solid	05/24/21 14:25	05/26/21 08:47	
880-2471-19	SP-4 1'	Solid	05/24/21 13:35	05/26/21 08:47	
880-2471-20	SP-4 5'	Solid	05/24/21 13:37	05/26/21 08:47	
880-2471-21	SP-4 10'	Solid	05/24/21 13:40	05/26/21 08:47	
880-2471-22	SP-4 15'	Solid	05/24/21 13:45	05/26/21 08:47	
880-2471-23	SP-4 20'	Solid	05/24/21 13:52	05/26/21 08:47	
880-2471-24	SP-4 25'	Solid	05/24/21 13:57	05/26/21 08:47	

Page 208 of 510

880-2471

484 STODY

880-2471 Chain of Custody

6/2/2021

Larson & Associates, Inc.
Environmental Consultants

Midland, TX
432-687-0901

Data Reported to

DATE: 5/25/2021 PAGE 1 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR: DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State: MST / NM

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

ANALYSES: BTEX ☑ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP - PEST ☐ | HERB ☐ | TCLP VOC ☐ | TOTAL METALS (RCRA) ☐ | Semi-VOC ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | OTHER LIST ☐ | RCI ☐ | TOX ☐ | TCLP ☐ | TDS ☐ | TSS ☐ | FLASHPOINT ☐ | pH ☐ | % MOISTURE ☐ | HEXAVALENT CHROMIUM ☐ | CYANIDE ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDES ☒ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	BTEX	MTBE	TRPH	GASOLINE MOD 8015	DIESEL - MOD 8015	CHLORIDES	FIELD NOTES
SP-1 1'		5/24/21	1500	S	1				X		X		X	X	X	X	# Direct Bill to Apache #
SP-1 5'			1503														
SP-1 10'			1505														
SP 1 15'			1510														
SP-1 20'			1515														
SP-1 25'			1520														
SP-2 1'			1430														
SP-2 5'			1432														
SP-2 10'			1435														
SP-2 15'			1437														
SP-2 20'			1440														
SP-2 25			1446														
SP-3 1'			1416														
SP-3 5'			1412														
SP-3 10'			1415														
TOTAL 15																	

RELINQUISHED BY (Signature) DATE/TIME 5/26/21 8:47 RECEIVED BY (Signature)

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

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

LABORATORY XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Page 45 of 47

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 209 of 510

Loc: 880
2471

№1485

-OF-CUSTODY

6/2/2021

Larson & Associates, Inc.
Environmental Consultants

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

Data Reported to

DATE: 5/25/2021 PAGE 2 OF 2

PO#.

LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR: DSG

TRRP report? ☐ Yes ☒ No

TIME ZONE
Time zone/State: MST

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

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | TOTAL METALS (RCRA) ☐ | Semi-VOC ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | OTHER LIST ☐ | RCI ☐ | TOX ☐ | TCLP ☐ | TDS ☐ | FLASHPOINT ☐ | pH ☐ | % MOISTURE ☐ | HEXAVALENT CHROMIUM ☐ | CYANIDE ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDE ☐ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	BTEX	GASOLINE MOD 8015	DIESEL - MOD 8015	TOTAL METALS (RCRA)	LEAD - TOTAL	pH	FIELD NOTES
SP-3 15'		5/24/21	1418	S	1				X		X	X	X	X		X	* Direct Bill to Apache *
SP-3 20'		"	1421	"	"				"		"	"	"	"		"	
SP-3 25'		"	1425	"	"				"		"	"	"	"		"	
SP-4 1'		"	1335	"	"				"		"	"	"	"		"	
SP-4 5'		"	1337	"	"				"		"	"	"	"		"	
SP-4 10'		"	1340	"	"				"		"	"	"	"		"	
SP-4 15'		"	1345	"	"				"		"	"	"	"		"	
SP-4 20'		"	1352	"	"				"		"	"	"	"		"	
SP-4 25		"	1357	"	"				"		"	"	"	"		"	

TOTAL 9

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	5/26/21 8:07	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY: XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4 3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Page 46 of 47

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-2471-1

Login Number: 2471 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Teel, Brianna

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

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2472-1
Client Project/Site: Apache - NMUSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
5/28/2021 5:10:39 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: Apache - NMUSAU 1416

Laboratory Job ID: 880-2472-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 13
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 20

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Job ID: 880-2472-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2472-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2021 8:47 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 3.9º C.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3530 recovered above the upper control limit for Toluene 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 880-3530/20).

Method 8021B: Surrogate recovery for the following samples were outside control limits: Source 15' (880-2472-1), Source 20' (880-2472-2), Source 25' (880-2472-3) and Source 30' (880-2472-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described 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: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 15'

Date Collected: 05/24/21 13:00
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.101**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Toluene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Ethylbenzene	**0.625**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
m-Xylene & p-Xylene	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
o-Xylene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Xylenes, Total	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Total BTEX	**1.30**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**83.4**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	**838**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Oil Range Organics (Over C28-C36)	**111**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Total TPH	**1030**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*23*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**618**	**F1**	4.97		mg/Kg			05/26/21 13:30	1

Client Sample ID: Source 20'

Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.338**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Toluene	**0.392**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Ethylbenzene	**0.591**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
m-Xylene & p-Xylene	**1.61**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
o-Xylene	**0.553**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Xylenes, Total	**2.16**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Total BTEX	**3.48**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

Client Sample ID: Source 20' Lab Sample ID: 880-2472-2

Date Collected: 05/24/21 13:16 **Matrix: Solid**
Date Received: 05/26/21 08:47

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)	452		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	59.1		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Total TPH	511		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	790		5.03		mg/Kg			05/26/21 13:57	1

Client Sample ID: Source 25' Lab Sample ID: 880-2472-3

Date Collected: 05/24/21 13:20 **Matrix: Solid**
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.278		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Toluene	1.41		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Ethylbenzene	0.267		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
m-Xylene & p-Xylene	0.697		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
o-Xylene	0.641		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Xylenes, Total	1.34		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Total BTEX	3.29		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*240*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	73.9		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Diesel Range Organics (Over C10-C28)	634		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Oil Range Organics (Over C28-C36)	82.1		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Total TPH	790		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	788		5.02		mg/Kg			05/26/21 13:57	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 30'

Date Collected: 05/24/21 09:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.148**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Toluene	**0.775**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Ethylbenzene	<0.0994	U	0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
m-Xylene & p-Xylene	**0.975**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
o-Xylene	**0.171**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Xylenes, Total	**1.15**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Total BTEX	**2.07**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	**590**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Oil Range Organics (Over C28-C36)	**72.2**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Total TPH	**662**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		5.05		mg/Kg			05/26/21 14:02	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2472-1	Source 15'	208 S1+	70
880-2472-2	Source 20'	144 S1+	71
880-2472-3	Source 25'	240 S1+	72
880-2472-4	Source 30'	146 S1+	76
890-730-A-1-B MS	Matrix Spike	60 S1-	95
890-730-A-1-C MSD	Matrix Spike Duplicate	62 S1-	95
LCS 880-3520/1-A	Lab Control Sample	108	98
LCS 880-3520/2-A	Lab Control Sample	103	95
MB 880-3520/5-A	Method Blank	70	82

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2471-A-21-F MS	Matrix Spike	78	75
880-2471-A-21-G MSD	Matrix Spike Duplicate	95	90
880-2472-1	Source 15'	23 S1-	21 S1-
880-2472-2	Source 20'	21 S1-	21 S1-
880-2472-3	Source 25'	21 S1-	21 S1-
880-2472-4	Source 30'	95	97
LCS 880-3527/2-A	Lab Control Sample	100	95
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96
MB 880-3527/1-A	Method Blank	100	103

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3520/5-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3520

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*

Lab Sample ID: LCS 880-3520/1-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1159		mg/Kg		116	70 - 130		
Toluene			0.100	0.09439		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.1041		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2101		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1016		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 880-3520/2-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1131		mg/Kg		113	70 - 130		
Toluene			0.100	0.09802		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1016		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.2052		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1001		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U F1	0.100	0.07893		mg/Kg		79	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U F1	0.100	0.06278	F1	mg/Kg		63	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.05543	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1111	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05683	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-C MSD
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0998	0.06735	F1	mg/Kg		67	70 - 130	16	35
Toluene	<0.00199	U F1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.0998	0.04920	F1	mg/Kg		49	70 - 130	12	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09888	F1	mg/Kg		50	70 - 130	12	35
o-Xylene	<0.00199	U F1	0.0998	0.05191	F1	mg/Kg		52	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-3527/1-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3527

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1073		mg/Kg		107	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

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

Lab Sample ID: 880-2471-A-21-F MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-2471-A-21-G MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3519/1-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/26/21 13:14	1

Lab Sample ID: LCS 880-3519/2-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	242.4		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-3519/3-A
Matrix: Solid
Analysis Batch: 3522

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	241.4		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-2472-1 MS
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110		

Lab Sample ID: 880-2472-1 MSD
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

GC VOA

Prep Batch: 3520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	5035	
880-2472-2	Source 20'	Total/NA	Solid	5035	
880-2472-3	Source 25'	Total/NA	Solid	5035	
880-2472-4	Source 30'	Total/NA	Solid	5035	
MB 880-3520/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	5035	
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 3530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8021B	3520
880-2472-2	Source 20'	Total/NA	Solid	8021B	3520
880-2472-3	Source 25'	Total/NA	Solid	8021B	3520
880-2472-4	Source 30'	Total/NA	Solid	8021B	3520
MB 880-3520/5-A	Method Blank	Total/NA	Solid	8021B	3520
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	8021B	3520
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	8021B	3520
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	3520
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3520

GC Semi VOA

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015B NM	3527
880-2472-2	Source 20'	Total/NA	Solid	8015B NM	3527
880-2472-3	Source 25'	Total/NA	Solid	8015B NM	3527
880-2472-4	Source 30'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015B NM	3527
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	3527

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015NM Prep	
880-2472-2	Source 20'	Total/NA	Solid	8015NM Prep	
880-2472-3	Source 25'	Total/NA	Solid	8015NM Prep	
880-2472-4	Source 30'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

HPLC/IC

Leach Batch: 3519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	DI Leach	
880-2472-2	Source 20'	Soluble	Solid	DI Leach	
880-2472-3	Source 25'	Soluble	Solid	DI Leach	
880-2472-4	Source 30'	Soluble	Solid	DI Leach	
MB 880-3519/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2472-1 MS	Source 15'	Soluble	Solid	DI Leach	
880-2472-1 MSD	Source 15'	Soluble	Solid	DI Leach	

Analysis Batch: 3522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	300.0	3519
880-2472-2	Source 20'	Soluble	Solid	300.0	3519
880-2472-3	Source 25'	Soluble	Solid	300.0	3519
880-2472-4	Source 30'	Soluble	Solid	300.0	3519
MB 880-3519/1-A	Method Blank	Soluble	Solid	300.0	3519
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	300.0	3519
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3519
880-2472-1 MS	Source 15'	Soluble	Solid	300.0	3519
880-2472-1 MSD	Source 15'	Soluble	Solid	300.0	3519

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 15'
Date Collected: 05/24/21 13:00
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-1
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			4.97 g	5 mL	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:30	CH	XEN MID

Client Sample ID: Source 20'
Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
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			5.01 g	5 mL	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 25'
Date Collected: 05/24/21 13:20
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-3
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			5.05 g	5 mL	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:19	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 30'
Date Collected: 05/24/21 09:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-4
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			5.03 g	5 mL	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:45	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 14:02	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. Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

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: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2472-1	Source 15'	Solid	05/24/21 13:00	05/26/21 08:47	
880-2472-2	Source 20'	Solid	05/24/21 13:16	05/26/21 08:47	
880-2472-3	Source 25'	Solid	05/24/21 13:20	05/26/21 08:47	
880-2472-4	Source 30'	Solid	05/24/21 09:16	05/26/21 08:47	

Page 229 of 510



880-2472 №1483

CHAIN-OF-CUSTODY

5/28/2021

Larson & Associates, Inc.
Environmental Consultants

Data Reported to

Midland, TX 79701
432-687-0901

Date: 5/25/2021 PAGE 1 OF 1

PO#. _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #. 21-0119-01 COLLECTOR DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MST / NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐	TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D W 200 8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
~~Source~~ Source 15		5/24/21	1300	S	1				X		X		X	X	X												X		* Direct Bill to Apache *
Source 20'		5/24/21	1316	S	↓				↓		↓		↓	↓	↓												↓		
Source 25'		5/24/21	1320	S	↓				↓		↓		↓	↓	↓												↓		
Source 30'		5/25/21	0916	S	↓				↓		↓		↓	↓	↓												↓		

TOTAL 4

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
[signature]	5/26/21 8:47	[signature]
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Page 19 of 20

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-2472-1

Login Number: 2472 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Phillips, Kerianna

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Mark J Larson
Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Generated 9/13/2023 12:50:26 PM

JOB DESCRIPTION

NMGSAU 1416
SDG NUMBER 21-0119-01

JOB NUMBER

880-32940-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 4/16/2024 1:38:58 PM

my EOL

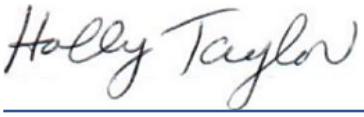
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/13/2023 12:50:26 PM

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

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Laboratory Job ID: 880-32940-1
SDG: 21-0119-01

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 31
QC Sample Results 34
QC Association Summary 45
Lab Chronicle 53
Certification Summary 63
Method Summary 64
Sample Summary 65
Chain of Custody 66
Receipt Checklists 69

Eurofins Midland
9/13/2023

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

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
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Job ID: 880-32940-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-32940-1

Receipt
The samples were received on 9/7/2023 9:56 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 3.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SP-5 1' (880-32940-1), SP-5 5' (880-32940-2), SP-5 10' (880-32940-3), SP-5 15' (880-32940-4), SP-5 20' (880-32940-5), SP-5 25' (880-32940-6), SP-5 30' (880-32940-7), SP-5 35' (880-32940-8), SP-6 1' (880-32940-9), SP-6 5' (880-32940-10), SP-6 10' (880-32940-11), SP-6 15' (880-32940-12), SP-6 20' (880-32940-13), SP-6 25' (880-32940-14), SP-6 30' (880-32940-15), SP-6 35' (880-32940-16), SP-8 1 (880-32940-17), SP-8 5 (880-32940-18), SP-8 10 (880-32940-19), SP-8 15 (880-32940-20), SP-8 20 (880-32940-21), SP-8 25 (880-32940-22), SP-8 30 (880-32940-23), SP-8 35 (880-32940-24), SP-7 1 (880-32940-25), SP-7 5 (880-32940-26), SP-7 10 (880-32940-27), SP-7 15 (880-32940-28), SP-7 20 (880-32940-29), SP-7 25 (880-32940-30), SP-7 30' (880-32940-31) and SP-7 35' (880-32940-32).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62005 and analytical batch 880-61967 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SP-7 15 (880-32940-28), SP-7 20 (880-32940-29), SP-7 25 (880-32940-30), SP-7 30' (880-32940-31) and SP-7 35' (880-32940-32). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SP-8 20 (880-32940-21), SP-8 25 (880-32940-22), SP-8 30 (880-32940-23) and SP-8 35 (880-32940-24). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SP-8 35 (880-32940-24), SP-7 1 (880-32940-25) and SP-7 5 (880-32940-26). Elevated reporting limits (RLs) are provided.

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 surrogate recovery for the blank associated with preparation batch 880-61987 and 880-61988 and analytical batch 880-61960 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SP-5 10' (880-32940-3), SP-5 15' (880-32940-4), SP-5 20' (880-32940-5), SP-5 25' (880-32940-6), SP-5 30' (880-32940-7), SP-5 35' (880-32940-8), SP-6 1' (880-32940-9), SP-6 5' (880-32940-10), SP-6 10' (880-32940-11), SP-6 15' (880-32940-12), SP-6 20' (880-32940-13), SP-6 25' (880-32940-14), SP-6 30' (880-32940-15), SP-6 35' (880-32940-16), SP-8 1 (880-32940-17), SP-8 5 (880-32940-18), SP-8 10 (880-32940-19), SP-8 15 (880-32940-20), SP-8 20 (880-32940-21), SP-8 25 (880-32940-22), (880-32940-A-6-D MS) and (880-32940-A-6-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-61960/20), (CCV 880-61960/31), (CCV 880-61960/47), (CCV 880-61960/5) and (CCV 880-61960/58). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-62104 and analytical batch 880-62025 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SP-7 5 (880-32940-26), SP-7 15 (880-32940-28), SP-7 20 (880-32940-29) and SP-7 25 (880-32940-30). Evidence of matrix interference is present; therefore,

Released to Imaging: 4/16/2024 1:38:58 PM

Case Narrative

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Job ID: 880-32940-1 (Continued)

Laboratory: Eurofins Midland (Continued)

re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62025/31), (CCV 880-62025/47) and (CCV 880-62025/58). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-62060 and analytical batch 880-62028 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-62060 and analytical batch 880-62028 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28).

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-61996 and analytical batch 880-62332 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The continuing calibration blank (CCB) for analytical batch 880-62322 contained Chloride above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 1'

Date Collected: 09/05/23 10:20
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 03:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 03:52	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		09/07/23 16:03	09/08/23 03:52	1
m,p-Xylenes	<0.00398	U F1	0.00398		mg/Kg		09/07/23 16:03	09/08/23 03:52	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		09/07/23 16:03	09/08/23 03:52	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		09/07/23 16:03	09/08/23 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*09/07/23 16:03*	*09/08/23 03:52*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/07/23 16:03*	*09/08/23 03:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**92.4**		50.1		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/07/23 11:01	09/07/23 19:12	1
Diesel Range Organics (Over C10-C28)	**92.4**		50.1		mg/Kg		09/07/23 11:01	09/07/23 19:12	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/07/23 11:01	09/07/23 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*121*		*70 - 130*	*09/07/23 11:01*	*09/07/23 19:12*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*09/07/23 11:01*	*09/07/23 19:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**144**		5.01		mg/Kg			09/13/23 07:38	1

Client Sample ID: SP-5 5'

Date Collected: 09/05/23 10:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 04:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 04:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 04:13	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 04:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 04:13	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:13*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:13*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 5'

Date Collected: 09/05/23 10:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/07/23 11:01	09/07/23 19:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/07/23 11:01	09/07/23 19:34	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/07/23 11:01	09/07/23 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*122*		*70 - 130*	*09/07/23 11:01*	*09/07/23 19:34*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*09/07/23 11:01*	*09/07/23 19:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**253**		5.04		mg/Kg			09/13/23 07:45	1

Client Sample ID: SP-5 10'

Date Collected: 09/05/23 10:30
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 04:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 04:33	1
Ethylbenzene	**0.00407**		0.00201		mg/Kg		09/07/23 16:03	09/08/23 04:33	1
m,p-Xylenes	**0.00814**		0.00402		mg/Kg		09/07/23 16:03	09/08/23 04:33	1
o-Xylene	**0.00423**		0.00201		mg/Kg		09/07/23 16:03	09/08/23 04:33	1
Xylenes, Total	**0.0124**		0.00402		mg/Kg		09/07/23 16:03	09/08/23 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:33*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0164**		0.00402		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1480**		50.2		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/07/23 11:04	09/08/23 03:59	1
Diesel Range Organics (Over C10-C28)	**1480**		50.2		mg/Kg		09/07/23 11:04	09/08/23 03:59	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 10'

Lab Sample ID: 880-32940-3
Matrix: Solid
Date Collected: 09/05/23 10:30
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/07/23 11:04	09/08/23 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*140*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 03:59*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*09/07/23 11:04*	*09/08/23 03:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**278**		4.99		mg/Kg			09/13/23 08:04	1

Client Sample ID: SP-5 15'

Lab Sample ID: 880-32940-4
Matrix: Solid
Date Collected: 09/05/23 10:35
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 04:54	1
Toluene	**0.00328**		0.00200		mg/Kg		09/07/23 16:03	09/08/23 04:54	1
Ethylbenzene	**0.00415**		0.00200		mg/Kg		09/07/23 16:03	09/08/23 04:54	1
m,p-Xylenes	**0.00619**		0.00401		mg/Kg		09/07/23 16:03	09/08/23 04:54	1
o-Xylene	**0.00409**		0.00200		mg/Kg		09/07/23 16:03	09/08/23 04:54	1
Xylenes, Total	**0.0103**		0.00401		mg/Kg		09/07/23 16:03	09/08/23 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:54*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/07/23 16:03*	*09/08/23 04:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0177**		0.00401		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1520**		50.3		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**54.8**		50.3		mg/Kg		09/07/23 11:04	09/08/23 04:21	1
Diesel Range Organics (Over C10-C28)	**1470**		50.3		mg/Kg		09/07/23 11:04	09/08/23 04:21	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/07/23 11:04	09/08/23 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*142*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 04:21*	*1*
o-Terphenyl (Surr)	*113*		*70 - 130*	*09/07/23 11:04*	*09/08/23 04:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**293**		4.95		mg/Kg			09/13/23 08:10	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 20'

Date Collected: 09/05/23 10:40
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:14	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 05:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:14*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**221**		50.5		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/08/23 05:27	1
Diesel Range Organics (Over C10-C28)	**221**		50.5		mg/Kg		09/07/23 11:04	09/08/23 05:27	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/08/23 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*146*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 05:27*	*1*
o-Terphenyl (Surr)	*122*		*70 - 130*	*09/07/23 11:04*	*09/08/23 05:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**578**		5.00		mg/Kg			09/13/23 09:25	1

Client Sample ID: SP-5 25'

Date Collected: 09/05/23 10:42
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 05:35	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 05:35	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 05:35	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		09/07/23 16:03	09/08/23 05:35	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 05:35	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/07/23 16:03	09/08/23 05:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:35*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:35*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 25'

Lab Sample ID: 880-32940-6
Matrix: Solid
Date Collected: 09/05/23 10:42
Date Received: 09/07/23 09:56

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 21:23	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 21:23	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*144*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 21:23*	*1*
o-Terphenyl (Surr)	*124*		*70 - 130*	*09/07/23 11:04*	*09/07/23 21:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**437**		4.97		mg/Kg			09/13/23 09:31	1

Client Sample ID: SP-5 30'

Lab Sample ID: 880-32940-7
Matrix: Solid
Date Collected: 09/05/23 10:44
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:55	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 05:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 05:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:55*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/07/23 16:03*	*09/08/23 05:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/07/23 22:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/07/23 22:29	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 30'

Date Collected: 09/05/23 10:44
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/07/23 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*144*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 22:29*	*1*
o-Terphenyl (Surr)	*121*		*70 - 130*	*09/07/23 11:04*	*09/07/23 22:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**339**		5.00		mg/Kg			09/13/23 09:37	1

Client Sample ID: SP-5 35'

Date Collected: 09/05/23 10:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 06:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 06:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 06:15	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/07/23 16:03	09/08/23 06:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 06:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/23 16:03	09/08/23 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:15*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**722**		49.6		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/07/23 11:04	09/08/23 05:05	1
Diesel Range Organics (Over C10-C28)	**722**		49.6		mg/Kg		09/07/23 11:04	09/08/23 05:05	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/07/23 11:04	09/08/23 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*142*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 05:05*	*1*
o-Terphenyl (Surr)	*113*		*70 - 130*	*09/07/23 11:04*	*09/08/23 05:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**363**		4.95		mg/Kg			09/13/23 09:44	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 1'

Date Collected: 09/05/23 11:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 06:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 06:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 06:36	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 06:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 06:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:36*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**481**		49.8		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/07/23 11:04	09/08/23 04:43	1
Diesel Range Organics (Over C10-C28)	**481**		49.8		mg/Kg		09/07/23 11:04	09/08/23 04:43	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/07/23 11:04	09/08/23 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*158*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 04:43*	*1*
o-Terphenyl (Surr)	*127*		*70 - 130*	*09/07/23 11:04*	*09/08/23 04:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**249**		4.98		mg/Kg			09/13/23 09:50	1

Client Sample ID: SP-6 5'

Date Collected: 09/05/23 11:05
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 06:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 06:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 06:56	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		09/07/23 16:03	09/08/23 06:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 06:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/07/23 16:03	09/08/23 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:56*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/07/23 16:03*	*09/08/23 06:56*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 5'

Date Collected: 09/05/23 11:05
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/08/23 09:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/07/23 11:04	09/07/23 22:51	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/07/23 11:04	09/07/23 22:51	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/07/23 11:04	09/07/23 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*140*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 22:51*	*1*
o-Terphenyl (Surr)	*120*		*70 - 130*	*09/07/23 11:04*	*09/07/23 22:51*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**508**	**F1**	4.96		mg/Kg			09/12/23 21:38	1

Client Sample ID: SP-6 10'

Date Collected: 09/05/23 11:10
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 08:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 08:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 08:47	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		09/07/23 16:03	09/08/23 08:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 08:47	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/07/23 16:03	09/08/23 08:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/07/23 16:03*	*09/08/23 08:47*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/07/23 16:03*	*09/08/23 08:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/08/23 10:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/07/23 11:04	09/07/23 23:13	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/07/23 11:04	09/07/23 23:13	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 10'

Date Collected: 09/05/23 11:10
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/07/23 11:04	09/07/23 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*150*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 23:13*	*1*
o-Terphenyl (Surr)	*129*		*70 - 130*	*09/07/23 11:04*	*09/07/23 23:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**337**		5.00		mg/Kg			09/12/23 21:58	1

Client Sample ID: SP-6 15'

Date Collected: 09/05/23 11:15
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 09:07	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 09:07	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 09:07	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		09/07/23 16:03	09/08/23 09:07	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 09:07	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/07/23 16:03	09/08/23 09:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:07*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/08/23 10:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 23:35	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 23:35	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/07/23 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*152*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 23:35*	*1*
o-Terphenyl (Surr)	*132*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 23:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		4.99		mg/Kg			09/12/23 22:05	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 20'

Lab Sample ID: 880-32940-13
Matrix: Solid
Date Collected: 09/05/23 11:20
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 09:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 09:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 09:28	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		09/07/23 16:03	09/08/23 09:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 09:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/23 16:03	09/08/23 09:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:28*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/08/23 10:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/07/23 23:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/07/23 23:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/07/23 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*142*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 23:57*	*1*
o-Terphenyl (Surr)	*123*		*70 - 130*	*09/07/23 11:04*	*09/07/23 23:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**487**		5.01		mg/Kg			09/12/23 22:12	1

Client Sample ID: SP-6 25'

Lab Sample ID: 880-32940-14
Matrix: Solid
Date Collected: 09/05/23 11:25
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 09:48	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 09:48	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 09:48	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 09:48	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/07/23 16:03	09/08/23 09:48	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/07/23 16:03	09/08/23 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/07/23 16:03*	*09/08/23 09:48*	*1*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Client Sample ID: SP-6 25'
Lab Sample ID: 880-32940-14
Date Collected: 09/05/23 11:25 **Matrix: Solid**
Date Received: 09/07/23 09:56

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/08/23 10:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/08/23 00:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/08/23 00:19	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/07/23 11:04	09/08/23 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*146*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 00:19*	*1*
o-Terphenyl (Surr)	*126*		*70 - 130*	*09/07/23 11:04*	*09/08/23 00:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**556**		4.98		mg/Kg			09/12/23 22:18	1

Client Sample ID: SP-6 30'
Lab Sample ID: 880-32940-15
Date Collected: 09/05/23 11:30 **Matrix: Solid**
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 10:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 10:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 10:09	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 10:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 10:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:09*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 10:31	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/08/23 00:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/08/23 00:41	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 30'

Lab Sample ID: 880-32940-15
Matrix: Solid
Date Collected: 09/05/23 11:30
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/08/23 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*153*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 00:41*	*1*
o-Terphenyl (Surr)	*132*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 00:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**255**		4.97		mg/Kg			09/12/23 22:38	1

Client Sample ID: SP-6 35'

Lab Sample ID: 880-32940-16
Matrix: Solid
Date Collected: 09/05/23 11:35
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 10:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 10:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 10:29	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		09/07/23 16:03	09/08/23 10:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/07/23 16:03	09/08/23 10:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/07/23 16:03	09/08/23 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:29*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/08/23 14:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/07/23 11:04	09/08/23 01:03	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/07/23 11:04	09/08/23 01:03	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/07/23 11:04	09/08/23 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*144*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 01:03*	*1*
o-Terphenyl (Surr)	*123*		*70 - 130*	*09/07/23 11:04*	*09/08/23 01:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**159**		4.95		mg/Kg			09/12/23 22:45	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 1

Date Collected: 09/05/23 11:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 10:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 10:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 10:50	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		09/07/23 16:03	09/08/23 10:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/23 16:03	09/08/23 10:50	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/07/23 16:03	09/08/23 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:50*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/07/23 16:03*	*09/08/23 10:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/08/23 14:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/07/23 11:04	09/08/23 01:25	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/07/23 11:04	09/08/23 01:25	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/07/23 11:04	09/08/23 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*137*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 01:25*	*1*
o-Terphenyl (Surr)	*119*		*70 - 130*	*09/07/23 11:04*	*09/08/23 01:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**154**		4.99		mg/Kg			09/12/23 22:52	1

Client Sample ID: SP-8 5

Date Collected: 09/05/23 11:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 11:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 11:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 11:10	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 11:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/23 16:03	09/08/23 11:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/23 16:03	09/08/23 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:10*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:10*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 5

Date Collected: 09/05/23 11:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-18

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 14:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/08/23 02:09	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/08/23 02:09	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/07/23 11:04	09/08/23 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*141*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 02:09*	*1*
o-Terphenyl (Surr)	*121*		*70 - 130*	*09/07/23 11:04*	*09/08/23 02:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**315**		4.95		mg/Kg			09/12/23 22:58	1

Client Sample ID: SP-8 10

Date Collected: 09/05/23 12:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0693**		0.0495		mg/Kg		09/07/23 16:03	09/08/23 11:31	25
Toluene	**4.80**		0.0495		mg/Kg		09/07/23 16:03	09/08/23 11:31	25
Ethylbenzene	**0.710**		0.0495		mg/Kg		09/07/23 16:03	09/08/23 11:31	25
m,p-Xylenes	**1.11**		0.0990		mg/Kg		09/07/23 16:03	09/08/23 11:31	25
o-Xylene	**1.43**		0.0495		mg/Kg		09/07/23 16:03	09/08/23 11:31	25
Xylenes, Total	**2.54**		0.0990		mg/Kg		09/07/23 16:03	09/08/23 11:31	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:31*	*25*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:31*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**8.12**		0.0990		mg/Kg			09/08/23 14:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7500**		251		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1270**		251		mg/Kg		09/07/23 11:04	09/08/23 02:31	5
Diesel Range Organics (Over C10-C28)	**6230**		251		mg/Kg		09/07/23 11:04	09/08/23 02:31	5

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 10

Date Collected: 09/05/23 12:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-19

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<251	U	251		mg/Kg		09/07/23 11:04	09/08/23 02:31	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*168*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 02:31*	*5*
o-Terphenyl (Surr)	*125*		*70 - 130*	*09/07/23 11:04*	*09/08/23 02:31*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**114**		5.00		mg/Kg			09/12/23 23:05	1

Client Sample ID: SP-8 15

Date Collected: 09/05/23 12:05
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.141**		0.0499		mg/Kg		09/07/23 16:03	09/08/23 11:51	25
Toluene	**6.72**		0.0499		mg/Kg		09/07/23 16:03	09/08/23 11:51	25
Ethylbenzene	**0.564**		0.0499		mg/Kg		09/07/23 16:03	09/08/23 11:51	25
m,p-Xylenes	**4.26**		0.0998		mg/Kg		09/07/23 16:03	09/08/23 11:51	25
o-Xylene	**1.38**		0.0499		mg/Kg		09/07/23 16:03	09/08/23 11:51	25
Xylenes, Total	**5.64**		0.0998		mg/Kg		09/07/23 16:03	09/08/23 11:51	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:51*	*25*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*09/07/23 16:03*	*09/08/23 11:51*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**13.1**		0.0998		mg/Kg			09/08/23 14:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**6930**		250		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1270**		250		mg/Kg		09/07/23 11:04	09/08/23 02:53	5
Diesel Range Organics (Over C10-C28)	**5660**		250		mg/Kg		09/07/23 11:04	09/08/23 02:53	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		09/07/23 11:04	09/08/23 02:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*154*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 02:53*	*5*
o-Terphenyl (Surr)	*128*		*70 - 130*	*09/07/23 11:04*	*09/08/23 02:53*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**133**		5.05		mg/Kg			09/12/23 23:12	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 20

Date Collected: 09/05/23 12:10
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-21

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.305		0.0499		mg/Kg		09/07/23 16:17	09/08/23 18:44	25
Toluene	4.96		0.0499		mg/Kg		09/07/23 16:17	09/08/23 18:44	25
Ethylbenzene	1.24		0.0499		mg/Kg		09/07/23 16:17	09/08/23 18:44	25
m,p-Xylenes	1.65		0.0998		mg/Kg		09/07/23 16:17	09/08/23 18:44	25
o-Xylene	2.29		0.0499		mg/Kg		09/07/23 16:17	09/08/23 18:44	25
Xylenes, Total	3.94		0.0998		mg/Kg		09/07/23 16:17	09/08/23 18:44	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*159*	*S1+*	*70 - 130*	*09/07/23 16:17*	*09/08/23 18:44*	*25*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*09/07/23 16:17*	*09/08/23 18:44*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	10.4		0.0998		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6940		249		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1020		249		mg/Kg		09/07/23 11:04	09/08/23 03:15	5
Diesel Range Organics (Over C10-C28)	5920		249		mg/Kg		09/07/23 11:04	09/08/23 03:15	5
OII Range Organics (Over C28-C36)	<249	U	249		mg/Kg		09/07/23 11:04	09/08/23 03:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*165*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 03:15*	*5*
o-Terphenyl (Surr)	*139*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 03:15*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183		4.98		mg/Kg			09/12/23 23:32	1

Client Sample ID: SP-8 25

Date Collected: 09/05/23 12:15
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-22

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.641		0.0496		mg/Kg		09/07/23 16:17	09/08/23 19:05	25
Toluene	6.50		0.0496		mg/Kg		09/07/23 16:17	09/08/23 19:05	25
Ethylbenzene	0.399		0.0496		mg/Kg		09/07/23 16:17	09/08/23 19:05	25
m,p-Xylenes	2.26		0.0992		mg/Kg		09/07/23 16:17	09/08/23 19:05	25
o-Xylene	3.02		0.0496		mg/Kg		09/07/23 16:17	09/08/23 19:05	25
Xylenes, Total	5.28		0.0992		mg/Kg		09/07/23 16:17	09/08/23 19:05	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*221*	*S1+*	*70 - 130*	*09/07/23 16:17*	*09/08/23 19:05*	*25*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/07/23 16:17*	*09/08/23 19:05*	*25*

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 25

Date Collected: 09/05/23 12:15
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-22

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.8		0.0992		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6850		250		mg/Kg			09/08/23 11:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	927		250		mg/Kg		09/07/23 11:04	09/08/23 03:37	5
Diesel Range Organics (Over C10-C28)	5920		250		mg/Kg		09/07/23 11:04	09/08/23 03:37	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		09/07/23 11:04	09/08/23 03:37	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*179*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 03:37*	*5*
o-Terphenyl (Surr)	*143*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/08/23 03:37*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	198		4.97		mg/Kg			09/12/23 23:38	1

Client Sample ID: SP-8 30

Date Collected: 09/05/23 12:20
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-23

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0643		0.0502		mg/Kg		09/07/23 16:17	09/08/23 19:26	25
Toluene	0.912		0.0502		mg/Kg		09/07/23 16:17	09/08/23 19:26	25
Ethylbenzene	0.459		0.0502		mg/Kg		09/07/23 16:17	09/08/23 19:26	25
m,p-Xylenes	0.427		0.100		mg/Kg		09/07/23 16:17	09/08/23 19:26	25
o-Xylene	0.878		0.0502		mg/Kg		09/07/23 16:17	09/08/23 19:26	25
Xylenes, Total	1.31		0.100		mg/Kg		09/07/23 16:17	09/08/23 19:26	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*09/07/23 16:17*	*09/08/23 19:26*	*25*
1,4-Difluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*09/07/23 16:17*	*09/08/23 19:26*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.74		0.100		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2130		49.6		mg/Kg			09/11/23 10:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	166	*1	49.6		mg/Kg		09/08/23 10:09	09/08/23 16:34	1
Diesel Range Organics (Over C10-C28)	1820	*1	49.6		mg/Kg		09/08/23 10:09	09/08/23 16:34	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Client Sample ID: SP-8 30 — Lab Sample ID: 880-32940-23

Date Collected: 09/05/23 12:20 **Matrix: Solid**
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	139		49.6		mg/Kg		09/08/23 10:09	09/08/23 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*122*		*70 - 130*	*09/08/23 10:09*	*09/08/23 16:34*	*1*
o-Terphenyl (Surr)	*120*		*70 - 130*	*09/08/23 10:09*	*09/08/23 16:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		4.95		mg/Kg			09/12/23 23:58	1

Client Sample ID: SP-8 35 — Lab Sample ID: 880-32940-24

Date Collected: 09/05/23 12:25 **Matrix: Solid**
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0504	U	0.0504		mg/Kg		09/07/23 16:17	09/08/23 19:47	25
Toluene	0.553		0.0504		mg/Kg		09/07/23 16:17	09/08/23 19:47	25
Ethylbenzene	0.447		0.0504		mg/Kg		09/07/23 16:17	09/08/23 19:47	25
m,p-Xylenes	0.385		0.101		mg/Kg		09/07/23 16:17	09/08/23 19:47	25
o-Xylene	0.856		0.0504		mg/Kg		09/07/23 16:17	09/08/23 19:47	25
Xylenes, Total	1.24		0.101		mg/Kg		09/07/23 16:17	09/08/23 19:47	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*09/07/23 16:17*	*09/08/23 19:47*	*25*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/07/23 16:17*	*09/08/23 19:47*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.24		0.101		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1700		50.3		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	78.6		50.3		mg/Kg		09/08/23 15:19	09/09/23 03:42	1
Diesel Range Organics (Over C10-C28)	1620		50.3		mg/Kg		09/08/23 15:19	09/09/23 03:42	1
Oll Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*128*		*70 - 130*	*09/08/23 15:19*	*09/09/23 03:42*	*1*
o-Terphenyl (Surr)	*101*		*70 - 130*	*09/08/23 15:19*	*09/09/23 03:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	197		4.96		mg/Kg			09/13/23 00:05	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 1

Date Collected: 09/05/23 13:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0497	U	0.0497		mg/Kg		09/07/23 16:17	09/08/23 20:08	25
Toluene	<0.0497	U	0.0497		mg/Kg		09/07/23 16:17	09/08/23 20:08	25
Ethylbenzene	<0.0497	U	0.0497		mg/Kg		09/07/23 16:17	09/08/23 20:08	25
m,p-Xylenes	<0.0994	U	0.0994		mg/Kg		09/07/23 16:17	09/08/23 20:08	25
o-Xylene	<0.0497	U	0.0497		mg/Kg		09/07/23 16:17	09/08/23 20:08	25
Xylenes, Total	<0.0994	U	0.0994		mg/Kg		09/07/23 16:17	09/08/23 20:08	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*09/07/23 16:17*	*09/08/23 20:08*	*25*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/07/23 16:17*	*09/08/23 20:08*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0994	U	0.0994		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1600**		50.1		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**447**		50.1		mg/Kg		09/08/23 15:19	09/09/23 04:47	1
Diesel Range Organics (Over C10-C28)	**1150**		50.1		mg/Kg		09/08/23 15:19	09/09/23 04:47	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/08/23 15:19	09/09/23 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*125*		*70 - 130*	*09/08/23 15:19*	*09/09/23 04:47*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*09/08/23 15:19*	*09/09/23 04:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**157**		5.04		mg/Kg			09/13/23 00:12	1

Client Sample ID: SP-7 5

Date Collected: 09/05/23 13:30
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0495	U	0.0495		mg/Kg		09/07/23 16:17	09/08/23 20:28	25
Toluene	<0.0495	U	0.0495		mg/Kg		09/07/23 16:17	09/08/23 20:28	25
Ethylbenzene	<0.0495	U	0.0495		mg/Kg		09/07/23 16:17	09/08/23 20:28	25
m,p-Xylenes	<0.0990	U	0.0990		mg/Kg		09/07/23 16:17	09/08/23 20:28	25
o-Xylene	<0.0495	U	0.0495		mg/Kg		09/07/23 16:17	09/08/23 20:28	25
Xylenes, Total	<0.0990	U	0.0990		mg/Kg		09/07/23 16:17	09/08/23 20:28	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/07/23 16:17*	*09/08/23 20:28*	*25*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/07/23 16:17*	*09/08/23 20:28*	*25*

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Client Sample ID: SP-7 5
Lab Sample ID: 880-32940-26
Date Collected: 09/05/23 13:30 **Matrix: Solid**
Date Received: 09/07/23 09:56

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0990	U	0.0990		mg/Kg			09/11/23 11:11	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**250**		50.5		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/08/23 15:19	09/09/23 05:50	1
Diesel Range Organics (Over C10-C28)	**250**		50.5		mg/Kg		09/08/23 15:19	09/09/23 05:50	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/08/23 15:19	09/09/23 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*131*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/09/23 05:50*	*1*
o-Terphenyl (Surr)	*111*		*70 - 130*	*09/08/23 15:19*	*09/09/23 05:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**165**		4.98		mg/Kg			09/13/23 00:18	1

Client Sample ID: SP-7 10
Lab Sample ID: 880-32940-27
Date Collected: 09/05/23 13:35 **Matrix: Solid**
Date Received: 09/07/23 09:56

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00236**		0.00199		mg/Kg		09/07/23 15:49	09/08/23 00:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/23 15:49	09/08/23 00:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/23 15:49	09/08/23 00:14	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/07/23 15:49	09/08/23 00:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/23 15:49	09/08/23 00:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/23 15:49	09/08/23 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*09/07/23 15:49*	*09/08/23 00:14*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/07/23 15:49*	*09/08/23 00:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**56.9**		50.4		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/08/23 15:19	09/08/23 21:43	1
Diesel Range Organics (Over C10-C28)	**56.9**		50.4		mg/Kg		09/08/23 15:19	09/08/23 21:43	1

Eurofins Midland

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 10

Date Collected: 09/05/23 13:35
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-27

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/08/23 15:19	09/08/23 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*130*		*70 - 130*	*09/08/23 15:19*	*09/08/23 21:43*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*09/08/23 15:19*	*09/08/23 21:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**431**		5.00		mg/Kg			09/13/23 00:25	1

Client Sample ID: SP-7 15

Date Collected: 09/05/23 13:40
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-28

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0501	U	0.0501		mg/Kg		09/07/23 15:49	09/08/23 01:16	25
Toluene	<0.0501	U	0.0501		mg/Kg		09/07/23 15:49	09/08/23 01:16	25
Ethylbenzene	<0.0501	U	0.0501		mg/Kg		09/07/23 15:49	09/08/23 01:16	25
m,p-Xylenes	<0.100	U	0.100		mg/Kg		09/07/23 15:49	09/08/23 01:16	25
o-Xylene	<0.0501	U	0.0501		mg/Kg		09/07/23 15:49	09/08/23 01:16	25
Xylenes, Total	<0.100	U	0.100		mg/Kg		09/07/23 15:49	09/08/23 01:16	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*158*	*S1+*	*70 - 130*	*09/07/23 15:49*	*09/08/23 01:16*	*25*
1,4-Difluorobenzene (Surr)	*125*		*70 - 130*	*09/07/23 15:49*	*09/08/23 01:16*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.100	U	0.100		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**908**		49.9		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/08/23 15:19	09/09/23 05:08	1
Diesel Range Organics (Over C10-C28)	**908**		49.9		mg/Kg		09/08/23 15:19	09/09/23 05:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/08/23 15:19	09/09/23 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*133*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/09/23 05:08*	*1*
o-Terphenyl (Surr)	*114*		*70 - 130*	*09/08/23 15:19*	*09/09/23 05:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**233**		5.00		mg/Kg			09/13/23 00:32	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 20

Date Collected: 09/05/23 13:45
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-29

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.192		0.0505		mg/Kg		09/07/23 15:49	09/08/23 01:37	25
Toluene	4.96		0.0505		mg/Kg		09/07/23 15:49	09/08/23 01:37	25
Ethylbenzene	1.26		0.0505		mg/Kg		09/07/23 15:49	09/08/23 01:37	25
m,p-Xylenes	1.46		0.101		mg/Kg		09/07/23 15:49	09/08/23 01:37	25
o-Xylene	4.57		0.0505		mg/Kg		09/07/23 15:49	09/08/23 01:37	25
Xylenes, Total	6.03		0.101		mg/Kg		09/07/23 15:49	09/08/23 01:37	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*248*	*S1+*	*70 - 130*	*09/07/23 15:49*	*09/08/23 01:37*	*25*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/07/23 15:49*	*09/08/23 01:37*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.4		0.101		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5250		250		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	616		250		mg/Kg		09/08/23 15:19	09/09/23 04:04	5
Diesel Range Organics (Over C10-C28)	4630		250		mg/Kg		09/08/23 15:19	09/09/23 04:04	5
OII Range Organics (Over C28-C36)	<250	U	250		mg/Kg		09/08/23 15:19	09/09/23 04:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*143*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/09/23 04:04*	*5*
o-Terphenyl (Surr)	*109*		*70 - 130*	*09/08/23 15:19*	*09/09/23 04:04*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	255		4.96		mg/Kg			09/13/23 00:38	1

Client Sample ID: SP-7 25

Date Collected: 09/05/23 13:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-30

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.289		0.0502		mg/Kg		09/07/23 15:49	09/08/23 01:58	25
Toluene	4.51		0.0502		mg/Kg		09/07/23 15:49	09/08/23 01:58	25
Ethylbenzene	1.29		0.0502		mg/Kg		09/07/23 15:49	09/08/23 01:58	25
m,p-Xylenes	1.30		0.100		mg/Kg		09/07/23 15:49	09/08/23 01:58	25
o-Xylene	4.06		0.0502		mg/Kg		09/07/23 15:49	09/08/23 01:58	25
Xylenes, Total	5.36		0.100		mg/Kg		09/07/23 15:49	09/08/23 01:58	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*224*	*S1+*	*70 - 130*	*09/07/23 15:49*	*09/08/23 01:58*	*25*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*09/07/23 15:49*	*09/08/23 01:58*	*25*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 25

Date Collected: 09/05/23 13:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-30

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	11.4		0.100		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4900		248		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	460		248		mg/Kg		09/08/23 15:19	09/09/23 04:25	5
Diesel Range Organics (Over C10-C28)	4440		248		mg/Kg		09/08/23 15:19	09/09/23 04:25	5
OII Range Organics (Over C28-C36)	<248	U	248		mg/Kg		09/08/23 15:19	09/09/23 04:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*146*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/09/23 04:25*	*5*
o-Terphenyl (Surr)	*114*		*70 - 130*	*09/08/23 15:19*	*09/09/23 04:25*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	462	F1	4.99		mg/Kg			09/12/23 17:45	1

Client Sample ID: SP-7 30'

Date Collected: 09/05/23 13:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-31

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.260		0.0504		mg/Kg		09/07/23 15:49	09/08/23 02:18	25
Toluene	0.809		0.0504		mg/Kg		09/07/23 15:49	09/08/23 02:18	25
Ethylbenzene	<0.0504	U	0.0504		mg/Kg		09/07/23 15:49	09/08/23 02:18	25
m,p-Xylenes	0.327		0.101		mg/Kg		09/07/23 15:49	09/08/23 02:18	25
o-Xylene	0.738		0.0504		mg/Kg		09/07/23 15:49	09/08/23 02:18	25
Xylenes, Total	1.07		0.101		mg/Kg		09/07/23 15:49	09/08/23 02:18	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*09/07/23 15:49*	*09/08/23 02:18*	*25*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*	*09/07/23 15:49*	*09/08/23 02:18*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.13		0.101		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1630		49.6		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	90.0		49.6		mg/Kg		09/08/23 15:19	09/09/23 03:21	1
Diesel Range Organics (Over C10-C28)	1540		49.6		mg/Kg		09/08/23 15:19	09/09/23 03:21	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 30'

Date Collected: 09/05/23 13:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-31
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/08/23 15:19	09/09/23 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*124*		*70 - 130*	*09/08/23 15:19*	*09/09/23 03:21*	*1*
o-Terphenyl (Surr)	*99*		*70 - 130*	*09/08/23 15:19*	*09/09/23 03:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**484**		4.95		mg/Kg			09/12/23 18:05	1

Client Sample ID: SP-7 35'

Date Collected: 09/05/23 14:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-32
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0691**		0.0497		mg/Kg		09/07/23 15:49	09/08/23 02:39	25
Toluene	<0.0497	U	0.0497		mg/Kg		09/07/23 15:49	09/08/23 02:39	25
Ethylbenzene	**0.0605**		0.0497		mg/Kg		09/07/23 15:49	09/08/23 02:39	25
m,p-Xylenes	<0.0994	U	0.0994		mg/Kg		09/07/23 15:49	09/08/23 02:39	25
o-Xylene	<0.0497	U	0.0497		mg/Kg		09/07/23 15:49	09/08/23 02:39	25
Xylenes, Total	<0.0994	U	0.0994		mg/Kg		09/07/23 15:49	09/08/23 02:39	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/07/23 15:49*	*09/08/23 02:39*	*25*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/07/23 15:49*	*09/08/23 02:39*	*25*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.130**		0.0994		mg/Kg			09/08/23 08:59	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**539**		50.3		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 05:29	1
Diesel Range Organics (Over C10-C28)	**539**		50.3		mg/Kg		09/08/23 15:19	09/09/23 05:29	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*123*		*70 - 130*	*09/08/23 15:19*	*09/09/23 05:29*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*09/08/23 15:19*	*09/09/23 05:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**237**		5.04		mg/Kg			09/12/23 18:12	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-32940-1	SP-5 1'	81	92
880-32940-1 MS	SP-5 1'	90	88
880-32940-1 MSD	SP-5 1'	93	92
880-32940-2	SP-5 5'	88	94
880-32940-3	SP-5 10'	92	87
880-32940-4	SP-5 15'	84	79
880-32940-5	SP-5 20'	100	89
880-32940-6	SP-5 25'	91	94
880-32940-7	SP-5 30'	101	90
880-32940-8	SP-5 35'	99	91
880-32940-9	SP-6 1'	88	97
880-32940-10	SP-6 5'	99	90
880-32940-11	SP-6 10'	83	94
880-32940-12	SP-6 15'	85	103
880-32940-13	SP-6 20'	91	100
880-32940-14	SP-6 25'	87	99
880-32940-15	SP-6 30'	96	101
880-32940-16	SP-6 35'	89	98
880-32940-17	SP-8 1	92	97
880-32940-18	SP-8 5	101	104
880-32940-19	SP-8 10	99	75
880-32940-20	SP-8 15	79	81
880-32940-21	SP-8 20	159 S1+	88
880-32940-22	SP-8 25	221 S1+	106
880-32940-23	SP-8 30	144 S1+	133 S1+
880-32940-24	SP-8 35	144 S1+	99
880-32940-25	SP-7 1	125	103
880-32940-26	SP-7 5	103	108
880-32940-27	SP-7 10	93	104
880-32940-28	SP-7 15	158 S1+	125
880-32940-29	SP-7 20	248 S1+	101
880-32940-30	SP-7 25	224 S1+	120
880-32940-31	SP-7 30'	142 S1+	129
880-32940-32	SP-7 35'	108	69 S1-
LCS 880-62002/1-A	Lab Control Sample	88	100
LCS 880-62005/1-A	Lab Control Sample	89	97
LCS 880-62007/1-A	Lab Control Sample	87	97
LCSD 880-62002/2-A	Lab Control Sample Dup	97	101
LCSD 880-62005/2-A	Lab Control Sample Dup	90	84
LCSD 880-62007/2-A	Lab Control Sample Dup	89	103
MB 880-61967/8	Method Blank	97	122
MB 880-62002/5-A	Method Blank	81	92
MB 880-62005/5-A	Method Blank	100	127
MB 880-62007/5-A	Method Blank	79	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-32940-1	SP-5 1'	121	102										
880-32940-2	SP-5 5'	122	106										
880-32940-3	SP-5 10'	140 S1+	112										
880-32940-4	SP-5 15'	142 S1+	113										
880-32940-5	SP-5 20'	146 S1+	122										
880-32940-6	SP-5 25'	144 S1+	124										
880-32940-6 MS	SP-5 25'	144 S1+	108										
880-32940-6 MSD	SP-5 25'	141 S1+	108										
880-32940-7	SP-5 30'	144 S1+	121										
880-32940-8	SP-5 35'	142 S1+	113										
880-32940-9	SP-6 1'	158 S1+	127										
880-32940-10	SP-6 5'	140 S1+	120										
880-32940-11	SP-6 10'	150 S1+	129										
880-32940-12	SP-6 15'	152 S1+	132 S1+										
880-32940-13	SP-6 20'	142 S1+	123										
880-32940-14	SP-6 25'	146 S1+	126										
880-32940-15	SP-6 30'	153 S1+	132 S1+										
880-32940-16	SP-6 35'	144 S1+	123										
880-32940-17	SP-8 1	137 S1+	119										
880-32940-18	SP-8 5	141 S1+	121										
880-32940-19	SP-8 10	168 S1+	125										
880-32940-20	SP-8 15	154 S1+	128										
880-32940-21	SP-8 20	165 S1+	139 S1+										
880-32940-22	SP-8 25	179 S1+	143 S1+										
880-32940-23	SP-8 30	122	120										
880-32940-24	SP-8 35	128	101										
880-32940-25	SP-7 1	125	106										
880-32940-26	SP-7 5	131 S1+	111										
880-32940-27	SP-7 10	130	112										
880-32940-27 MS	SP-7 10	126	97										
880-32940-27 MSD	SP-7 10	126	97										
880-32940-28	SP-7 15	133 S1+	114										
880-32940-29	SP-7 20	143 S1+	109										
880-32940-30	SP-7 25	146 S1+	114										
880-32940-31	SP-7 30'	124	99										
880-32940-32	SP-7 35'	123	102										
LCS 880-61987/2-A	Lab Control Sample	112	113										
LCS 880-61988/2-A	Lab Control Sample	103	103										
LCS 880-62060/2-A	Lab Control Sample	91	96										
LCS 880-62104/2-A	Lab Control Sample	97	99										
LCSD 880-61987/3-A	Lab Control Sample Dup	123	116										
LCSD 880-61988/3-A	Lab Control Sample Dup	116	105										
LCSD 880-62060/3-A	Lab Control Sample Dup	82	89										
LCSD 880-62104/3-A	Lab Control Sample Dup	99	94										
MB 880-61987/1-A	Method Blank	179 S1+	157 S1+										
MB 880-61988/1-A	Method Blank	181 S1+	161 S1+										
MB 880-62060/1-A	Method Blank	163 S1+	180 S1+										
MB 880-62104/1-A	Method Blank	160 S1+	148 S1+										

Surrogate Legend

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-61967/8
Matrix: Solid
Analysis Batch: 61967

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			09/07/23 18:51	1
Toluene	<0.00200	U	0.00200		mg/Kg			09/07/23 18:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			09/07/23 18:51	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg			09/07/23 18:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			09/07/23 18:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			09/07/23 18:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/07/23 18:51*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*		*09/07/23 18:51*	*1*

Lab Sample ID: MB 880-62002/5-A
Matrix: Solid
Analysis Batch: 61968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62002

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 15:49	09/07/23 18:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/23 15:49	09/07/23 18:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/23 15:49	09/07/23 18:40	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/07/23 15:49	09/07/23 18:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/23 15:49	09/07/23 18:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/23 15:49	09/07/23 18:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*09/07/23 15:49*	*09/07/23 18:40*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/07/23 15:49*	*09/07/23 18:40*	*1*

Lab Sample ID: LCS 880-62002/1-A
Matrix: Solid
Analysis Batch: 61968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62002

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08595		mg/Kg		86	70 - 130		
Toluene			0.100	0.08295		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.08107		mg/Kg		81	70 - 130		
m,p-Xylenes			0.200	0.1624		mg/Kg		81	70 - 130		
o-Xylene			0.100	0.07819		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-62002/2-A
Matrix: Solid
Analysis Batch: 61968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62002

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1137		mg/Kg		114	70 - 130	28	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: LCSD 880-62002/2-A
Matrix: Solid
Analysis Batch: 61968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62002

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1093		mg/Kg		109	70 - 130	27	35
Ethylbenzene			0.100	0.1087		mg/Kg		109	70 - 130	29	35
m,p-Xylenes			0.200	0.2186		mg/Kg		109	70 - 130	29	35
o-Xylene			0.100	0.1045		mg/Kg		104	70 - 130	29	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-62005/5-A
Matrix: Solid
Analysis Batch: 61967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62005

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 03:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 03:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 03:24	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/07/23 16:03	09/08/23 03:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:03	09/08/23 03:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/23 16:03	09/08/23 03:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/07/23 16:03*	*09/08/23 03:24*	*1*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*	*09/07/23 16:03*	*09/08/23 03:24*	*1*

Lab Sample ID: LCS 880-62005/1-A
Matrix: Solid
Analysis Batch: 61967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62005

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09891		mg/Kg		99	70 - 130		
Toluene			0.100	0.09515		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.08580		mg/Kg		86	70 - 130		
m,p-Xylenes			0.200	0.1787		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.08610		mg/Kg		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-62005/2-A
Matrix: Solid
Analysis Batch: 61967

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62005

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09303		mg/Kg		93	70 - 130	6	35
Toluene			0.100	0.09928		mg/Kg		99	70 - 130	4	35
Ethylbenzene			0.100	0.08508		mg/Kg		85	70 - 130	1	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: LCSD 880-62005/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 61967 — **Prep Batch: 62005**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m,p-Xylenes			0.200	0.1707		mg/Kg		85	70 - 130	5	35
o-Xylene			0.100	0.09022		mg/Kg		90	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: 880-32940-1 MS — **Client Sample ID: SP-5 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 61967 — **Prep Batch: 62005**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.101	0.07780		mg/Kg		77	70 - 130
Toluene	<0.00199	U	0.101	0.07413		mg/Kg		74	70 - 130
Ethylbenzene	<0.00199	U F1	0.101	0.06450	F1	mg/Kg		64	70 - 130
m,p-Xylenes	<0.00398	U F1	0.202	0.1351	F1	mg/Kg		67	70 - 130
o-Xylene	<0.00199	U F1	0.101	0.06435	F1	mg/Kg		63	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-32940-1 MSD — **Client Sample ID: SP-5 1'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 61967 — **Prep Batch: 62005**

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	0.07966		mg/Kg		80	70 - 130	2	35
Toluene	<0.00199	U	0.100	0.07071		mg/Kg		71	70 - 130	5	35
Ethylbenzene	<0.00199	U F1	0.100	0.06066	F1	mg/Kg		61	70 - 130	6	35
m,p-Xylenes	<0.00398	U F1	0.200	0.1315	F1	mg/Kg		66	70 - 130	3	35
o-Xylene	<0.00199	U F1	0.100	0.06250	F1	mg/Kg		62	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-62007/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62038 — **Prep Batch: 62007**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:17	09/08/23 11:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:17	09/08/23 11:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:17	09/08/23 11:46	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/07/23 16:17	09/08/23 11:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/23 16:17	09/08/23 11:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/23 16:17	09/08/23 11:46	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	09/07/23 16:17	09/08/23 11:46	1
1,4-Difluorobenzene (Surr)	90		70 - 130	09/07/23 16:17	09/08/23 11:46	1

Lab Sample ID: LCS 880-62007/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62038 — **Prep Batch: 62007**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08374		mg/Kg		84	70 - 130
Toluene	0.100	0.07828		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.07675		mg/Kg		77	70 - 130
m,p-Xylenes	0.200	0.1528		mg/Kg		76	70 - 130
o-Xylene	0.100	0.07385		mg/Kg		74	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-62007/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62038 — **Prep Batch: 62007**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09245		mg/Kg		92	70 - 130	10	35
Toluene	0.100	0.08722		mg/Kg		87	70 - 130	11	35
Ethylbenzene	0.100	0.08649		mg/Kg		86	70 - 130	12	35
m,p-Xylenes	0.200	0.1728		mg/Kg		86	70 - 130	12	35
o-Xylene	0.100	0.08263		mg/Kg		83	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-61987/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 61960 — **Prep Batch: 61987**

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		09/07/23 08:00	09/07/23 08:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/07/23 08:00	09/07/23 08:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/07/23 08:00	09/07/23 08:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	179	S1+	70 - 130	09/07/23 08:00	09/07/23 08:29	1
o-Terphenyl (Surr)	157	S1+	70 - 130	09/07/23 08:00	09/07/23 08:29	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: LCS 880-61987/2-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61987

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	953.8		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	951.1		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*112*		*70 - 130*
o-Terphenyl (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-61987/3-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61987

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	978.1		mg/Kg		98	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	965.3		mg/Kg		97	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*123*		*70 - 130*
o-Terphenyl (Surr)	*116*		*70 - 130*

Lab Sample ID: MB 880-61988/1-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61988

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		09/07/23 11:04	09/07/23 20:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/07/23 20:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/07/23 11:04	09/07/23 20:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*181*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 20:18*	*1*
o-Terphenyl (Surr)	*161*	*S1+*	*70 - 130*	*09/07/23 11:04*	*09/07/23 20:18*	*1*

Lab Sample ID: LCS 880-61988/2-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61988

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	902.1		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	857.5		mg/Kg		86	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: LCS 880-61988/2-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61988

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

Lab Sample ID: LCSD 880-61988/3-A
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61988

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	917.1		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	882.8		mg/Kg		88	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	116		70 - 130
o-Terphenyl (Surr)	105		70 - 130

Lab Sample ID: 880-32940-6 MS
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: SP-5 25'
Prep Type: Total/NA
Prep Batch: 61988

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	998	1012		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1267		mg/Kg		123	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	144	S1+	70 - 130
o-Terphenyl (Surr)	108		70 - 130

Lab Sample ID: 880-32940-6 MSD
Matrix: Solid
Analysis Batch: 61960

Client Sample ID: SP-5 25'
Prep Type: Total/NA
Prep Batch: 61988

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	<50.5	U	998	1001		mg/Kg		97	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1249		mg/Kg		121	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	141	S1+	70 - 130
o-Terphenyl (Surr)	108		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: MB 880-62060/1-A
Matrix: Solid
Analysis Batch: 62028

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62060

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		09/08/23 08:00	09/08/23 09:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 08:00	09/08/23 09:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 08:00	09/08/23 09:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*163*	*S1+*	*70 - 130*	*09/08/23 08:00*	*09/08/23 09:08*	*1*
o-Terphenyl (Surr)	*180*	*S1+*	*70 - 130*	*09/08/23 08:00*	*09/08/23 09:08*	*1*

Lab Sample ID: LCS 880-62060/2-A
Matrix: Solid
Analysis Batch: 62028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62060

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1166		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1051		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*91*		*70 - 130*
o-Terphenyl (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-62060/3-A
Matrix: Solid
Analysis Batch: 62028

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62060

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	938.4	*1	mg/Kg		94	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	783.4	*1	mg/Kg		78	70 - 130	29	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*82*		*70 - 130*
o-Terphenyl (Surr)	*89*		*70 - 130*

Lab Sample ID: MB 880-62104/1-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62104

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		09/08/23 15:19	09/08/23 20:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/08/23 20:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/08/23 20:37	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: MB 880-62104/1-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62104

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	160	S1+	70 - 130	09/08/23 15:19	09/08/23 20:37	1
o-Terphenyl (Surr)	148	S1+	70 - 130	09/08/23 15:19	09/08/23 20:37	1

Lab Sample ID: LCS 880-62104/2-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62104

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1039		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1048		mg/Kg		105	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	97		70 - 130
o-Terphenyl (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-62104/3-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	981.8		mg/Kg		98	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	985.2		mg/Kg		99	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	99		70 - 130
o-Terphenyl (Surr)	94		70 - 130

Lab Sample ID: 880-32940-27 MS
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: SP-7 10
Prep Type: Total/NA
Prep Batch: 62104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	993	911.7		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	56.9		993	1092		mg/Kg		104	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	126		70 - 130
o-Terphenyl (Surr)	97		70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

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

Lab Sample ID: 880-32940-27 MSD
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: SP-7 10
Prep Type: Total/NA
Prep Batch: 62104

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	<50.4	U	993	911.4		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	56.9		993	1095		mg/Kg		105	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*126*		*70 - 130*
o-Terphenyl (Surr)	*97*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-61995/1-A
Matrix: Solid
Analysis Batch: 62322

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			09/13/23 05:31	1

Lab Sample ID: LCS 880-61995/2-A
Matrix: Solid
Analysis Batch: 62322

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-61995/3-A
Matrix: Solid
Analysis Batch: 62322

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	252.5		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-62032/1-A
Matrix: Solid
Analysis Batch: 62331

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			09/12/23 17:25	1

Lab Sample ID: LCS 880-62032/2-A
Matrix: Solid
Analysis Batch: 62331

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.5		mg/Kg		97	90 - 110

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-62032/3-A
Matrix: Solid
Analysis Batch: 62331

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	241.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-32940-30 MS
Matrix: Solid
Analysis Batch: 62331

Client Sample ID: SP-7 25
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	462	F1	250	682.1	F1	mg/Kg		88	90 - 110

Lab Sample ID: 880-32940-30 MSD
Matrix: Solid
Analysis Batch: 62331

Client Sample ID: SP-7 25
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	462	F1	250	681.8	F1	mg/Kg		88	90 - 110	0	20

Lab Sample ID: MB 880-61996/1-A
Matrix: Solid
Analysis Batch: 62332

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			09/12/23 21:18	1

Lab Sample ID: LCS 880-61996/2-A
Matrix: Solid
Analysis Batch: 62332

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	243.7		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-61996/3-A
Matrix: Solid
Analysis Batch: 62332

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	243.7		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-32940-10 MS
Matrix: Solid
Analysis Batch: 62332

Client Sample ID: SP-6 5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	508	F1	248	721.8	F1	mg/Kg		86	90 - 110

Lab Sample ID: 880-32940-10 MSD
Matrix: Solid
Analysis Batch: 62332

Client Sample ID: SP-6 5'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	508	F1	248	721.8	F1	mg/Kg		86	90 - 110	0	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-32940-20 MS
Matrix: Solid
Analysis Batch: 62332

Client Sample ID: SP-8 15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	133		253	384.3		mg/Kg		100	90 - 110		

Lab Sample ID: 880-32940-20 MSD
Matrix: Solid
Analysis Batch: 62332

Client Sample ID: SP-8 15
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	133		253	384.4		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC VOA

Analysis Batch: 61967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	8021B	62005
880-32940-2	SP-5 5'	Total/NA	Solid	8021B	62005
880-32940-3	SP-5 10'	Total/NA	Solid	8021B	62005
880-32940-4	SP-5 15'	Total/NA	Solid	8021B	62005
880-32940-5	SP-5 20'	Total/NA	Solid	8021B	62005
880-32940-6	SP-5 25'	Total/NA	Solid	8021B	62005
880-32940-7	SP-5 30'	Total/NA	Solid	8021B	62005
880-32940-8	SP-5 35'	Total/NA	Solid	8021B	62005
880-32940-9	SP-6 1'	Total/NA	Solid	8021B	62005
880-32940-10	SP-6 5'	Total/NA	Solid	8021B	62005
880-32940-11	SP-6 10'	Total/NA	Solid	8021B	62005
880-32940-12	SP-6 15'	Total/NA	Solid	8021B	62005
880-32940-13	SP-6 20'	Total/NA	Solid	8021B	62005
880-32940-14	SP-6 25'	Total/NA	Solid	8021B	62005
880-32940-15	SP-6 30'	Total/NA	Solid	8021B	62005
880-32940-16	SP-6 35'	Total/NA	Solid	8021B	62005
880-32940-17	SP-8 1	Total/NA	Solid	8021B	62005
880-32940-18	SP-8 5	Total/NA	Solid	8021B	62005
880-32940-19	SP-8 10	Total/NA	Solid	8021B	62005
880-32940-20	SP-8 15	Total/NA	Solid	8021B	62005
MB 880-61967/8	Method Blank	Total/NA	Solid	8021B	
MB 880-62005/5-A	Method Blank	Total/NA	Solid	8021B	62005
LCS 880-62005/1-A	Lab Control Sample	Total/NA	Solid	8021B	62005
LCSD 880-62005/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62005
880-32940-1 MS	SP-5 1'	Total/NA	Solid	8021B	62005
880-32940-1 MSD	SP-5 1'	Total/NA	Solid	8021B	62005

Analysis Batch: 61968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-27	SP-7 10	Total/NA	Solid	8021B	62002
880-32940-28	SP-7 15	Total/NA	Solid	8021B	62002
880-32940-29	SP-7 20	Total/NA	Solid	8021B	62002
880-32940-30	SP-7 25	Total/NA	Solid	8021B	62002
880-32940-31	SP-7 30'	Total/NA	Solid	8021B	62002
880-32940-32	SP-7 35'	Total/NA	Solid	8021B	62002
MB 880-62002/5-A	Method Blank	Total/NA	Solid	8021B	62002
LCS 880-62002/1-A	Lab Control Sample	Total/NA	Solid	8021B	62002
LCSD 880-62002/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62002

Prep Batch: 62002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-27	SP-7 10	Total/NA	Solid	5035	
880-32940-28	SP-7 15	Total/NA	Solid	5035	
880-32940-29	SP-7 20	Total/NA	Solid	5035	
880-32940-30	SP-7 25	Total/NA	Solid	5035	
880-32940-31	SP-7 30'	Total/NA	Solid	5035	
880-32940-32	SP-7 35'	Total/NA	Solid	5035	
MB 880-62002/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62002/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62002/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC VOA

Prep Batch: 62005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	5035	
880-32940-2	SP-5 5'	Total/NA	Solid	5035	
880-32940-3	SP-5 10'	Total/NA	Solid	5035	
880-32940-4	SP-5 15'	Total/NA	Solid	5035	
880-32940-5	SP-5 20'	Total/NA	Solid	5035	
880-32940-6	SP-5 25'	Total/NA	Solid	5035	
880-32940-7	SP-5 30'	Total/NA	Solid	5035	
880-32940-8	SP-5 35'	Total/NA	Solid	5035	
880-32940-9	SP-6 1'	Total/NA	Solid	5035	
880-32940-10	SP-6 5'	Total/NA	Solid	5035	
880-32940-11	SP-6 10'	Total/NA	Solid	5035	
880-32940-12	SP-6 15'	Total/NA	Solid	5035	
880-32940-13	SP-6 20'	Total/NA	Solid	5035	
880-32940-14	SP-6 25'	Total/NA	Solid	5035	
880-32940-15	SP-6 30'	Total/NA	Solid	5035	
880-32940-16	SP-6 35'	Total/NA	Solid	5035	
880-32940-17	SP-8 1	Total/NA	Solid	5035	
880-32940-18	SP-8 5	Total/NA	Solid	5035	
880-32940-19	SP-8 10	Total/NA	Solid	5035	
880-32940-20	SP-8 15	Total/NA	Solid	5035	
MB 880-62005/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62005/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62005/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-32940-1 MS	SP-5 1'	Total/NA	Solid	5035	
880-32940-1 MSD	SP-5 1'	Total/NA	Solid	5035	

Prep Batch: 62007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-21	SP-8 20	Total/NA	Solid	5035	
880-32940-22	SP-8 25	Total/NA	Solid	5035	
880-32940-23	SP-8 30	Total/NA	Solid	5035	
880-32940-24	SP-8 35	Total/NA	Solid	5035	
880-32940-25	SP-7 1	Total/NA	Solid	5035	
880-32940-26	SP-7 5	Total/NA	Solid	5035	
MB 880-62007/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62007/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62007/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 62038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-21	SP-8 20	Total/NA	Solid	8021B	62007
880-32940-22	SP-8 25	Total/NA	Solid	8021B	62007
880-32940-23	SP-8 30	Total/NA	Solid	8021B	62007
880-32940-24	SP-8 35	Total/NA	Solid	8021B	62007
880-32940-25	SP-7 1	Total/NA	Solid	8021B	62007
880-32940-26	SP-7 5	Total/NA	Solid	8021B	62007
MB 880-62007/5-A	Method Blank	Total/NA	Solid	8021B	62007
LCS 880-62007/1-A	Lab Control Sample	Total/NA	Solid	8021B	62007
LCSD 880-62007/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62007

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC VOA

Analysis Batch: 62045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	Total BTEX	
880-32940-2	SP-5 5'	Total/NA	Solid	Total BTEX	
880-32940-3	SP-5 10'	Total/NA	Solid	Total BTEX	
880-32940-4	SP-5 15'	Total/NA	Solid	Total BTEX	
880-32940-5	SP-5 20'	Total/NA	Solid	Total BTEX	
880-32940-6	SP-5 25'	Total/NA	Solid	Total BTEX	
880-32940-7	SP-5 30'	Total/NA	Solid	Total BTEX	
880-32940-8	SP-5 35'	Total/NA	Solid	Total BTEX	
880-32940-9	SP-6 1'	Total/NA	Solid	Total BTEX	
880-32940-10	SP-6 5'	Total/NA	Solid	Total BTEX	
880-32940-11	SP-6 10'	Total/NA	Solid	Total BTEX	
880-32940-12	SP-6 15'	Total/NA	Solid	Total BTEX	
880-32940-13	SP-6 20'	Total/NA	Solid	Total BTEX	
880-32940-14	SP-6 25'	Total/NA	Solid	Total BTEX	
880-32940-15	SP-6 30'	Total/NA	Solid	Total BTEX	
880-32940-16	SP-6 35'	Total/NA	Solid	Total BTEX	
880-32940-17	SP-8 1	Total/NA	Solid	Total BTEX	
880-32940-18	SP-8 5	Total/NA	Solid	Total BTEX	
880-32940-19	SP-8 10	Total/NA	Solid	Total BTEX	
880-32940-20	SP-8 15	Total/NA	Solid	Total BTEX	
880-32940-21	SP-8 20	Total/NA	Solid	Total BTEX	
880-32940-22	SP-8 25	Total/NA	Solid	Total BTEX	
880-32940-23	SP-8 30	Total/NA	Solid	Total BTEX	
880-32940-24	SP-8 35	Total/NA	Solid	Total BTEX	
880-32940-25	SP-7 1	Total/NA	Solid	Total BTEX	
880-32940-26	SP-7 5	Total/NA	Solid	Total BTEX	
880-32940-27	SP-7 10	Total/NA	Solid	Total BTEX	
880-32940-28	SP-7 15	Total/NA	Solid	Total BTEX	
880-32940-29	SP-7 20	Total/NA	Solid	Total BTEX	
880-32940-30	SP-7 25	Total/NA	Solid	Total BTEX	
880-32940-31	SP-7 30'	Total/NA	Solid	Total BTEX	
880-32940-32	SP-7 35'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 61960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	8015B NM	61987
880-32940-2	SP-5 5'	Total/NA	Solid	8015B NM	61987
880-32940-3	SP-5 10'	Total/NA	Solid	8015B NM	61988
880-32940-4	SP-5 15'	Total/NA	Solid	8015B NM	61988
880-32940-5	SP-5 20'	Total/NA	Solid	8015B NM	61988
880-32940-6	SP-5 25'	Total/NA	Solid	8015B NM	61988
880-32940-7	SP-5 30'	Total/NA	Solid	8015B NM	61988
880-32940-8	SP-5 35'	Total/NA	Solid	8015B NM	61988
880-32940-9	SP-6 1'	Total/NA	Solid	8015B NM	61988
880-32940-10	SP-6 5'	Total/NA	Solid	8015B NM	61988
880-32940-11	SP-6 10'	Total/NA	Solid	8015B NM	61988
880-32940-12	SP-6 15'	Total/NA	Solid	8015B NM	61988
880-32940-13	SP-6 20'	Total/NA	Solid	8015B NM	61988
880-32940-14	SP-6 25'	Total/NA	Solid	8015B NM	61988

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC Semi VOA (Continued)

Analysis Batch: 61960 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-15	SP-6 30'	Total/NA	Solid	8015B NM	61988
880-32940-16	SP-6 35'	Total/NA	Solid	8015B NM	61988
880-32940-17	SP-8 1	Total/NA	Solid	8015B NM	61988
880-32940-18	SP-8 5	Total/NA	Solid	8015B NM	61988
880-32940-19	SP-8 10	Total/NA	Solid	8015B NM	61988
880-32940-20	SP-8 15	Total/NA	Solid	8015B NM	61988
880-32940-21	SP-8 20	Total/NA	Solid	8015B NM	61988
880-32940-22	SP-8 25	Total/NA	Solid	8015B NM	61988
MB 880-61987/1-A	Method Blank	Total/NA	Solid	8015B NM	61987
MB 880-61988/1-A	Method Blank	Total/NA	Solid	8015B NM	61988
LCS 880-61987/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61987
LCS 880-61988/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61988
LCSD 880-61987/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61987
LCSD 880-61988/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61988
880-32940-6 MS	SP-5 25'	Total/NA	Solid	8015B NM	61988
880-32940-6 MSD	SP-5 25'	Total/NA	Solid	8015B NM	61988

Prep Batch: 61987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	8015NM Prep	
880-32940-2	SP-5 5'	Total/NA	Solid	8015NM Prep	
MB 880-61987/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61987/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-61987/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 61988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-3	SP-5 10'	Total/NA	Solid	8015NM Prep	
880-32940-4	SP-5 15'	Total/NA	Solid	8015NM Prep	
880-32940-5	SP-5 20'	Total/NA	Solid	8015NM Prep	
880-32940-6	SP-5 25'	Total/NA	Solid	8015NM Prep	
880-32940-7	SP-5 30'	Total/NA	Solid	8015NM Prep	
880-32940-8	SP-5 35'	Total/NA	Solid	8015NM Prep	
880-32940-9	SP-6 1'	Total/NA	Solid	8015NM Prep	
880-32940-10	SP-6 5'	Total/NA	Solid	8015NM Prep	
880-32940-11	SP-6 10'	Total/NA	Solid	8015NM Prep	
880-32940-12	SP-6 15'	Total/NA	Solid	8015NM Prep	
880-32940-13	SP-6 20'	Total/NA	Solid	8015NM Prep	
880-32940-14	SP-6 25'	Total/NA	Solid	8015NM Prep	
880-32940-15	SP-6 30'	Total/NA	Solid	8015NM Prep	
880-32940-16	SP-6 35'	Total/NA	Solid	8015NM Prep	
880-32940-17	SP-8 1	Total/NA	Solid	8015NM Prep	
880-32940-18	SP-8 5	Total/NA	Solid	8015NM Prep	
880-32940-19	SP-8 10	Total/NA	Solid	8015NM Prep	
880-32940-20	SP-8 15	Total/NA	Solid	8015NM Prep	
880-32940-21	SP-8 20	Total/NA	Solid	8015NM Prep	
880-32940-22	SP-8 25	Total/NA	Solid	8015NM Prep	
MB 880-61988/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61988/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-61988/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-32940-6 MS	SP-5 25'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC Semi VOA (Continued)

Prep Batch: 61988 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-6 MSD	SP-5 25'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-24	SP-8 35	Total/NA	Solid	8015B NM	62104
880-32940-25	SP-7 1	Total/NA	Solid	8015B NM	62104
880-32940-26	SP-7 5	Total/NA	Solid	8015B NM	62104
880-32940-27	SP-7 10	Total/NA	Solid	8015B NM	62104
880-32940-28	SP-7 15	Total/NA	Solid	8015B NM	62104
880-32940-29	SP-7 20	Total/NA	Solid	8015B NM	62104
880-32940-30	SP-7 25	Total/NA	Solid	8015B NM	62104
880-32940-31	SP-7 30'	Total/NA	Solid	8015B NM	62104
880-32940-32	SP-7 35'	Total/NA	Solid	8015B NM	62104
MB 880-62104/1-A	Method Blank	Total/NA	Solid	8015B NM	62104
LCS 880-62104/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62104
LCSD 880-62104/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62104
880-32940-27 MS	SP-7 10	Total/NA	Solid	8015B NM	62104
880-32940-27 MSD	SP-7 10	Total/NA	Solid	8015B NM	62104

Analysis Batch: 62028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-23	SP-8 30	Total/NA	Solid	8015B NM	62060
MB 880-62060/1-A	Method Blank	Total/NA	Solid	8015B NM	62060
LCS 880-62060/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62060
LCSD 880-62060/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62060

Prep Batch: 62060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-23	SP-8 30	Total/NA	Solid	8015NM Prep	
MB 880-62060/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62060/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62060/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Total/NA	Solid	8015 NM	
880-32940-2	SP-5 5'	Total/NA	Solid	8015 NM	
880-32940-3	SP-5 10'	Total/NA	Solid	8015 NM	
880-32940-4	SP-5 15'	Total/NA	Solid	8015 NM	
880-32940-5	SP-5 20'	Total/NA	Solid	8015 NM	
880-32940-6	SP-5 25'	Total/NA	Solid	8015 NM	
880-32940-7	SP-5 30'	Total/NA	Solid	8015 NM	
880-32940-8	SP-5 35'	Total/NA	Solid	8015 NM	
880-32940-9	SP-6 1'	Total/NA	Solid	8015 NM	
880-32940-10	SP-6 5'	Total/NA	Solid	8015 NM	
880-32940-11	SP-6 10'	Total/NA	Solid	8015 NM	
880-32940-12	SP-6 15'	Total/NA	Solid	8015 NM	
880-32940-13	SP-6 20'	Total/NA	Solid	8015 NM	
880-32940-14	SP-6 25'	Total/NA	Solid	8015 NM	
880-32940-15	SP-6 30'	Total/NA	Solid	8015 NM	
880-32940-16	SP-6 35'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

GC Semi VOA (Continued)

Analysis Batch: 62087 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-17	SP-8 1	Total/NA	Solid	8015 NM	
880-32940-18	SP-8 5	Total/NA	Solid	8015 NM	
880-32940-19	SP-8 10	Total/NA	Solid	8015 NM	
880-32940-20	SP-8 15	Total/NA	Solid	8015 NM	
880-32940-21	SP-8 20	Total/NA	Solid	8015 NM	
880-32940-22	SP-8 25	Total/NA	Solid	8015 NM	
880-32940-23	SP-8 30	Total/NA	Solid	8015 NM	
880-32940-24	SP-8 35	Total/NA	Solid	8015 NM	
880-32940-25	SP-7 1	Total/NA	Solid	8015 NM	
880-32940-26	SP-7 5	Total/NA	Solid	8015 NM	
880-32940-27	SP-7 10	Total/NA	Solid	8015 NM	
880-32940-28	SP-7 15	Total/NA	Solid	8015 NM	
880-32940-29	SP-7 20	Total/NA	Solid	8015 NM	
880-32940-30	SP-7 25	Total/NA	Solid	8015 NM	
880-32940-31	SP-7 30'	Total/NA	Solid	8015 NM	
880-32940-32	SP-7 35'	Total/NA	Solid	8015 NM	

Prep Batch: 62104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-24	SP-8 35	Total/NA	Solid	8015NM Prep	
880-32940-25	SP-7 1	Total/NA	Solid	8015NM Prep	
880-32940-26	SP-7 5	Total/NA	Solid	8015NM Prep	
880-32940-27	SP-7 10	Total/NA	Solid	8015NM Prep	
880-32940-28	SP-7 15	Total/NA	Solid	8015NM Prep	
880-32940-29	SP-7 20	Total/NA	Solid	8015NM Prep	
880-32940-30	SP-7 25	Total/NA	Solid	8015NM Prep	
880-32940-31	SP-7 30'	Total/NA	Solid	8015NM Prep	
880-32940-32	SP-7 35'	Total/NA	Solid	8015NM Prep	
MB 880-62104/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62104/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62104/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-32940-27 MS	SP-7 10	Total/NA	Solid	8015NM Prep	
880-32940-27 MSD	SP-7 10	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 61995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Soluble	Solid	DI Leach	
880-32940-2	SP-5 5'	Soluble	Solid	DI Leach	
880-32940-3	SP-5 10'	Soluble	Solid	DI Leach	
880-32940-4	SP-5 15'	Soluble	Solid	DI Leach	
880-32940-5	SP-5 20'	Soluble	Solid	DI Leach	
880-32940-6	SP-5 25'	Soluble	Solid	DI Leach	
880-32940-7	SP-5 30'	Soluble	Solid	DI Leach	
880-32940-8	SP-5 35'	Soluble	Solid	DI Leach	
880-32940-9	SP-6 1'	Soluble	Solid	DI Leach	
MB 880-61995/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-61995/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-61995/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

HPLC/IC

Leach Batch: 61996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-10	SP-6 5'	Soluble	Solid	DI Leach	
880-32940-11	SP-6 10'	Soluble	Solid	DI Leach	
880-32940-12	SP-6 15'	Soluble	Solid	DI Leach	
880-32940-13	SP-6 20'	Soluble	Solid	DI Leach	
880-32940-14	SP-6 25'	Soluble	Solid	DI Leach	
880-32940-15	SP-6 30'	Soluble	Solid	DI Leach	
880-32940-16	SP-6 35'	Soluble	Solid	DI Leach	
880-32940-17	SP-8 1	Soluble	Solid	DI Leach	
880-32940-18	SP-8 5	Soluble	Solid	DI Leach	
880-32940-19	SP-8 10	Soluble	Solid	DI Leach	
880-32940-20	SP-8 15	Soluble	Solid	DI Leach	
880-32940-21	SP-8 20	Soluble	Solid	DI Leach	
880-32940-22	SP-8 25	Soluble	Solid	DI Leach	
880-32940-23	SP-8 30	Soluble	Solid	DI Leach	
880-32940-24	SP-8 35	Soluble	Solid	DI Leach	
880-32940-25	SP-7 1	Soluble	Solid	DI Leach	
880-32940-26	SP-7 5	Soluble	Solid	DI Leach	
880-32940-27	SP-7 10	Soluble	Solid	DI Leach	
880-32940-28	SP-7 15	Soluble	Solid	DI Leach	
880-32940-29	SP-7 20	Soluble	Solid	DI Leach	
MB 880-61996/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-61996/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-61996/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32940-10 MS	SP-6 5'	Soluble	Solid	DI Leach	
880-32940-10 MSD	SP-6 5'	Soluble	Solid	DI Leach	
880-32940-20 MS	SP-8 15	Soluble	Solid	DI Leach	
880-32940-20 MSD	SP-8 15	Soluble	Solid	DI Leach	

Leach Batch: 62032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-30	SP-7 25	Soluble	Solid	DI Leach	
880-32940-31	SP-7 30'	Soluble	Solid	DI Leach	
880-32940-32	SP-7 35'	Soluble	Solid	DI Leach	
MB 880-62032/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62032/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62032/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32940-30 MS	SP-7 25	Soluble	Solid	DI Leach	
880-32940-30 MSD	SP-7 25	Soluble	Solid	DI Leach	

Analysis Batch: 62322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-1	SP-5 1'	Soluble	Solid	300.0	61995
880-32940-2	SP-5 5'	Soluble	Solid	300.0	61995
880-32940-3	SP-5 10'	Soluble	Solid	300.0	61995
880-32940-4	SP-5 15'	Soluble	Solid	300.0	61995
880-32940-5	SP-5 20'	Soluble	Solid	300.0	61995
880-32940-6	SP-5 25'	Soluble	Solid	300.0	61995
880-32940-7	SP-5 30'	Soluble	Solid	300.0	61995
880-32940-8	SP-5 35'	Soluble	Solid	300.0	61995
880-32940-9	SP-6 1'	Soluble	Solid	300.0	61995
MB 880-61995/1-A	Method Blank	Soluble	Solid	300.0	61995

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

HPLC/IC (Continued)

Analysis Batch: 62322 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-61995/2-A	Lab Control Sample	Soluble	Solid	300.0	61995
LCSD 880-61995/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	61995

Analysis Batch: 62331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-30	SP-7 25	Soluble	Solid	300.0	62032
880-32940-31	SP-7 30'	Soluble	Solid	300.0	62032
880-32940-32	SP-7 35'	Soluble	Solid	300.0	62032
MB 880-62032/1-A	Method Blank	Soluble	Solid	300.0	62032
LCS 880-62032/2-A	Lab Control Sample	Soluble	Solid	300.0	62032
LCSD 880-62032/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62032
880-32940-30 MS	SP-7 25	Soluble	Solid	300.0	62032
880-32940-30 MSD	SP-7 25	Soluble	Solid	300.0	62032

Analysis Batch: 62332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32940-10	SP-6 5'	Soluble	Solid	300.0	61996
880-32940-11	SP-6 10'	Soluble	Solid	300.0	61996
880-32940-12	SP-6 15'	Soluble	Solid	300.0	61996
880-32940-13	SP-6 20'	Soluble	Solid	300.0	61996
880-32940-14	SP-6 25'	Soluble	Solid	300.0	61996
880-32940-15	SP-6 30'	Soluble	Solid	300.0	61996
880-32940-16	SP-6 35'	Soluble	Solid	300.0	61996
880-32940-17	SP-8 1	Soluble	Solid	300.0	61996
880-32940-18	SP-8 5	Soluble	Solid	300.0	61996
880-32940-19	SP-8 10	Soluble	Solid	300.0	61996
880-32940-20	SP-8 15	Soluble	Solid	300.0	61996
880-32940-21	SP-8 20	Soluble	Solid	300.0	61996
880-32940-22	SP-8 25	Soluble	Solid	300.0	61996
880-32940-23	SP-8 30	Soluble	Solid	300.0	61996
880-32940-24	SP-8 35	Soluble	Solid	300.0	61996
880-32940-25	SP-7 1	Soluble	Solid	300.0	61996
880-32940-26	SP-7 5	Soluble	Solid	300.0	61996
880-32940-27	SP-7 10	Soluble	Solid	300.0	61996
880-32940-28	SP-7 15	Soluble	Solid	300.0	61996
880-32940-29	SP-7 20	Soluble	Solid	300.0	61996
MB 880-61996/1-A	Method Blank	Soluble	Solid	300.0	61996
LCS 880-61996/2-A	Lab Control Sample	Soluble	Solid	300.0	61996
LCSD 880-61996/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	61996
880-32940-10 MS	SP-6 5'	Soluble	Solid	300.0	61996
880-32940-10 MSD	SP-6 5'	Soluble	Solid	300.0	61996
880-32940-20 MS	SP-8 15	Soluble	Solid	300.0	61996
880-32940-20 MSD	SP-8 15	Soluble	Solid	300.0	61996

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 1'

Lab Sample ID: 880-32940-1
Matrix: Solid
Date Collected: 09/05/23 10:20
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 03:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	61987	09/07/23 11:01	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 19:12	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 07:38	CH	EET MID

Client Sample ID: SP-5 5'

Lab Sample ID: 880-32940-2
Matrix: Solid
Date Collected: 09/05/23 10:25
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 04:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	61987	09/07/23 11:01	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 19:34	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 07:45	CH	EET MID

Client Sample ID: SP-5 10'

Lab Sample ID: 880-32940-3
Matrix: Solid
Date Collected: 09/05/23 10:30
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 04:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 03:59	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 08:04	CH	EET MID

Client Sample ID: SP-5 15'

Lab Sample ID: 880-32940-4
Matrix: Solid
Date Collected: 09/05/23 10:35
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 04:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 15'

Lab Sample ID: 880-32940-4
Matrix: Solid
Date Collected: 09/05/23 10:35
Date Received: 09/07/23 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 04:21	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 08:10	CH	EET MID

Client Sample ID: SP-5 20'

Lab Sample ID: 880-32940-5
Matrix: Solid
Date Collected: 09/05/23 10:40
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 05:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 05:27	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 09:25	CH	EET MID

Client Sample ID: SP-5 25'

Lab Sample ID: 880-32940-6
Matrix: Solid
Date Collected: 09/05/23 10:42
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 05:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 21:23	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 09:31	CH	EET MID

Client Sample ID: SP-5 30'

Lab Sample ID: 880-32940-7
Matrix: Solid
Date Collected: 09/05/23 10:44
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 05:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 22:29	SM	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-5 30'

Lab Sample ID: 880-32940-7
Matrix: Solid
Date Collected: 09/05/23 10:44
Date Received: 09/07/23 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 09:37	CH	EET MID

Client Sample ID: SP-5 35'

Lab Sample ID: 880-32940-8
Matrix: Solid
Date Collected: 09/05/23 10:50
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 06:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 05:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 09:44	CH	EET MID

Client Sample ID: SP-6 1'

Lab Sample ID: 880-32940-9
Matrix: Solid
Date Collected: 09/05/23 11:00
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 06:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 04:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	61995	09/07/23 11:19	CH	EET MID
Soluble	Analysis	300.0		1			62322	09/13/23 09:50	CH	EET MID

Client Sample ID: SP-6 5'

Lab Sample ID: 880-32940-10
Matrix: Solid
Date Collected: 09/05/23 11:05
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 06:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 09:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 22:51	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 21:38	CH	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 10'

Lab Sample ID: 880-32940-11
Matrix: Solid
Date Collected: 09/05/23 11:10
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 08:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 10:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 23:13	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 21:58	CH	EET MID

Client Sample ID: SP-6 15'

Lab Sample ID: 880-32940-12
Matrix: Solid
Date Collected: 09/05/23 11:15
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 09:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 10:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 23:35	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:05	CH	EET MID

Client Sample ID: SP-6 20'

Lab Sample ID: 880-32940-13
Matrix: Solid
Date Collected: 09/05/23 11:20
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 09:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 10:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/07/23 23:57	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:12	CH	EET MID

Client Sample ID: SP-6 25'

Lab Sample ID: 880-32940-14
Matrix: Solid
Date Collected: 09/05/23 11:25
Date Received: 09/07/23 09:56

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	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 09:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 10:31	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-6 25'

Date Collected: 09/05/23 11:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 00:19	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:18	CH	EET MID

Client Sample ID: SP-6 30'

Date Collected: 09/05/23 11:30
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 10:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 10:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 00:41	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:38	CH	EET MID

Client Sample ID: SP-6 35'

Date Collected: 09/05/23 11:35
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 10:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 01:03	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:45	CH	EET MID

Client Sample ID: SP-8 1

Date Collected: 09/05/23 11:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 10:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 01:25	SM	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 1

Date Collected: 09/05/23 11:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:52	CH	EET MID

Client Sample ID: SP-8 5

Date Collected: 09/05/23 11:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61967	09/08/23 11:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61960	09/08/23 02:09	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 22:58	CH	EET MID

Client Sample ID: SP-8 10

Date Collected: 09/05/23 12:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61967	09/08/23 11:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	61960	09/08/23 02:31	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 23:05	CH	EET MID

Client Sample ID: SP-8 15

Date Collected: 09/05/23 12:05
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62005	09/07/23 16:03	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61967	09/08/23 11:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	61960	09/08/23 02:53	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 23:12	CH	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 20

Date Collected: 09/05/23 12:10
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	61960	09/08/23 03:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 23:32	CH	EET MID

Client Sample ID: SP-8 25

Date Collected: 09/05/23 12:15
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 19:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/08/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	61988	09/07/23 11:04	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	61960	09/08/23 03:37	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 23:38	CH	EET MID

Client Sample ID: SP-8 30

Date Collected: 09/05/23 12:20
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 19:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62060	09/08/23 10:09	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62028	09/08/23 16:34	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/12/23 23:58	CH	EET MID

Client Sample ID: SP-8 35

Date Collected: 09/05/23 12:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-8 35

Date Collected: 09/05/23 12:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 03:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:05	CH	EET MID

Client Sample ID: SP-7 1

Date Collected: 09/05/23 13:25
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 20:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 04:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:12	CH	EET MID

Client Sample ID: SP-7 5

Date Collected: 09/05/23 13:30
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	62007	09/07/23 16:17	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	62038	09/08/23 20:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/11/23 11:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 05:50	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:18	CH	EET MID

Client Sample ID: SP-7 10

Date Collected: 09/05/23 13:35
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-27

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	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61968	09/08/23 00:14	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/08/23 21:43	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 10

Date Collected: 09/05/23 13:35
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:25	CH	EET MID

Client Sample ID: SP-7 15

Date Collected: 09/05/23 13:40
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-28

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	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61968	09/08/23 01:16	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 05:08	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:32	CH	EET MID

Client Sample ID: SP-7 20

Date Collected: 09/05/23 13:45
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61968	09/08/23 01:37	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	62025	09/09/23 04:04	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	61996	09/07/23 11:22	CH	EET MID
Soluble	Analysis	300.0		1			62332	09/13/23 00:38	CH	EET MID

Client Sample ID: SP-7 25

Date Collected: 09/05/23 13:50
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-30

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	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61968	09/08/23 01:58	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	62025	09/09/23 04:25	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62032	09/08/23 08:04	CH	EET MID
Soluble	Analysis	300.0		1			62331	09/12/23 17:45	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Client Sample ID: SP-7 30'

Date Collected: 09/05/23 13:55
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-31

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	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61968	09/08/23 02:18	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 03:21	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62032	09/08/23 08:04	CH	EET MID
Soluble	Analysis	300.0		1			62331	09/12/23 18:05	CH	EET MID

Client Sample ID: SP-7 35'

Date Collected: 09/05/23 14:00
Date Received: 09/07/23 09:56

Lab Sample ID: 880-32940-32

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	62002	09/07/23 15:49	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	61968	09/08/23 02:39	SM	EET MID
Total/NA	Analysis	Total BTEX		1			62045	09/08/23 08:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			62087	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 05:29	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62032	09/08/23 08:04	CH	EET MID
Soluble	Analysis	300.0		1			62331	09/12/23 18:12	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

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

Method Summary

Client: Larson & Associates, Inc. Job ID: 880-32940-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-32940-1
SDG: 21-0119-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32940-1	SP-5 1'	Solid	09/05/23 10:20	09/07/23 09:56
880-32940-2	SP-5 5'	Solid	09/05/23 10:25	09/07/23 09:56
880-32940-3	SP-5 10'	Solid	09/05/23 10:30	09/07/23 09:56
880-32940-4	SP-5 15'	Solid	09/05/23 10:35	09/07/23 09:56
880-32940-5	SP-5 20'	Solid	09/05/23 10:40	09/07/23 09:56
880-32940-6	SP-5 25'	Solid	09/05/23 10:42	09/07/23 09:56
880-32940-7	SP-5 30'	Solid	09/05/23 10:44	09/07/23 09:56
880-32940-8	SP-5 35'	Solid	09/05/23 10:50	09/07/23 09:56
880-32940-9	SP-6 1'	Solid	09/05/23 11:00	09/07/23 09:56
880-32940-10	SP-6 5'	Solid	09/05/23 11:05	09/07/23 09:56
880-32940-11	SP-6 10'	Solid	09/05/23 11:10	09/07/23 09:56
880-32940-12	SP-6 15'	Solid	09/05/23 11:15	09/07/23 09:56
880-32940-13	SP-6 20'	Solid	09/05/23 11:20	09/07/23 09:56
880-32940-14	SP-6 25'	Solid	09/05/23 11:25	09/07/23 09:56
880-32940-15	SP-6 30'	Solid	09/05/23 11:30	09/07/23 09:56
880-32940-16	SP-6 35'	Solid	09/05/23 11:35	09/07/23 09:56
880-32940-17	SP-8 1	Solid	09/05/23 11:50	09/07/23 09:56
880-32940-18	SP-8 5	Solid	09/05/23 11:55	09/07/23 09:56
880-32940-19	SP-8 10	Solid	09/05/23 12:00	09/07/23 09:56
880-32940-20	SP-8 15	Solid	09/05/23 12:05	09/07/23 09:56
880-32940-21	SP-8 20	Solid	09/05/23 12:10	09/07/23 09:56
880-32940-22	SP-8 25	Solid	09/05/23 12:15	09/07/23 09:56
880-32940-23	SP-8 30	Solid	09/05/23 12:20	09/07/23 09:56
880-32940-24	SP-8 35	Solid	09/05/23 12:25	09/07/23 09:56
880-32940-25	SP-7 1	Solid	09/05/23 13:25	09/07/23 09:56
880-32940-26	SP-7 5	Solid	09/05/23 13:30	09/07/23 09:56
880-32940-27	SP-7 10	Solid	09/05/23 13:35	09/07/23 09:56
880-32940-28	SP-7 15	Solid	09/05/23 13:40	09/07/23 09:56
880-32940-29	SP-7 20	Solid	09/05/23 13:45	09/07/23 09:56
880-32940-30	SP-7 25	Solid	09/05/23 13:50	09/07/23 09:56
880-32940-31	SP-7 30'	Solid	09/05/23 13:55	09/07/23 09:56
880-32940-32	SP-7 35'	Solid	09/05/23 14:00	09/07/23 09:56

Page 296 of 510

32940 No. 3034

CHAIN-OF-CUSTODY

9/13/2023

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

Data Reported to Mark Larson

DATE 9/5/2023 PAGE 1 OF 3

PO# _____ LAB WORK ORDER# _____

PROJECT LOCATION OR NAME. NMGSAU 14/6

LAI PROJECT # 11-0119-01 COLLECTOR DSG

TRRP report? ☐ Yes ☒ No

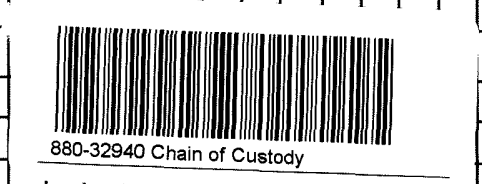
S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

TIME ZONE
Time zone/State
MNT/NM

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TCLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ DW 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	BTEX	TRPH	GASOLINE MOD	DIESEL - MOD	OIL - MOD	VOC 8260	SVOC 8270	8081 PESTICIDES	8082 PCBS	TCLP - METALS (RCRA)	TCLP - PEST	TOTAL METALS (RCRA)	LEAD - TOTAL	RCI	TDS	pH	EXPLOSIVES	CHLORIDES	FIELD NOTES
SP-5 1'		9/5/23	1026	S	1				X		X		X	X	X													X	Direct Bill
SP-5 5'			1025																										To Apache
SP-5 10'			1030																										
SP-5 15'			1035																										
SP-5 20'			1040																										
SP-5 25'			1042																										
SP-5 30'			1044																										
SP-5 35'			1050																										
SP-6 1			1100																										
SP-6 5			1105																										
SP-6 10			1110																										
SP-6 15			1115																										
SP-6 20			1120																										
SP-6 25			1125																										
SP-6 30			1130																										
TOTAL 15																													



RELINQUISHED BY (Signature) Daniel Battelino DATE/TIME 9/7 9:56 RECEIVED BY (Signature)

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

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

LABORATORY Xteo

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.3/3.0 THERM# CRB-38
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☒ HAND DELIVERED

Page 66 of 69

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 297 of 510

32940

No. 3035

CHAIN-OF-CUSTODY

9/13/2023

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

DATE: 9/5/23 PAGE 2 OF 3

PO# _____ LAB WORK ORDER# _____

PROJECT LOCATION OR NAME NMGSAU 1H/1G

LAI PROJECT # 21-0119-01 COLLECTOR: DSG

Data Reported to Mark Larson

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MNT/NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D W 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
SP-6 35'		9/05/23	1135	S	1				X		X		X	X	X														X	Direct B. II
SP-8 1			1150																											to Apache
SP-8 5			1155																											
SP-8 10			1200																											
SP-8 15			1205																											
SP-8 20			1210																											
SP-8 25			1215																											
SP-8 30			1220																											
SP-8 35			1225																											
SP-7 1			1325																											
SP-7 5			1330																											
SP-7 10			1335																											
SP-7 15			1340																											
SP-7 20			1345																											
SP-7 25			1350																											
TOTAL 15																														

RELINQUISHED BY (Signature) Tenoch Billino DATE/TIME 9/7 RECEIVED BY (Signature)

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

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

LABORATORY Xenco

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

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

Page 67 of 69

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 298 of 510

32940 No. 3036

CHAIN-OF-CUSTODY

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

DATE 9/5/23 PAGE 3 OF 3

PO# _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME. NM 4 SAN 14 16

LAI PROJECT #. 21-0119-01 COLLECTOR. ASG

Data Reported to Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE Time zone/State: MNT/NM

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

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐	PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐	8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐	TCLP VOC ☐	TCLP - PEST ☐ HERB ☐	Semi-VOC ☐	TOTAL METALS (RCRA) ☐	OTHER LIST ☐	LEAD - TOTAL ☐ D W 200.8 ☐	TCLP ☐	RCI ☐ TOX ☐	FLASHPOINT ☐	TDS ☐ TSS ☐	% MOISTURE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	CYANIDE ☐	EXPLOSIVES ☐	PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐	ALKALINITY ☐	FIELD NOTES
SP-7 30'		9/5/23	1355	S	1				X		X			X	X	X																		X				Direct Bill
SP-7 35'		9/5/23	1400	S	1				X		X			X	X	X																		X				to Apache

Loc: 880
32940

TOTAL 2

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Brenda Cottine	9/7	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

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

9/13/2023

Page 68 of 69
Received by OCD: 3/14/2024 1:16:20 PM
Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-32940-1
SDG Number: 21-0119-01

Login Number: 32940
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Mark J Larson
Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Generated 9/14/2023 3:34:07 PM

JOB DESCRIPTION

Lea Co, NM/NMGASU 1614
SDG NUMBER 21-0119-01

JOB NUMBER

880-33016-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 4/16/2024 1:38:58 PM

my EOL

Detailed Hydrocarbon Analysis Summary Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1).D Acquired: 7/21/2023 12:01:40 PM
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Location: DEFAULT

Yield: 13.0297
Int Std: MEK
Int Std Amt: 0.1164
Sample Wt: 10.0030 Sample Den: 0.8778

SUMMARY REPORT

Group Type	Total(Mass%)	Total(Vol%)	Total(Mol%)
Paraffins:	0.6326	0.8593	0.7664
I-Paraffins:	6.2172	7.9836	6.0537
Olefins:	0.6031	0.7291	0.5065
Naphthenes:	4.7112	5.3979	4.5681
Aromatics:	0.3036	0.3083	0.2700
Total C15+:	0.0000	0.0000	0.0000
Total Unknowns:	0.5619	0.7047	0.4502

Oxygenates:

Total:	0.0000(Mass%)	0.0000(Vol%)
Total Oxygen Content:	0.0000(Mass%)	

Multisubstituted Aromatics: 0.1593(Mass%) 0.1617(Vol%)

Average Molecular Weight: 90.1515

Relative Density: 0.6635

Reid Vapor Pressure @ 100F: 0.6948psi - 4.7908kPa

Calculated Octane Number: 68.5

Motor Octane Number (Jenkins Calculation): 65.0

	IBP	T10	T50	T90	FBP
BP by Mass (Deg F)	82.11	269.22	T50	T90	FBP
BP by Vol (Deg F)	82.11	269.22	T50	T90	FBP

Percent Carbon: 84.8801 Percent Hydrogen: 15.1199
Bromine Number (Calc): 3.8576

Detailed Hydrocarbon Analysis Detail Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1) 2023-ELDF-000223-001 (MW-1).CDF
Sample: ELDF-000223-001 (MW-1) Acquired: 7/21/2023 3:38:26 PM
Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments:

Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Sample Wt: 10.0030 Sample Den: 0.8778

Totals by Group Type & Carbon Number (in Mass Percent)

	Paraffins	I-Paraffins	Olefins	Naphthenes	Aromatics	Unknowns	Total
C1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C3	0.0029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0029
C4	0.0731	0.0137	0.0000	0.0000	0.0000	0.0000	0.0868
C5	0.2559	0.5778	0.0000	0.0745	0.0000	0.0000	0.9082
C6	0.1000	1.4260	0.0000	0.9147	0.0000	0.0000	2.4407
C7	0.0858	1.4126	0.0048	1.5694	0.0052	0.0000	3.0778
C8	0.0299	1.3509	0.3786	1.6118	0.1931	0.1295	3.6939
C9	0.0850	1.1651	0.2070	0.5407	0.1054	0.1796	2.2827
C10	0.0000	0.2711	0.0127	0.0000	0.0000	0.2529	0.5367
C11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total:	0.6326	6.2172	0.6031	4.7112	0.3036	0.5619	12.4677

Oxygenates 0.0000 Total C15+: 0.0000
Total Unknowns: 0.5619 Grand Total: 13.0297

Totals by Group Type & Carbon Number (in Volume Percent)

	Paraffins	I-Paraffins	Olefins	Naphthenes	Aromatics	Unknowns	Total
C1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C3	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0051
C4	0.1108	0.0216	0.0000	0.0000	0.0000	0.0000	0.1324
C5	0.3587	0.8188	0.0000	0.0878	0.0000	0.0000	1.2653
C6	0.1332	1.8994	0.0000	1.0547	0.0000	0.0000	3.0873
C7	0.1101	1.8070	0.0060	1.8221	0.0053	0.0000	3.7505
C8	0.0374	1.6871	0.4458	1.8274	0.1957	0.1624	4.3558
C9	0.1040	1.4222	0.2615	0.6059	0.1073	0.2252	2.7261
C10	0.0000	0.3275	0.0159	0.0000	0.0000	0.3171	0.6605
C11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total:	0.8593	7.9836	0.7291	5.3979	0.3083	0.7047	15.2783

Oxygenates 0.0000 Total C15+: 0.0000
Total Unknowns: 0.7047 Grand Total: 15.9830

Detailed Hydrocarbon Analysis Detail Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1).D Acquired: 7/21/2023 3:38:26 PM (MW-1)
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments:

Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Sample Wt: 10.0030 Sample Den: 0.8778

Totals by Group Type & Carbon Number (in Mol Percent)

	Paraffins	I-Paraffins	Olefins	Naphthenes	Aromatics	Unknowns	Total
C1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C3	0.0065	0.0000	0.0000	0.0000	0.0000	0.0000	0.0065
C4	0.1233	0.0231	0.0000	0.0000	0.0000	0.0000	0.1465
C5	0.3480	0.7857	0.0000	0.1043	0.0000	0.0000	1.2379
C6	0.1139	1.6234	0.0000	1.0663	0.0000	0.0000	2.8036
C7	0.0840	1.3831	0.0058	1.5682	0.0055	0.0000	3.0465
C8	0.0257	1.1602	0.3310	1.4092	0.1784	0.1124	3.2170
C9	0.0650	0.8912	0.1609	0.4202	0.0860	0.1403	1.7636
C10	0.0000	0.1869	0.0089	0.0000	0.0000	0.1975	0.3933
C11	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C13	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C14	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total:	0.7664	6.0537	0.5065	4.5681	0.2700	0.4502	12.1647

Oxygenates 0.0000 Total C15+: 0.0000
Total Unknowns: 0.4502 Grand Total: 12.6149

Detailed Hydrocarbon Analysis Detail Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1) 2023-ELDF-000223-001 (MW-1).CDF
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments: Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Hold Sample Wt: 10.0030 Sample Den: 0.8778

Components Listed in Chromatographic Order

Minutes	Index	Group	Component	Mass %	Volume %	Mol %	BP(F)	BP(C)
3.888	300.000	P3	propane	0.0029	0.0051	0.0065	-43.672	-42.040
4.118	361.640	I4	i-butane	0.0137	0.0216	0.0231	10.904	-11.720
4.316	400.000	P4	n-butane	0.0731	0.1108	0.1233	31.100	-0.500
4.414	413.070	I5	2,2-dimethylpropane	0.0037	0.0054	0.0050	49.100	9.500
5.041	474.900	I5	i-pentane	0.5741	0.8134	0.7807	82.112	27.840
5.433	501.950	P5	n-pentane	0.2559	0.3587	0.3480	96.908	36.060
6.175	536.410	I6	2,2-dimethylbutane	0.0236	0.0319	0.0268	121.514	49.730
6.990	564.890	N5	cyclopentane	0.0745	0.0878	0.1043	120.650	49.250
7.005	565.340	I6	2,3-dimethylbutane	0.1266	0.1680	0.1442	136.364	57.980
7.130	569.120	I6	2-methylpentane	0.6063	0.8149	0.6903	140.468	60.260
7.130	569.120	I6	2-methylpentane	0.6063	0.8149	0.6903	140.468	60.260
7.639	583.230	I6	3-methylpentane	0.6695	0.8846	0.7622	145.886	63.270
8.335	600.000	P6	n-hexane	0.1000	0.1332	0.1139	155.714	68.730
9.544	623.840	I7	2,2-dimethylpentane	0.0239	0.0311	0.0234	174.542	79.190
9.704	626.630	N6	methylcyclopentane	0.5186	0.6081	0.6045	161.240	71.800
9.894	629.860	I7	2,4-dimethylpentane	0.0584	0.0762	0.0571	176.882	80.490
10.223	635.240	O7	cyclic diolefin or triolefin-[1]	0.0048	0.0060	0.0058	32.000	0.000
11.554	654.600	I7	3,3-dimethylpentane	0.0197	0.0249	0.0193	186.908	86.060
11.850	658.480	N6	cyclohexane	0.3961	0.4466	0.4617	177.296	80.720
12.553	667.160	I7	2-methylhexane	0.3544	0.4585	0.3470	194.090	90.050
12.689	668.760	I7	2,3-dimethylpentane	0.2599	0.3282	0.2545	193.604	89.780
12.925	671.480	N7	1,1-dimethylcyclopentane	0.1112	0.1294	0.1111	189.464	87.480
13.306	675.740	I7	3-methylhexane	0.6195	0.7914	0.6065	197.330	91.850
13.877	681.830	N7	1c,3-dimethylcyclopentane	0.2650	0.3123	0.2647	195.386	90.770
14.142	684.540	N7	1t,3-dimethylcyclopentane	0.2408	0.2823	0.2406	197.096	91.720
14.268	685.810	I7	3-ethylpentane	0.0770	0.0968	0.0754	200.246	93.470
14.408	687.200	N7	1t,2-dimethylcyclopentane	0.3027	0.3536	0.3024	197.366	91.870
15.785	700.000	P7	n-heptane	0.0858	0.1101	0.0840	209.156	98.420
18.020	718.440	N7	1c,2-dimethylcyclopentane	0.0469	0.0562	0.0468	211.154	99.530
18.095	719.000	N7	methylcyclohexane	0.4776	0.5449	0.4773	213.674	100.930
18.532	722.260	I8	2,2-dimethylhexane	0.1638	0.2068	0.1407	224.312	106.840
19.747	730.850	N7	ethylcyclopentane	0.1253	0.1435	0.1252	218.246	103.470
20.035	732.780	I8	2,5-dimethylhexane	0.0803	0.1016	0.0690	228.398	109.110
20.307	734.590	I8	2,4-dimethylhexane	0.0939	0.1177	0.0806	228.974	109.430
21.092	739.630	N8	1c,2t,4-trimethylcyclopentane	0.2004	0.2305	0.1752	242.132	116.740
21.331	741.130	I8	3,3-dimethylhexane	0.0262	0.0324	0.0225	233.546	111.970
22.290	746.920	N8	1t,2c,3-trimethylcyclopentane	0.2308	0.2630	0.2018	230.738	110.410

Detailed Hydrocarbon Analysis Detail Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1).D Acquired: 7/21/2023 3:38:26 PM (MW-1)
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments: Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Hold Sample Wt: 10.0030 Sample Den: 0.8778

Components Listed in Chromatographic Order

Minutes	Index	Group	Component	Mass %	Volume %	Mol %	BP(F)	BP(C)
22.779	749.750	I8	2,3,4-trimethylpentane	0.0088	0.0107	0.0075	236.246	113.470
23.447	753.520	A7	toluene	0.0052	0.0053	0.0055	231.134	110.630
24.865	761.110	O8	O8-[1]	0.0632	0.0757	0.0552	32.000	0.000
24.909	761.340	--	unknown	0.0752	0.0943	0.0657	32.000	0.000
25.096	762.300	I8	2,3-dimethylhexane	0.0575	0.0709	0.0494	240.098	115.610
26.250	768.050	I8	2-methylheptane	0.1699	0.2137	0.1459	243.770	117.650
26.553	769.520	O8	*2-ethylhexene-1	0.1744	0.2001	0.1524	255.200	124.000
26.747	770.450	I8	4-methylheptane	0.0294	0.0367	0.0253	243.878	117.710
27.024	771.760	I8	3,4-dimethylhexane	0.0072	0.0087	0.0062	243.914	117.730
27.146	772.330	N8	1c,2c,4-trimethylcyclopentane	0.0080	0.0092	0.0070	242.168	116.760
27.778	775.250	I8	3-methylheptane	0.7139	0.8879	0.6132	246.074	118.930
27.955	776.050	--	unknown	0.0544	0.0682	0.0467	32.000	0.000
28.163	776.990	N8	1c,2t,3-trimethylcyclopentane	0.2099	0.2392	0.1836	243.500	117.500
29.289	781.930	N8	1,1-dimethylcyclohexane	0.0654	0.0735	0.0572	247.190	119.550
30.360	786.430	N8	3t-ethylmethylcyclopentane	0.0814	0.0932	0.0712	249.980	121.100
30.852	788.440	N8	1,1-methylethylcyclopentane	0.0687	0.0773	0.0601	250.754	121.530
31.138	789.590	O8	O8-[2]	0.1240	0.1491	0.1084	32.000	0.000
31.487	790.980	I9	2,2,4-trimethylhexane	0.0097	0.0115	0.0074	32.000	0.000
32.028	793.090	N8	2t-ethylmethylcyclopentane	0.2113	0.2413	0.1848	250.160	121.200
33.571	798.930	N8	1c,2c,3-trimethylcyclopentane	0.1385	0.1560	0.1211	253.400	123.000
33.863	800.000	P8	n-octane	0.0299	0.0374	0.0257	258.224	125.680
34.794	808.270	N8	i-propylcyclopentane	0.0154	0.0174	0.0134	259.574	126.430
34.907	809.260	I9	2,4,4-trimethylhexane	0.0218	0.0259	0.0167	32.000	0.000
35.909	817.860	O8	O8-[3]	0.0171	0.0209	0.0149	32.000	0.000
36.572	823.410	O9	O9-[1]	0.0296	0.0361	0.0230	32.000	0.000
37.167	828.290	O9	2,3,3-trimethylhexene-1	0.0111	0.0142	0.0086	32.000	0.000
37.413	830.280	I9	2,3,5-trimethylhexane	0.0296	0.0360	0.0226	268.430	131.350
37.693	832.540	--	unknown	0.0157	0.0197	0.0120	32.000	0.000
37.807	833.450	N8	1c,2-dimethylcyclohexane	0.0433	0.0477	0.0378	265.532	129.740
37.967	834.720	--	unknown	0.0108	0.0136	0.0095	32.000	0.000
38.266	837.090	N8	ethylcyclohexane	0.3330	0.3729	0.2912	269.222	131.790
38.604	839.740	--	unknown	0.0058	0.0073	0.0051	32.000	0.000
38.790	841.200	I9	2,2,3-trimethylhexane	0.2092	0.2568	0.1600	271.220	132.900
39.019	842.970	I9	2,4-dimethylheptane	0.2501	0.3069	0.1913	271.220	132.900
39.330	845.350	N9	*1c,3c,5-trimethylcyclohexane	0.0274	0.0312	0.0213	281.174	138.430
39.670	847.940	I9	2,5-dimethylheptane	0.0943	0.1155	0.0721	276.800	136.000
39.823	849.100	I9	3,5-dimethylheptane	0.0481	0.0584	0.0368	276.800	136.000
40.009	850.500	I9	3,3-&3,5-dimethylheptane	0.0423	0.0511	0.0323	278.636	137.020

Detailed Hydrocarbon Analysis Detail Report - Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1) 2023-ELDF-000223-001 (MW-1).CDF
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments: Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Hold Sample Wt: 10.0030 Sample Den: 0.8778

Components Listed in Chromatographic Order **Page: 6**

Minutes	Index	Group	Component	Mass %	Volume %	Mol %	BP(F)	BP(C)
40.226	852.120	I9	2,6-dimethylheptane	0.0237	0.0294	0.0182	275.396	135.220
40.730	855.850	N9	1c,2t,4t-trimethylcyclohexane	0.0275	0.0309	0.0214	32.000	0.000
40.940	857.400	A8	ethylbenzene	0.0607	0.0614	0.0561	277.160	136.200
41.078	858.410	O9	2,4-dimethylheptene-1	0.1121	0.1441	0.0871	32.000	0.000
41.278	859.860	N8	N8-[1]	0.0056	0.0063	0.0049	32.000	0.000
41.617	862.310	O9	2-methyloctene-1	0.0058	0.0074	0.0045	32.000	0.000
42.072	865.560	A8	1,3-dimethylbenzene	0.0234	0.0237	0.0216	282.416	139.120
42.284	867.060	A8	1,4-dimethylbenzene	0.0826	0.0842	0.0763	281.048	138.360
42.433	868.110	I9	3,4 -dimethylheptane	0.0382	0.0458	0.0292	285.080	140.600
42.597	869.260	I9	I9-[1]	0.0165	0.0198	0.0126	32.000	0.000
42.690	869.920	--	unknown	0.0127	0.0160	0.0097	32.000	0.000
42.890	871.310	N9	N9-[1]	0.0300	0.0338	0.0233	32.000	0.000
43.278	874.000	I9	4-methyloctane	0.1085	0.1323	0.0830	288.392	142.440
43.403	874.860	I9	2-methyloctane	0.0762	0.0937	0.0583	289.904	143.280
43.521	875.660	N9	N9-[2]	0.0179	0.0201	0.0139	32.000	0.000
43.787	877.480	I9	3-ethylheptane	0.0351	0.0424	0.0268	289.400	143.000
43.983	878.810	--	unknown	0.0340	0.0426	0.0260	32.000	0.000
44.141	879.880	I9	3-methyloctane	0.1339	0.1632	0.1024	291.614	144.230
44.463	882.040	A8	1,2-dimethylbenzene	0.0265	0.0264	0.0245	291.974	144.430
44.621	883.100	N9	1,1,2-trimethylcyclohexane	0.0070	0.0077	0.0055	293.360	145.200
44.947	885.270	--	unknown	0.0039	0.0048	0.0030	32.000	0.000
45.266	887.360	--	unknown	0.0854	0.1071	0.0664	32.000	0.000
45.297	887.570	N9	N9-[3]	0.1458	0.1641	0.1133	32.000	0.000
45.537	889.130	N9	N9-[4]	0.0678	0.0763	0.0527	32.000	0.000
45.853	891.190	N9	N9-[5]	0.0106	0.0119	0.0082	32.000	0.000
46.017	892.250	N9	i-butylcyclopentane	0.0240	0.0270	0.0186	298.346	147.970
46.477	895.200	N9	N9-[6]	0.0057	0.0064	0.0044	32.000	0.000
46.776	897.100	O9	t-nonene-2	0.0106	0.0136	0.0082	32.000	0.000
47.026	898.670	I9	I9-[2]	0.0280	0.0336	0.0214	32.000	0.000
47.115	899.240	--	unknown	0.0113	0.0141	0.0086	32.000	0.000
47.236	900.000	P9	n-nonane	0.0850	0.1040	0.0650	303.476	150.820
47.441	901.610	O10	3,7-dimethyloctene-1	0.0127	0.0159	0.0089	32.000	0.000
47.541	902.390	--	unknown	0.0078	0.0098	0.0055	32.000	0.000
48.009	906.010	O9	t-nonene-3	0.0332	0.0400	0.0258	32.000	0.000
48.233	907.730	A9	i-propylbenzene	0.0785	0.0799	0.0641	306.338	152.410
48.466	909.520	--	unknown	0.0498	0.0624	0.0406	32.000	0.000
48.552	910.170	N9	N9-[7]	0.0040	0.0044	0.0031	32.000	0.000
48.723	911.480	--	unknown	0.0284	0.0356	0.0221	32.000	0.000

Detailed Hydrocarbon Analysis Detail Report -

Report Date: 7/21/2023 3:38:26 PM

RawFile: C:\Chem32\2\DATA\2023-07-21\2023-07-21 2023-07-21 12-01-40\2023-ELDF-000223-001 (MW-1).D Acquired: 7/21/2023 3:38:26 PM Sample Type: CDF
Sample: ELDF-000223-001 (MW-1) Analyzed: 7/21/2023 3:38:26 PM
Processed 130 Peaks
Reference File: C:\Dragon Software\Dragon DHA\References\D7900_MASTER.DHA
Comments:

Yield: 13.0000%
Int Std: MEK
Int Std Amt: 0.1164
Sample Wt: 10.0030 Sample Den: 0.8778

Hold

Components Listed in Chromatographic Order

Minutes	Index	Group	Component	Mass %	Volume %	Mol %	BP(F)	BP(C)
48.862	912.530	--	unknown	0.0166	0.0209	0.0129	32.000	0.000
48.954	913.220	--	unknown	0.0298	0.0373	0.0231	32.000	0.000
49.116	914.450	O9	c-nonene-2	0.0046	0.0059	0.0036	32.000	0.000
49.289	915.750	--	unknown	0.0141	0.0177	0.0110	32.000	0.000
49.507	917.380	N9	N9-[8]	0.1214	0.1349	0.0943	32.000	0.000
49.596	918.040	--	unknown	0.0496	0.0622	0.0385	32.000	0.000
49.919	920.440	--	unknown	0.0276	0.0346	0.0214	32.000	0.000
49.961	920.750	N9	i-propylcyclohexane	0.0141	0.0154	0.0109	310.622	154.790
50.065	921.510	--	unknown	0.0250	0.0314	0.0195	32.000	0.000
50.242	922.820	I10	2,4-dimethyloctane	0.0049	0.0060	0.0034	312.620	155.900
50.393	923.930	I10	2,2-dimethyloctane	0.1585	0.1920	0.1093	314.420	156.900
50.567	925.200	--	unknown	0.0041	0.0051	0.0028	32.000	0.000
50.809	926.960	N9	N9-[9]	0.0167	0.0186	0.0130	32.000	0.000
51.155	929.460	N9	N9-[10]	0.0210	0.0233	0.0163	32.000	0.000
51.599	932.650	I10	2,6-dimethyloctane	0.0566	0.0683	0.0391	320.738	160.410
55.113	956.860	A9	1,4-methylethylbenzene	0.0269	0.0274	0.0220	323.618	162.010
56.888	968.470	I10	5-methylnonane	0.0511	0.0612	0.0352	329.180	165.100

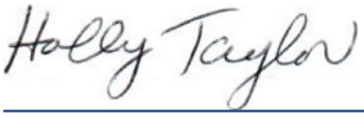
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/14/2023 3:34:07 PM

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

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Laboratory Job ID: 880-33016-1
SDG: 21-0119-01

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 18
QC Sample Results 20
QC Association Summary 26
Lab Chronicle 31
Certification Summary 36
Method Summary 37
Sample Summary 38
Chain of Custody 39
Receipt Checklists 41

Released to Imaging: 4/16/2024 1:38:58 PM

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-33016-1
Project/Site: Lea Co, NM/NMGASU 1614 SDG: 21-0119-01

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, 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: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Job ID: 880-33016-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-33016-1

Receipt
The samples were received on 9/7/2023 4:40 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 15.1°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SP-9, 0' (880-33016-1), SP-9, 5' (880-33016-2), SP-9, 10' (880-33016-3), SP-9, 15' (880-33016-4), SP-9, 20' (880-33016-5), SP-9, 25' (880-33016-6), SP-10, 0' (880-33016-7), SP-10, 5' (880-33016-8), SP-10, 10' (880-33016-9), SP-10, 15' (880-33016-10), SP-10, 20' (880-33016-11), SP-11, 0' (880-33016-12), SP-11, 5' (880-33016-13), SP-11, 10' (880-33016-14), SP-11, 15' (880-33016-15) and SP-11, 20' (880-33016-16).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SP-9, 10' (880-33016-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SP-9, 15' (880-33016-4) and SP-9, 25' (880-33016-6). Elevated reporting limits (RLs) are provided.

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) precision for preparation batch 880-62103 and analytical batch 880-62118 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SP-9, 0' (880-33016-1), SP-9, 5' (880-33016-2), SP-9, 10' (880-33016-3), SP-9, 20' (880-33016-5), SP-9, 25' (880-33016-6), SP-10, 0' (880-33016-7), SP-10, 5' (880-33016-8), SP-10, 10' (880-33016-9), SP-10, 15' (880-33016-10), SP-10, 20' (880-33016-11), SP-11, 0' (880-33016-12), SP-11, 5' (880-33016-13), SP-11, 10' (880-33016-14), SP-11, 15' (880-33016-15) and SP-11, 20' (880-33016-16). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62153 and analytical batch 880-62336 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62289 and analytical batch 880-62364 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 0'

Date Collected: 09/07/23 10:22
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:54	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/08/23 09:23	09/09/23 04:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 09:23	09/09/23 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*09/08/23 09:23*	*09/09/23 04:54*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*09/08/23 09:23*	*09/09/23 04:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	50.1		mg/Kg		09/08/23 15:14	09/11/23 11:05	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/08/23 15:14	09/11/23 11:05	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/08/23 15:14	09/11/23 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*133*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 11:05*	*1*
o-Terphenyl (Surr)	*139*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 11:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.1**	**F1**	5.00		mg/Kg			09/13/23 01:32	1

Client Sample ID: SP-9, 5'

Date Collected: 09/07/23 10:23
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:14	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 05:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:14*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:14*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 5'

Date Collected: 09/07/23 10:23
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 12:11	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*138*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 12:11*	*1*
o-Terphenyl (Surr)	*146*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 12:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**241**		4.98		mg/Kg			09/13/23 01:52	1

Client Sample ID: SP-9, 10'

Date Collected: 09/07/23 10:25
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.184**		0.0996		mg/Kg		09/08/23 09:23	09/09/23 07:17	50
Toluene	**5.88**		0.0996		mg/Kg		09/08/23 09:23	09/09/23 07:17	50
Ethylbenzene	**0.619**		0.0996		mg/Kg		09/08/23 09:23	09/09/23 07:17	50
m,p-Xylenes	**1.75**		0.199		mg/Kg		09/08/23 09:23	09/09/23 07:17	50
o-Xylene	**1.75**		0.0996		mg/Kg		09/08/23 09:23	09/09/23 07:17	50
Xylenes, Total	**3.50**		0.199		mg/Kg		09/08/23 09:23	09/09/23 07:17	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/08/23 09:23*	*09/09/23 07:17*	*50*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/08/23 09:23*	*09/09/23 07:17*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**10.2**		0.199		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**8130**		251		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1400**		251		mg/Kg		09/08/23 15:14	09/11/23 12:34	5
Diesel Range Organics (Over C10-C28)	**6290**		251		mg/Kg		09/08/23 15:14	09/11/23 12:34	5

Client Sample Results

Client: Larson & Associates, Inc. Job ID: 880-33016-1
Project/Site: Lea Co, NM/NMGASU 1614 SDG: 21-0119-01

Client Sample ID: SP-9, 10'
Lab Sample ID: 880-33016-3
Date Collected: 09/07/23 10:25 **Matrix: Solid**
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	438		251		mg/Kg		09/08/23 15:14	09/11/23 12:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*151*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 12:34*	*5*
o-Terphenyl (Surr)	*150*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 12:34*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	615		5.04		mg/Kg			09/13/23 01:58	1

Client Sample ID: SP-9, 15'
Lab Sample ID: 880-33016-4
Date Collected: 09/07/23 10:27 **Matrix: Solid**
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		09/11/23 08:29	09/11/23 14:46	10
Toluene	<0.0200	U	0.0200		mg/Kg		09/11/23 08:29	09/11/23 14:46	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		09/11/23 08:29	09/11/23 14:46	10
m,p-Xylenes	<0.0400	U	0.0400		mg/Kg		09/11/23 08:29	09/11/23 14:46	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		09/11/23 08:29	09/11/23 14:46	10
Xylenes, Total	<0.0400	U	0.0400		mg/Kg		09/11/23 08:29	09/11/23 14:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*09/11/23 08:29*	*09/11/23 14:46*	*10*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*09/11/23 08:29*	*09/11/23 14:46*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0400	U	0.0400		mg/Kg			09/11/23 16:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	107		50.5		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 12:56	1
Diesel Range Organics (Over C10-C28)	107		50.5		mg/Kg		09/08/23 15:14	09/11/23 12:56	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*119*		*70 - 130*	*09/08/23 15:14*	*09/11/23 12:56*	*1*
o-Terphenyl (Surr)	*127*		*70 - 130*	*09/08/23 15:14*	*09/11/23 12:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		4.95		mg/Kg			09/13/23 02:05	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 20'

Date Collected: 09/07/23 10:29
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 05:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 05:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 05:34	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 05:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 05:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 05:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:34*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 13:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 13:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*135*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 13:18*	*1*
o-Terphenyl (Surr)	*151*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 13:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**784**		4.99		mg/Kg			09/13/23 02:12	1

Client Sample ID: SP-9, 25'

Date Collected: 09/07/23 10:34
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0198	U	0.0198		mg/Kg		09/11/23 08:29	09/11/23 15:06	10
Toluene	<0.0198	U	0.0198		mg/Kg		09/11/23 08:29	09/11/23 15:06	10
Ethylbenzene	<0.0198	U	0.0198		mg/Kg		09/11/23 08:29	09/11/23 15:06	10
m,p-Xylenes	<0.0397	U	0.0397		mg/Kg		09/11/23 08:29	09/11/23 15:06	10
o-Xylene	<0.0198	U	0.0198		mg/Kg		09/11/23 08:29	09/11/23 15:06	10
Xylenes, Total	<0.0397	U	0.0397		mg/Kg		09/11/23 08:29	09/11/23 15:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*09/11/23 08:29*	*09/11/23 15:06*	*10*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*09/11/23 08:29*	*09/11/23 15:06*	*10*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 25'

Lab Sample ID: 880-33016-6
Matrix: Solid
Date Collected: 09/07/23 10:34
Date Received: 09/07/23 16:40

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0397	U	0.0397		mg/Kg			09/11/23 16:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**120**		50.0		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 13:40	1
Diesel Range Organics (Over C10-C28)	**120**		50.0		mg/Kg		09/08/23 15:14	09/11/23 13:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*153*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 13:40*	*1*
o-Terphenyl (Surr)	*166*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 13:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**550**		4.97		mg/Kg			09/13/23 02:32	1

Client Sample ID: SP-10, 0'

Lab Sample ID: 880-33016-7
Matrix: Solid
Date Collected: 09/07/23 09:53
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:55	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 05:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 05:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 05:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:55*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/08/23 09:23*	*09/09/23 05:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 14:02	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 14:02	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 0'

Lab Sample ID: 880-33016-7
Matrix: Solid
Date Collected: 09/07/23 09:53
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*135*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:02*	*1*
o-Terphenyl (Surr)	*146*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**245**		5.03		mg/Kg			09/13/23 02:38	1

Client Sample ID: SP-10, 5'

Lab Sample ID: 880-33016-8
Matrix: Solid
Date Collected: 09/07/23 09:58
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/08/23 09:23	09/09/23 06:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/08/23 09:23	09/09/23 06:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/08/23 09:23	09/09/23 06:15	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		09/08/23 09:23	09/09/23 06:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/08/23 09:23	09/09/23 06:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/08/23 09:23	09/09/23 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:15*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 14:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 14:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/08/23 15:14	09/11/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*156*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:24*	*1*
o-Terphenyl (Surr)	*165*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**118**		5.05		mg/Kg			09/13/23 02:45	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 10'

Lab Sample ID: 880-33016-9
Matrix: Solid
Date Collected: 09/07/23 10:04
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 06:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 06:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 06:36	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 06:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 06:36	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:36*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/08/23 15:14	09/11/23 14:46	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/08/23 15:14	09/11/23 14:46	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/08/23 15:14	09/11/23 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*143*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:46*	*1*
o-Terphenyl (Surr)	*153*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 14:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85.1**		5.00		mg/Kg			09/13/23 02:52	1

Client Sample ID: SP-10, 15'

Lab Sample ID: 880-33016-10
Matrix: Solid
Date Collected: 09/07/23 10:06
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 06:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 06:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 06:56	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 06:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 06:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:56*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/08/23 09:23*	*09/09/23 06:56*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 15'

Lab Sample ID: 880-33016-10
Matrix: Solid
Date Collected: 09/07/23 10:06
Date Received: 09/07/23 16:40

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/08/23 15:14	09/11/23 15:08	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/08/23 15:14	09/11/23 15:08	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/08/23 15:14	09/11/23 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*138*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 15:08*	*1*
o-Terphenyl (Surr)	*146*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 15:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**	**F1**	5.02		mg/Kg			09/14/23 14:30	1

Client Sample ID: SP-10, 20'

Lab Sample ID: 880-33016-11
Matrix: Solid
Date Collected: 09/07/23 10:09
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 09:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 09:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 09:48	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 09:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 09:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*09/08/23 09:23*	*09/09/23 09:48*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*09/08/23 09:23*	*09/09/23 09:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 15:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 15:52	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 20'

Lab Sample ID: 880-33016-11
Matrix: Solid
Date Collected: 09/07/23 10:09
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*149*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 15:52*	*1*
o-Terphenyl (Surr)	*158*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 15:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**164**		4.99		mg/Kg			09/13/23 03:05	1

Client Sample ID: SP-11, 0'

Lab Sample ID: 880-33016-12
Matrix: Solid
Date Collected: 09/07/23 10:49
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:08	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 10:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:08*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 16:14	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 16:14	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/08/23 15:14	09/11/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*145*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 16:14*	*1*
o-Terphenyl (Surr)	*154*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 16:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**136**		4.95		mg/Kg			09/13/23 02:58	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-11, 5'

Date Collected: 09/07/23 10:50
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:29	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 10:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 10:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:29*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 16:36	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 16:36	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/08/23 15:14	09/11/23 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*134*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 16:36*	*1*
o-Terphenyl (Surr)	*137*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 16:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**122**		5.05		mg/Kg			09/13/23 03:25	1

Client Sample ID: SP-11, 10'

Date Collected: 09/07/23 10:54
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-14

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 10:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 10:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 10:49	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 10:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 10:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:49*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/08/23 09:23*	*09/09/23 10:49*	*1*

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-11, 10'

Date Collected: 09/07/23 10:54
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 16:58	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 16:58	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/08/23 15:14	09/11/23 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*130*		*70 - 130*	*09/08/23 15:14*	*09/11/23 16:58*	*1*
o-Terphenyl (Surr)	*136*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 16:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**100**		4.97		mg/Kg			09/13/23 03:32	1

Client Sample ID: SP-11, 15'

Date Collected: 09/07/23 10:55
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 11:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 11:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 11:10	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 11:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 09:23	09/09/23 11:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 09:23	09/09/23 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/08/23 09:23*	*09/09/23 11:10*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*09/08/23 09:23*	*09/09/23 11:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:20	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:20	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-11, 15'

Lab Sample ID: 880-33016-15
Matrix: Solid
Date Collected: 09/07/23 10:55
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*136*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 17:20*	*1*
o-Terphenyl (Surr)	*145*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 17:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87.7**		4.98		mg/Kg			09/13/23 03:52	1

Client Sample ID: SP-11, 20'

Lab Sample ID: 880-33016-16
Matrix: Solid
Date Collected: 09/07/23 10:37
Date Received: 09/07/23 16:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 11:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 11:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 11:30	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 11:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 11:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/08/23 09:23	09/09/23 11:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/08/23 09:23*	*09/09/23 11:30*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/08/23 09:23*	*09/09/23 11:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/23 11:40	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/12/23 09:16	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:43	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:43	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/08/23 15:14	09/11/23 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*154*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 17:43*	*1*
o-Terphenyl (Surr)	*166*	*S1+*	*70 - 130*	*09/08/23 15:14*	*09/11/23 17:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.7**		4.96		mg/Kg			09/13/23 03:58	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-33016-1	SP-9, 0'	80	86										
880-33016-1 MS	SP-9, 0'	100	93										
880-33016-1 MSD	SP-9, 0'	102	96										
880-33016-2	SP-9, 5'	83	95										
880-33016-3	SP-9, 10'	96	69 S1-										
880-33016-4	SP-9, 15'	77	84										
880-33016-5	SP-9, 20'	91	91										
880-33016-6	SP-9, 25'	77	78										
880-33016-7	SP-10, 0'	97	92										
880-33016-8	SP-10, 5'	88	94										
880-33016-9	SP-10, 10'	88	95										
880-33016-10	SP-10, 15'	103	97										
880-33016-11	SP-10, 20'	86	88										
880-33016-12	SP-11, 0'	90	91										
880-33016-13	SP-11, 5'	87	96										
880-33016-14	SP-11, 10'	79	99										
880-33016-15	SP-11, 15'	101	100										
880-33016-16	SP-11, 20'	100	105										
LCS 880-62056/1-A	Lab Control Sample	89	95										
LCS 880-62128/1-A	Lab Control Sample	88	93										
LCSD 880-62056/2-A	Lab Control Sample Dup	90	97										
LCSD 880-62128/2-A	Lab Control Sample Dup	88	92										
MB 880-62055/5-A	Method Blank	99	123										
MB 880-62056/25-A	Method Blank	104	111										
MB 880-62128/5-A	Method Blank	107	110										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-33016-1	SP-9, 0'	133 S1+	139 S1+										
880-33016-1 MS	SP-9, 0'	120	116										
880-33016-1 MSD	SP-9, 0'	128	124										
880-33016-2	SP-9, 5'	138 S1+	146 S1+										
880-33016-3	SP-9, 10'	151 S1+	150 S1+										
880-33016-4	SP-9, 15'	119	127										
880-33016-5	SP-9, 20'	135 S1+	151 S1+										
880-33016-6	SP-9, 25'	153 S1+	166 S1+										
880-33016-7	SP-10, 0'	135 S1+	146 S1+										
880-33016-8	SP-10, 5'	156 S1+	165 S1+										
880-33016-9	SP-10, 10'	143 S1+	153 S1+										
880-33016-10	SP-10, 15'	138 S1+	146 S1+										
880-33016-11	SP-10, 20'	149 S1+	158 S1+										
880-33016-12	SP-11, 0'	145 S1+	154 S1+										

Surrogate Summary

Client: Larson & Associates, Inc. Job ID: 880-33016-1
Project/Site: Lea Co, NM/NMGASU 1614 SDG: 21-0119-01

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-33016-13	SP-11, 5'	134 S1+	137 S1+										
880-33016-14	SP-11, 10'	130	136 S1+										
880-33016-15	SP-11, 15'	136 S1+	145 S1+										
880-33016-16	SP-11, 20'	154 S1+	166 S1+										
LCS 880-62103/2-A	Lab Control Sample	98	109										
LCSD 880-62103/3-A	Lab Control Sample Dup	94	108										
MB 880-62103/1-A	Method Blank	110	119										

Surrogate Legend

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

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62055/5-A
Matrix: Solid
Analysis Batch: 62037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62055

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:20	09/08/23 16:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:20	09/08/23 16:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:20	09/08/23 16:45	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/08/23 09:20	09/08/23 16:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:20	09/08/23 16:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 09:20	09/08/23 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*09/08/23 09:20*	*09/08/23 16:45*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*09/08/23 09:20*	*09/08/23 16:45*	*1*

Lab Sample ID: MB 880-62056/25-A
Matrix: Solid
Analysis Batch: 62037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62056

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:25	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 04:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 09:23	09/09/23 04:25	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/08/23 09:23	09/09/23 04:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/08/23 09:23*	*09/09/23 04:25*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/08/23 09:23*	*09/09/23 04:25*	*1*

Lab Sample ID: LCS 880-62056/1-A
Matrix: Solid
Analysis Batch: 62037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62056

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1116		mg/Kg		112	70 - 130		
Toluene			0.100	0.09544		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.1002		mg/Kg		100	70 - 130		
m,p-Xylenes			0.200	0.1708		mg/Kg		85	70 - 130		
o-Xylene			0.100	0.07054		mg/Kg		71	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-62056/2-A
Matrix: Solid
Analysis Batch: 62037

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1236		mg/Kg		124	70 - 130	10	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

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

Lab Sample ID: LCSD 880-62056/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62037 — **Prep Batch: 62056**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1037		mg/Kg		104	70 - 130	8	35
Ethylbenzene			0.100	0.1087		mg/Kg		109	70 - 130	8	35
m,p-Xylenes			0.200	0.1836		mg/Kg		92	70 - 130	7	35
o-Xylene			0.100	0.07992		mg/Kg		80	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-33016-1 MS — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62037 — **Prep Batch: 62056**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.09896		mg/Kg		99	70 - 130
Toluene	<0.00200	U	0.0998	0.08089		mg/Kg		80	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08222		mg/Kg		82	70 - 130
m,p-Xylenes	<0.00400	U	0.200	0.1427		mg/Kg		72	70 - 130
o-Xylene	<0.00200	U	0.0998	0.07456		mg/Kg		75	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-33016-1 MSD — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62037 — **Prep Batch: 62056**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.1019		mg/Kg		102	70 - 130	3	35
Toluene	<0.00200	U	0.0998	0.08678		mg/Kg		86	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.0998	0.07953		mg/Kg		80	70 - 130	3	35
m,p-Xylenes	<0.00400	U	0.200	0.1491		mg/Kg		75	70 - 130	4	35
o-Xylene	<0.00200	U	0.0998	0.07201		mg/Kg		72	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-62128/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62126 — **Prep Batch: 62128**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/23 08:29	09/11/23 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/23 08:29	09/11/23 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/23 08:29	09/11/23 11:33	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		09/11/23 08:29	09/11/23 11:33	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

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

Lab Sample ID: MB 880-62128/5-A
Matrix: Solid
Analysis Batch: 62126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62128

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/23 08:29	09/11/23 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/11/23 08:29	09/11/23 11:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*09/11/23 08:29*	*09/11/23 11:33*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/11/23 08:29*	*09/11/23 11:33*	*1*

Lab Sample ID: LCS 880-62128/1-A
Matrix: Solid
Analysis Batch: 62126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62128

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09879		mg/Kg		99	70 - 130		
Toluene			0.100	0.09526		mg/Kg		95	70 - 130		
Ethylbenzene			0.100	0.08903		mg/Kg		89	70 - 130		
m,p-Xylenes			0.200	0.1700		mg/Kg		85	70 - 130		
o-Xylene			0.100	0.07593		mg/Kg		76	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 880-62128/2-A
Matrix: Solid
Analysis Batch: 62126

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62128

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1039		mg/Kg		104	70 - 130	5	35
Toluene			0.100	0.09601		mg/Kg		96	70 - 130	1	35
Ethylbenzene			0.100	0.09230		mg/Kg		92	70 - 130	4	35
m,p-Xylenes			0.200	0.1839		mg/Kg		92	70 - 130	8	35
o-Xylene			0.100	0.08759		mg/Kg		88	70 - 130	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 880-62103/1-A
Matrix: Solid
Analysis Batch: 62118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62103

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		09/08/23 15:14	09/11/23 08:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 08:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:14	09/11/23 08:30	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	110		70 - 130	09/08/23 15:14	09/11/23 08:30	1
o-Terphenyl (Surr)	119		70 - 130	09/08/23 15:14	09/11/23 08:30	1

Lab Sample ID: LCS 880-62103/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62118 — **Prep Batch: 62103**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	955.3		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	964.0		mg/Kg		96	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	98		70 - 130
o-Terphenyl (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-62103/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62118 — **Prep Batch: 62103**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	925.0		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	970.3		mg/Kg		97	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	94		70 - 130
o-Terphenyl (Surr)	108		70 - 130

Lab Sample ID: 880-33016-1 MS — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62118 — **Prep Batch: 62103**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	997	955.7		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.1	U	997	1098		mg/Kg		106	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	120		70 - 130
o-Terphenyl (Surr)	116		70 - 130

Lab Sample ID: 880-33016-1 MSD — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62118 — **Prep Batch: 62103**

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	<50.1	U F2	997	1180	F2	mg/Kg		118	70 - 130	21	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

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

Lab Sample ID: 880-33016-1 MSD — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62118 — **Prep Batch: 62103**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<50.1	U	997	1185		mg/Kg		115	70 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*128*		*70 - 130*
o-Terphenyl (Surr)	*124*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62153/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/13/23 01:12	1

Lab Sample ID: LCS 880-62153/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.7		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-62153/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

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: 880-33016-1 MS — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	80.1	F1	250	369.7	F1	mg/Kg		116	90 - 110		

Lab Sample ID: 880-33016-1 MSD — **Client Sample ID: SP-9, 0'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	80.1	F1	250	370.0	F1	mg/Kg		116	90 - 110	0	20

Lab Sample ID: 880-33016-11 MS — **Client Sample ID: SP-10, 20'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	164		250	399.4		mg/Kg		94	90 - 110		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-33016-11 MSD — **Client Sample ID: SP-10, 20'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	164		250	401.3		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-62289/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62364

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/13/23 11:54	1

Lab Sample ID: LCS 880-62289/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62364

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 880-62289/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62364

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	242.4		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-33016-10 MS — **Client Sample ID: SP-10, 15'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	104	F1	251	294.6	F1	mg/Kg		76	90 - 110		

Lab Sample ID: 880-33016-10 MSD — **Client Sample ID: SP-10, 15'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62364

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104	F1	251	297.2	F1	mg/Kg		77	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

GC VOA

Analysis Batch: 62037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	8021B	62056
880-33016-2	SP-9, 5'	Total/NA	Solid	8021B	62056
880-33016-3	SP-9, 10'	Total/NA	Solid	8021B	62056
880-33016-5	SP-9, 20'	Total/NA	Solid	8021B	62056
880-33016-7	SP-10, 0'	Total/NA	Solid	8021B	62056
880-33016-8	SP-10, 5'	Total/NA	Solid	8021B	62056
880-33016-9	SP-10, 10'	Total/NA	Solid	8021B	62056
880-33016-10	SP-10, 15'	Total/NA	Solid	8021B	62056
880-33016-11	SP-10, 20'	Total/NA	Solid	8021B	62056
880-33016-12	SP-11, 0'	Total/NA	Solid	8021B	62056
880-33016-13	SP-11, 5'	Total/NA	Solid	8021B	62056
880-33016-14	SP-11, 10'	Total/NA	Solid	8021B	62056
880-33016-15	SP-11, 15'	Total/NA	Solid	8021B	62056
880-33016-16	SP-11, 20'	Total/NA	Solid	8021B	62056
MB 880-62055/5-A	Method Blank	Total/NA	Solid	8021B	62055
MB 880-62056/25-A	Method Blank	Total/NA	Solid	8021B	62056
LCS 880-62056/1-A	Lab Control Sample	Total/NA	Solid	8021B	62056
LCSD 880-62056/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62056
880-33016-1 MS	SP-9, 0'	Total/NA	Solid	8021B	62056
880-33016-1 MSD	SP-9, 0'	Total/NA	Solid	8021B	62056

Prep Batch: 62055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62055/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 62056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	5035	
880-33016-2	SP-9, 5'	Total/NA	Solid	5035	
880-33016-3	SP-9, 10'	Total/NA	Solid	5035	
880-33016-5	SP-9, 20'	Total/NA	Solid	5035	
880-33016-7	SP-10, 0'	Total/NA	Solid	5035	
880-33016-8	SP-10, 5'	Total/NA	Solid	5035	
880-33016-9	SP-10, 10'	Total/NA	Solid	5035	
880-33016-10	SP-10, 15'	Total/NA	Solid	5035	
880-33016-11	SP-10, 20'	Total/NA	Solid	5035	
880-33016-12	SP-11, 0'	Total/NA	Solid	5035	
880-33016-13	SP-11, 5'	Total/NA	Solid	5035	
880-33016-14	SP-11, 10'	Total/NA	Solid	5035	
880-33016-15	SP-11, 15'	Total/NA	Solid	5035	
880-33016-16	SP-11, 20'	Total/NA	Solid	5035	
MB 880-62056/25-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62056/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62056/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33016-1 MS	SP-9, 0'	Total/NA	Solid	5035	
880-33016-1 MSD	SP-9, 0'	Total/NA	Solid	5035	

Analysis Batch: 62126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-4	SP-9, 15'	Total/NA	Solid	8021B	62128
880-33016-6	SP-9, 25'	Total/NA	Solid	8021B	62128

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

GC VOA (Continued)

Analysis Batch: 62126 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62128/5-A	Method Blank	Total/NA	Solid	8021B	62128
LCS 880-62128/1-A	Lab Control Sample	Total/NA	Solid	8021B	62128
LCSD 880-62128/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62128

Prep Batch: 62128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-4	SP-9, 15'	Total/NA	Solid	5035	
880-33016-6	SP-9, 25'	Total/NA	Solid	5035	
MB 880-62128/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62128/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62128/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 62178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	Total BTEX	
880-33016-2	SP-9, 5'	Total/NA	Solid	Total BTEX	
880-33016-3	SP-9, 10'	Total/NA	Solid	Total BTEX	
880-33016-4	SP-9, 15'	Total/NA	Solid	Total BTEX	
880-33016-5	SP-9, 20'	Total/NA	Solid	Total BTEX	
880-33016-6	SP-9, 25'	Total/NA	Solid	Total BTEX	
880-33016-7	SP-10, 0'	Total/NA	Solid	Total BTEX	
880-33016-8	SP-10, 5'	Total/NA	Solid	Total BTEX	
880-33016-9	SP-10, 10'	Total/NA	Solid	Total BTEX	
880-33016-10	SP-10, 15'	Total/NA	Solid	Total BTEX	
880-33016-11	SP-10, 20'	Total/NA	Solid	Total BTEX	
880-33016-12	SP-11, 0'	Total/NA	Solid	Total BTEX	
880-33016-13	SP-11, 5'	Total/NA	Solid	Total BTEX	
880-33016-14	SP-11, 10'	Total/NA	Solid	Total BTEX	
880-33016-15	SP-11, 15'	Total/NA	Solid	Total BTEX	
880-33016-16	SP-11, 20'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 62103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	8015NM Prep	
880-33016-2	SP-9, 5'	Total/NA	Solid	8015NM Prep	
880-33016-3	SP-9, 10'	Total/NA	Solid	8015NM Prep	
880-33016-4	SP-9, 15'	Total/NA	Solid	8015NM Prep	
880-33016-5	SP-9, 20'	Total/NA	Solid	8015NM Prep	
880-33016-6	SP-9, 25'	Total/NA	Solid	8015NM Prep	
880-33016-7	SP-10, 0'	Total/NA	Solid	8015NM Prep	
880-33016-8	SP-10, 5'	Total/NA	Solid	8015NM Prep	
880-33016-9	SP-10, 10'	Total/NA	Solid	8015NM Prep	
880-33016-10	SP-10, 15'	Total/NA	Solid	8015NM Prep	
880-33016-11	SP-10, 20'	Total/NA	Solid	8015NM Prep	
880-33016-12	SP-11, 0'	Total/NA	Solid	8015NM Prep	
880-33016-13	SP-11, 5'	Total/NA	Solid	8015NM Prep	
880-33016-14	SP-11, 10'	Total/NA	Solid	8015NM Prep	
880-33016-15	SP-11, 15'	Total/NA	Solid	8015NM Prep	
880-33016-16	SP-11, 20'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

GC Semi VOA (Continued)

Prep Batch: 62103 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33016-1 MS	SP-9, 0'	Total/NA	Solid	8015NM Prep	
880-33016-1 MSD	SP-9, 0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	8015B NM	62103
880-33016-2	SP-9, 5'	Total/NA	Solid	8015B NM	62103
880-33016-3	SP-9, 10'	Total/NA	Solid	8015B NM	62103
880-33016-4	SP-9, 15'	Total/NA	Solid	8015B NM	62103
880-33016-5	SP-9, 20'	Total/NA	Solid	8015B NM	62103
880-33016-6	SP-9, 25'	Total/NA	Solid	8015B NM	62103
880-33016-7	SP-10, 0'	Total/NA	Solid	8015B NM	62103
880-33016-8	SP-10, 5'	Total/NA	Solid	8015B NM	62103
880-33016-9	SP-10, 10'	Total/NA	Solid	8015B NM	62103
880-33016-10	SP-10, 15'	Total/NA	Solid	8015B NM	62103
880-33016-11	SP-10, 20'	Total/NA	Solid	8015B NM	62103
880-33016-12	SP-11, 0'	Total/NA	Solid	8015B NM	62103
880-33016-13	SP-11, 5'	Total/NA	Solid	8015B NM	62103
880-33016-14	SP-11, 10'	Total/NA	Solid	8015B NM	62103
880-33016-15	SP-11, 15'	Total/NA	Solid	8015B NM	62103
880-33016-16	SP-11, 20'	Total/NA	Solid	8015B NM	62103
MB 880-62103/1-A	Method Blank	Total/NA	Solid	8015B NM	62103
LCS 880-62103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62103
LCSD 880-62103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62103
880-33016-1 MS	SP-9, 0'	Total/NA	Solid	8015B NM	62103
880-33016-1 MSD	SP-9, 0'	Total/NA	Solid	8015B NM	62103

Analysis Batch: 62243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Total/NA	Solid	8015 NM	
880-33016-2	SP-9, 5'	Total/NA	Solid	8015 NM	
880-33016-3	SP-9, 10'	Total/NA	Solid	8015 NM	
880-33016-4	SP-9, 15'	Total/NA	Solid	8015 NM	
880-33016-5	SP-9, 20'	Total/NA	Solid	8015 NM	
880-33016-6	SP-9, 25'	Total/NA	Solid	8015 NM	
880-33016-7	SP-10, 0'	Total/NA	Solid	8015 NM	
880-33016-8	SP-10, 5'	Total/NA	Solid	8015 NM	
880-33016-9	SP-10, 10'	Total/NA	Solid	8015 NM	
880-33016-10	SP-10, 15'	Total/NA	Solid	8015 NM	
880-33016-11	SP-10, 20'	Total/NA	Solid	8015 NM	
880-33016-12	SP-11, 0'	Total/NA	Solid	8015 NM	
880-33016-13	SP-11, 5'	Total/NA	Solid	8015 NM	
880-33016-14	SP-11, 10'	Total/NA	Solid	8015 NM	
880-33016-15	SP-11, 15'	Total/NA	Solid	8015 NM	
880-33016-16	SP-11, 20'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

HPLC/IC

Leach Batch: 62153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Soluble	Solid	DI Leach	
880-33016-2	SP-9, 5'	Soluble	Solid	DI Leach	
880-33016-3	SP-9, 10'	Soluble	Solid	DI Leach	
880-33016-4	SP-9, 15'	Soluble	Solid	DI Leach	
880-33016-5	SP-9, 20'	Soluble	Solid	DI Leach	
880-33016-6	SP-9, 25'	Soluble	Solid	DI Leach	
880-33016-7	SP-10, 0'	Soluble	Solid	DI Leach	
880-33016-8	SP-10, 5'	Soluble	Solid	DI Leach	
880-33016-9	SP-10, 10'	Soluble	Solid	DI Leach	
880-33016-11	SP-10, 20'	Soluble	Solid	DI Leach	
880-33016-12	SP-11, 0'	Soluble	Solid	DI Leach	
880-33016-13	SP-11, 5'	Soluble	Solid	DI Leach	
880-33016-14	SP-11, 10'	Soluble	Solid	DI Leach	
880-33016-15	SP-11, 15'	Soluble	Solid	DI Leach	
880-33016-16	SP-11, 20'	Soluble	Solid	DI Leach	
MB 880-62153/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62153/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62153/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33016-1 MS	SP-9, 0'	Soluble	Solid	DI Leach	
880-33016-1 MSD	SP-9, 0'	Soluble	Solid	DI Leach	
880-33016-11 MS	SP-10, 20'	Soluble	Solid	DI Leach	
880-33016-11 MSD	SP-10, 20'	Soluble	Solid	DI Leach	

Leach Batch: 62289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-10	SP-10, 15'	Soluble	Solid	DI Leach	
MB 880-62289/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62289/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62289/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33016-10 MS	SP-10, 15'	Soluble	Solid	DI Leach	
880-33016-10 MSD	SP-10, 15'	Soluble	Solid	DI Leach	

Analysis Batch: 62336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-1	SP-9, 0'	Soluble	Solid	300.0	62153
880-33016-2	SP-9, 5'	Soluble	Solid	300.0	62153
880-33016-3	SP-9, 10'	Soluble	Solid	300.0	62153
880-33016-4	SP-9, 15'	Soluble	Solid	300.0	62153
880-33016-5	SP-9, 20'	Soluble	Solid	300.0	62153
880-33016-6	SP-9, 25'	Soluble	Solid	300.0	62153
880-33016-7	SP-10, 0'	Soluble	Solid	300.0	62153
880-33016-8	SP-10, 5'	Soluble	Solid	300.0	62153
880-33016-9	SP-10, 10'	Soluble	Solid	300.0	62153
880-33016-11	SP-10, 20'	Soluble	Solid	300.0	62153
880-33016-12	SP-11, 0'	Soluble	Solid	300.0	62153
880-33016-13	SP-11, 5'	Soluble	Solid	300.0	62153
880-33016-14	SP-11, 10'	Soluble	Solid	300.0	62153
880-33016-15	SP-11, 15'	Soluble	Solid	300.0	62153
880-33016-16	SP-11, 20'	Soluble	Solid	300.0	62153
MB 880-62153/1-A	Method Blank	Soluble	Solid	300.0	62153
LCS 880-62153/2-A	Lab Control Sample	Soluble	Solid	300.0	62153

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

HPLC/IC (Continued)

Analysis Batch: 62336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-62153/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62153
880-33016-1 MS	SP-9, 0'	Soluble	Solid	300.0	62153
880-33016-1 MSD	SP-9, 0'	Soluble	Solid	300.0	62153
880-33016-11 MS	SP-10, 20'	Soluble	Solid	300.0	62153
880-33016-11 MSD	SP-10, 20'	Soluble	Solid	300.0	62153

Analysis Batch: 62364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33016-10	SP-10, 15'	Soluble	Solid	300.0	62289
MB 880-62289/1-A	Method Blank	Soluble	Solid	300.0	62289
LCS 880-62289/2-A	Lab Control Sample	Soluble	Solid	300.0	62289
LCSD 880-62289/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62289
880-33016-10 MS	SP-10, 15'	Soluble	Solid	300.0	62289
880-33016-10 MSD	SP-10, 15'	Soluble	Solid	300.0	62289

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 0'

Date Collected: 09/07/23 10:22
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 04:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 11:05	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 01:32	CH	EET MID

Client Sample ID: SP-9, 5'

Date Collected: 09/07/23 10:23
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-2
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			4.99 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 05:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 12:11	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 01:52	CH	EET MID

Client Sample ID: SP-9, 10'

Date Collected: 09/07/23 10:25
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	62037	09/09/23 07:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	62118	09/11/23 12:34	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 01:58	CH	EET MID

Client Sample ID: SP-9, 15'

Date Collected: 09/07/23 10:27
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	62128	09/11/23 08:29	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	62126	09/11/23 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 16:06	SM	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-9, 15'

Lab Sample ID: 880-33016-4
Matrix: Solid
Date Collected: 09/07/23 10:27
Date Received: 09/07/23 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 12:56	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:05	CH	EET MID

Client Sample ID: SP-9, 20'

Lab Sample ID: 880-33016-5
Matrix: Solid
Date Collected: 09/07/23 10:29
Date Received: 09/07/23 16:40

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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 05:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 13:18	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:12	CH	EET MID

Client Sample ID: SP-9, 25'

Lab Sample ID: 880-33016-6
Matrix: Solid
Date Collected: 09/07/23 10:34
Date Received: 09/07/23 16:40

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	62128	09/11/23 08:29	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	62126	09/11/23 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 16:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 13:40	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:32	CH	EET MID

Client Sample ID: SP-10, 0'

Lab Sample ID: 880-33016-7
Matrix: Solid
Date Collected: 09/07/23 09:53
Date Received: 09/07/23 16:40

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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 05:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 14:02	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 0'

Date Collected: 09/07/23 09:53
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:38	CH	EET MID

Client Sample ID: SP-10, 5'

Date Collected: 09/07/23 09:58
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-8
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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 06:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 14:24	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:45	CH	EET MID

Client Sample ID: SP-10, 10'

Date Collected: 09/07/23 10:04
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-9
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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 06:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 14:46	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:52	CH	EET MID

Client Sample ID: SP-10, 15'

Date Collected: 09/07/23 10:06
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-10
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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 06:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 15:08	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62289	09/14/23 12:00	AG	EET MID
Soluble	Analysis	300.0		1			62364	09/14/23 14:30	CH	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-10, 20'

Date Collected: 09/07/23 10:09
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-11
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			5.03 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 09:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 15:52	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 03:05	CH	EET MID

Client Sample ID: SP-11, 0'

Date Collected: 09/07/23 10:49
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-12
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	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 10:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 16:14	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 02:58	CH	EET MID

Client Sample ID: SP-11, 5'

Date Collected: 09/07/23 10:50
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 10:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 16:36	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 03:25	CH	EET MID

Client Sample ID: SP-11, 10'

Date Collected: 09/07/23 10:54
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 10:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Client Sample ID: SP-11, 10'

Date Collected: 09/07/23 10:54
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 16:58	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 03:32	CH	EET MID

Client Sample ID: SP-11, 15'

Date Collected: 09/07/23 10:55
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 11:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 17:20	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 03:52	CH	EET MID

Client Sample ID: SP-11, 20'

Date Collected: 09/07/23 10:37
Date Received: 09/07/23 16:40

Lab Sample ID: 880-33016-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62056	09/08/23 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62037	09/09/23 11:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62178	09/11/23 11:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			62243	09/12/23 09:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	62103	09/08/23 15:14	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62118	09/11/23 17:43	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	62153	09/11/23 10:19	AG	EET MID
Soluble	Analysis	300.0		1			62336	09/13/23 03:58	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

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

Method Summary

Client: Larson & Associates, Inc. Job ID: 880-33016-1
Project/Site: Lea Co, NM/NMGASU 1614 SDG: 21-0119-01

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Lea Co, NM/NMGASU 1614

Job ID: 880-33016-1
SDG: 21-0119-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-33016-1	SP-9, 0'	Solid	09/07/23 10:22	09/07/23 16:40
880-33016-2	SP-9, 5'	Solid	09/07/23 10:23	09/07/23 16:40
880-33016-3	SP-9, 10'	Solid	09/07/23 10:25	09/07/23 16:40
880-33016-4	SP-9, 15'	Solid	09/07/23 10:27	09/07/23 16:40
880-33016-5	SP-9, 20'	Solid	09/07/23 10:29	09/07/23 16:40
880-33016-6	SP-9, 25'	Solid	09/07/23 10:34	09/07/23 16:40
880-33016-7	SP-10, 0'	Solid	09/07/23 09:53	09/07/23 16:40
880-33016-8	SP-10, 5'	Solid	09/07/23 09:58	09/07/23 16:40
880-33016-9	SP-10, 10'	Solid	09/07/23 10:04	09/07/23 16:40
880-33016-10	SP-10, 15'	Solid	09/07/23 10:06	09/07/23 16:40
880-33016-11	SP-10, 20'	Solid	09/07/23 10:09	09/07/23 16:40
880-33016-12	SP-11, 0'	Solid	09/07/23 10:49	09/07/23 16:40
880-33016-13	SP-11, 5'	Solid	09/07/23 10:50	09/07/23 16:40
880-33016-14	SP-11, 10'	Solid	09/07/23 10:54	09/07/23 16:40
880-33016-15	SP-11, 15'	Solid	09/07/23 10:55	09/07/23 16:40
880-33016-16	SP-11, 20'	Solid	09/07/23 10:37	09/07/23 16:40

Note: Bill to Apache Corp - Bruce Baker 33016

No. 2705

CHAIN-OF-CUSTODY

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

DATE 9-7-2023 PAGE 1 OF 2

PO#: _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: Lea Co, NM/NMGSSU1414

Data Reported to Robert Nelson/Manuel St. Germain LAI PROJECT #: 21-C3119-01 COLLECTOR: HL

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State: Mtn / NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
SP-9, 0'		9/7/23	1022	S	1				X		X	202
5'			1023		1							
10'			1025		1							
15'			1027		1							
20'			1029		1							
25'			1034		1							
SP-10, 0'			0953		1							
5'			0958		1							
10'			1004		1							
15'			1006		1							
20'			1009		1							
SP-11, 0'			1049		1							
5'			1050		1							
10'			1054		1							
15'			1055		1							
TOTAL					15							

880-33016 Chain of Custody

RELINQUISHED BY (Signature)	DATE/TIME 9/7/23 16:40	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Eurofins Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 15.4/15 THERM# IR8 -30
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☒ HAND DELIVERED

Page 345 of 510
Received by OCD: 3/14/2024 1:16:20 PM
Page 39 of 41
Released to Imaging: 4/16/2024 1:38:58 PM
9/14/2023

Note: Bill Apache Corp - Bruce Baker

33016

No. 2706

CHAIN-OF-CUSTODY

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

DATE 9-7-2023 PAGE 2 OF 2

PO# _____ LAB WORK ORDER#: _____

PROJECT LOCATION OR NAME: Lea Co, NM / NMFAU 1614

Data Reported to: Robert Nelson / Daniel St. Germain LAI PROJECT #: 21-C 119-01 COLLECTOR: ML

TRRP report? ☐ Yes ☒ No

TIME ZONE Time zone/State: Mtn/NM

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

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
SP-11,201		9/7/23	1037	S	1				X		X	202
TOTAL					1							

ANALYSES: BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TCLP - METALS (RCRA) ☐ TCLP - PEST ☐ HERB ☐ TCLP VOC ☐ TOTAL METALS (RCRA) ☐ Semi-VOC ☐ LEAD - TOTAL ☐ D W 200.8 ☐ OTHER LIST ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TCLP TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

Loc: 880
33016

RELINQUISHED BY (Signature) _____ DATE/TIME 9/7/23 1246 RECEIVED BY (Signature) _____

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

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

LABORATORY Eurofins Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 15.4/15.1 THERM# IR8-30
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☒ HAND DELIVERED

Page 346 of 510
Received by OCD: 3/14/2024 1:16:20 PM
Page 40 of 41
Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-33016-1
SDG Number: 21-0119-01

Login Number: 33016
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-9659-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
1/5/2022 8:47:48 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-9659-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 6
QC Sample Results 7
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-9659-1
Project/Site: NMGSAU 1416

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, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Job ID: 880-9659-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-9659-1

Receipt
The sample was received on 12/22/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.7°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-15649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-1 (880-9659-1) and (880-9698-B-1). 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: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Toluene	**0.221**		0.200		mg/L			12/29/21 07:35	100
Ethylbenzene	**0.391**		0.200		mg/L			12/29/21 07:35	100
m,p-Xylenes	<0.400	U	0.400		mg/L			12/29/21 07:35	100
o-Xylene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Xylenes, Total	<0.400	U	0.400		mg/L			12/29/21 07:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*12/29/21 07:35*	*100*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*		*12/29/21 07:35*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.612**		0.400		mg/L			12/30/21 10:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3560**		459		mg/L			01/04/22 15:21	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	**1350**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Diesel Range Organics (Over C10-C28)	**2210**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Oil Range Organics (Over C28-C36)	<459	U	459		mg/L		01/03/22 14:39	01/04/22 01:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0*	*S1-*	*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*
o-Terphenyl	*123*		*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		25.0		mg/L			12/30/21 15:56	50

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	108	78
880-9698-B-1 MS	Matrix Spike	125	71
880-9698-B-1 MSD	Matrix Spike Duplicate	118	92
LCS 880-15649/34	Lab Control Sample	130	70
LCSD 880-15649/35	Lab Control Sample Dup	129	71
MB 880-15649/39	Method Blank	100	64 S1-
MB 880-15650/5-A	Method Blank	108	60 S1-

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	0 S1-	123

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-15919/2-A	Lab Control Sample	102	93
LCSD 880-15919/3-A	Lab Control Sample Dup	109	100
MB 880-15919/1-A	Method Blank	120	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15649/39
Matrix: Water
Analysis Batch: 15649

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Toluene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*12/29/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*64*	*S1-*	*70 - 130*		*12/29/21 06:40*	*1*

Lab Sample ID: LCS 880-15649/34
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07587		mg/L		76	70 - 130		
Toluene			0.100	0.08056		mg/L		81	70 - 130		
Ethylbenzene			0.100	0.07723		mg/L		77	70 - 130		
m,p-Xylenes			0.200	0.1542		mg/L		77	70 - 130		
o-Xylene			0.100	0.07294		mg/L		73	70 - 130		

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

Lab Sample ID: LCSD 880-15649/35
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07470		mg/L		75	70 - 130	2	20
Toluene			0.100	0.08077		mg/L		81	70 - 130	0	20
Ethylbenzene			0.100	0.08063		mg/L		81	70 - 130	4	20
m,p-Xylenes			0.200	0.1579		mg/L		79	70 - 130	2	20
o-Xylene			0.100	0.08143		mg/L		81	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.00223	F1 F2	0.100	0.06449	F1	mg/L		62	70 - 130		
Toluene	0.0252	F1 F2	0.100	0.08513	F1	mg/L		60	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.00902	F1 F2	0.100	0.07678	F1	mg/L		68	70 - 130
m,p-Xylenes	0.0668	F1	0.200	0.1957	F1	mg/L		64	70 - 130
o-Xylene	0.00311	F1	0.100	0.07003	F1	mg/L		67	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MSD
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00223	F1 F2	0.100	0.08628	F2	mg/L		84	70 - 130	29	25
Toluene	0.0252	F1 F2	0.100	0.1488	F2	mg/L		124	70 - 130	54	25
Ethylbenzene	0.00902	F1 F2	0.100	0.1839	F1 F2	mg/L		175	70 - 130	82	25
m,p-Xylenes	0.0668	F1	0.200	0.2512		mg/L		92	70 - 130	25	25
o-Xylene	0.00311	F1	0.100	0.08910		mg/L		86	70 - 130	24	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-15650/5-A
Matrix: Water
Analysis Batch: 15649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15650

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Toluene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
m,p-Xylenes	<0.00400	U	0.00400	mg/L		12/28/21 12:49	12/28/21 16:34	1
o-Xylene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/L		12/28/21 12:49	12/28/21 16:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*
1,4-Difluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.57	U	4.57	mg/L		01/03/22 14:39	01/03/22 23:35	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1
Oil Range Organics (Over C28-C36)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*
o-Terphenyl	*126*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*

Lab Sample ID: LCS 880-15919/2-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			91.7	87.97		mg/L		96	75 - 125		
Diesel Range Organics (Over C10-C28)			91.7	92.37		mg/L		101	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-15919/3-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			92.0	87.57		mg/L		95	75 - 125	0	20
Diesel Range Organics (Over C10-C28)			92.0	90.57		mg/L		98	75 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15806/3
Matrix: Water
Analysis Batch: 15806

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/30/21 12:24	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-15806/4
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	24.54		mg/L		98	90 - 110		

Lab Sample ID: LCSD 880-15806/5
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	24.59		mg/L		98	90 - 110	0	20

Lab Sample ID: 880-9657-B-3 MS
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	284		250	535.7		mg/L		101	90 - 110		

Lab Sample ID: 880-9657-B-3 MSD
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	284		250	532.8		mg/L		100	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

GC VOA

Analysis Batch: 15649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8021B	
MB 880-15649/39	Method Blank	Total/NA	Water	8021B	
MB 880-15650/5-A	Method Blank	Total/NA	Water	8021B	15650
LCS 880-15649/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-15649/35	Lab Control Sample Dup	Total/NA	Water	8021B	
880-9698-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-9698-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Prep Batch: 15650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15650/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 15797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 15869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015B NM	15919
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015B NM	15919
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015B NM	15919
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	15919

Analysis Batch: 15912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015 NM	

Prep Batch: 15919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015NM Aq Prep	
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 15806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	300.0	
MB 880-15806/3	Method Blank	Total/NA	Water	300.0	
LCS 880-15806/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-15806/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-9657-B-3 MS	Matrix Spike	Total/NA	Water	300.0	
880-9657-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	5 mL	5 mL	15649	12/29/21 07:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15797	12/30/21 10:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Aq Prep			32.7 mL	3 mL	15919	01/03/22 14:39	DM	XEN MID
Total/NA	Analysis	8015B NM		100			15869	01/04/22 01:17	AJ	XEN MID
Total/NA	Analysis	300.0		50			15806	12/30/21 15:56	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. Job ID: 880-9659-1
Project/Site: NMGSAU 1416

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
8015 NM		Water	Total TPH
Total BTEX		Water	Total BTEX

Method Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID
8015NM Aq Prep	Microextraction	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9659-1	MW-1	Water	12/21/21 12:33	12/22/21 15:50

Page 363 of 510

No. 2299

96059 CHAIN-OF-CUSTODY

1/5/2022

Larson & Associates, Inc.
Environmental Consultants

507 N Marienfeld Ste 202
Midland TX 79701
432-687 0901

Data Reported to

DATE 12/22/2021 PAGE 1 OF 1

PO#: LAB WORK ORDER#

PROJECT LOCATION OR NAME NMGSAU 1416

LAI PROJECT # 21-0119-01 COLLECTOR DSG & JR

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MST/MDT

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL MOD 8015 ☐	OIL MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐	PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐	8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ DW 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☐ ANIONS ☐ ALK/ALINITY ☐	FIELD NOTES
MW-1		12/21/21	1233	W	2				X		X		X	X	X												X		X			Direct Bill to Apache
TOTAL																																

880-9659 Chain of Custody

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	12/22/21 1550	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 16/17 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Page 16 of 17

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-9659-1

Login Number: 9659 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Teel, Brianna

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").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Mark J Larson
Larson & Associates, Inc.
507 N Marienfeld
Suite 202
Midland, Texas 79701

Generated 9/26/2023 11:28:40 AM

JOB DESCRIPTION

NMGSAU 1416
SDG NUMBER 21-0119-01

JOB NUMBER

880-33306-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 4/16/2024 1:38:58 PM

my EOL

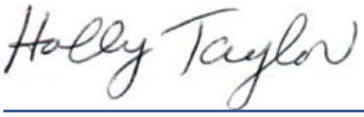
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/26/2023 11:28:40 AM

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

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Laboratory Job ID: 880-33306-1
SDG: 21-0119-01

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 13
Lab Chronicle 14
Certification Summary 15
Method Summary 16
Sample Summary 17
Chain of Custody 18
Receipt Checklists 19

Definitions/Glossary

Client: Larson & Associates, Inc. Job ID: 880-33306-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Qualifiers

GC VOA

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

HPLC/IC

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

General Chemistry

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: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Job ID: 880-33306-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-33306-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/15/2023 9:01 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 4.5°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-3 (880-33306-2) and Dup-1 (880-33306-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63183 recovered above the upper control limit for Ethylbenzene, m,p-Xylenes and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The matrix spike duplicate (MSD) recoveries for analytical batch 880-63183 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with analytical batch 880-63183 was outside the upper control 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.

General Chemistry
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: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Client Sample ID: MW-2

Lab Sample ID: 880-33306-1
Matrix: Water
Date Collected: 09/14/23 12:22
Date Received: 09/15/23 09:01

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			09/25/23 22:21	1
Toluene	<0.00200	U	0.00200		mg/L			09/25/23 22:21	1
Ethylbenzene	**0.00214**		0.00200		mg/L			09/25/23 22:21	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			09/25/23 22:21	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/25/23 22:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/25/23 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*09/25/23 22:21*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*		*09/25/23 22:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			09/25/23 22:21	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1270**		10.0		mg/L			09/20/23 05:36	20

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**3020**		200		mg/L			09/20/23 18:00	1

Client Sample ID: MW-3

Lab Sample ID: 880-33306-2
Matrix: Water
Date Collected: 09/14/23 11:50
Date Received: 09/15/23 09:01

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00330**		0.00200		mg/L			09/25/23 22:41	1
Toluene	<0.00200	U	0.00200		mg/L			09/25/23 22:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/25/23 22:41	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			09/25/23 22:41	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/25/23 22:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/25/23 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/25/23 22:41*	*1*
1,4-Difluorobenzene (Surr)	*59*	*S1-*	*70 - 130*		*09/25/23 22:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			09/25/23 22:41	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**588**		5.00		mg/L			09/20/23 05:46	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1490**		100		mg/L			09/20/23 18:00	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Client Sample ID: Dup-1

Date Collected: 09/14/23 00:00
Date Received: 09/15/23 09:01

Lab Sample ID: 880-33306-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00357**		0.00200		mg/L			09/25/23 23:01	1
Toluene	<0.00200	U	0.00200		mg/L			09/25/23 23:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/25/23 23:01	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			09/25/23 23:01	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/25/23 23:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/25/23 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/25/23 23:01*	*1*
1,4-Difluorobenzene (Surr)	*51*	*S1-*	*70 - 130*		*09/25/23 23:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			09/25/23 23:01	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**361**		5.00		mg/L			09/20/23 05:57	10

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	**1490**		100		mg/L			09/20/23 18:00	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-33306-1	MW-2	108	85										
880-33306-1 MS	MW-2	136 S1+	105										
880-33306-1 MSD	MW-2	125	114										
880-33306-2	MW-3	95	59 S1-										
880-33306-3	Dup-1	96	51 S1-										
LCS 880-63183/35	Lab Control Sample	123	105										
LCSD 880-63183/36	Lab Control Sample Dup	130	96										
MB 880-63183/40	Method Blank	77	84										
MB 880-63187/5-A	Method Blank	73	94										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63183/40
Matrix: Water
Analysis Batch: 63183

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			09/25/23 21:59	1
Toluene	<0.00200	U	0.00200		mg/L			09/25/23 21:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			09/25/23 21:59	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			09/25/23 21:59	1
o-Xylene	<0.00200	U	0.00200		mg/L			09/25/23 21:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			09/25/23 21:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*		*09/25/23 21:59*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*		*09/25/23 21:59*	*1*

Lab Sample ID: LCS 880-63183/35
Matrix: Water
Analysis Batch: 63183

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08997		mg/L		90	70 - 130		
Toluene			0.100	0.1073		mg/L		107	70 - 130		
Ethylbenzene			0.100	0.1246		mg/L		125	70 - 130		
m,p-Xylenes			0.200	0.2582		mg/L		129	70 - 130		
o-Xylene			0.100	0.1289		mg/L		129	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-63183/36
Matrix: Water
Analysis Batch: 63183

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09192		mg/L		92	70 - 130	2	20
Toluene			0.100	0.1065		mg/L		107	70 - 130	1	20
Ethylbenzene			0.100	0.1220		mg/L		122	70 - 130	2	20
m,p-Xylenes			0.200	0.2550		mg/L		127	70 - 130	1	20
o-Xylene			0.100	0.1275		mg/L		127	70 - 130	1	20

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

Lab Sample ID: 880-33306-1 MS
Matrix: Water
Analysis Batch: 63183

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.08888		mg/L		87	70 - 130		
Toluene	<0.00200	U	0.100	0.08935		mg/L		89	70 - 130		

Eurofins Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

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

Lab Sample ID: 880-33306-1 MS
Matrix: Water
Analysis Batch: 63183

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00214		0.100	0.1050		mg/L		103	70 - 130
m,p-Xylenes	<0.00400	U	0.200	0.2167		mg/L		108	70 - 130
o-Xylene	<0.00200	U	0.100	0.1120		mg/L		111	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-33306-1 MSD
Matrix: Water
Analysis Batch: 63183

Client Sample ID: MW-2
Prep Type: Total/NA

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	0.1014		mg/L		100	70 - 130	13	25
Toluene	<0.00200	U	0.100	0.09288		mg/L		93	70 - 130	4	25
Ethylbenzene	0.00214		0.100	0.1020		mg/L		100	70 - 130	3	25
m,p-Xylenes	<0.00400	U	0.200	0.2092		mg/L		104	70 - 130	4	25
o-Xylene	<0.00200	U	0.100	0.1042		mg/L		103	70 - 130	7	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: MB 880-63187/5-A
Matrix: Water
Analysis Batch: 63183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63187

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/L		09/25/23 08:39	09/25/23 11:24	1
Toluene	<0.00200	U	0.00200	mg/L		09/25/23 08:39	09/25/23 11:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/L		09/25/23 08:39	09/25/23 11:24	1
m,p-Xylenes	<0.00400	U	0.00400	mg/L		09/25/23 08:39	09/25/23 11:24	1
o-Xylene	<0.00200	U	0.00200	mg/L		09/25/23 08:39	09/25/23 11:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/L		09/25/23 08:39	09/25/23 11:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*09/25/23 08:39*	*09/25/23 11:24*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/25/23 08:39*	*09/25/23 11:24*	*1*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62849/3
Matrix: Water
Analysis Batch: 62849

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	mg/L			09/19/23 23:51	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-62849/4
Matrix: Water
Analysis Batch: 62849

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			25.0	25.12		mg/L		100	90 - 110		

Lab Sample ID: LCSD 880-62849/5
Matrix: Water
Analysis Batch: 62849

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			25.0	25.26		mg/L		101	90 - 110	1	20

Lab Sample ID: 880-33369-A-1 MS
Matrix: Water
Analysis Batch: 62849

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	64.8		25.0	87.29		mg/L		90	90 - 110		

Lab Sample ID: 880-33369-A-1 MSD
Matrix: Water
Analysis Batch: 62849

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	64.8		25.0	87.50		mg/L		91	90 - 110	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 880-62954/1
Matrix: Water
Analysis Batch: 62954

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<25.0	U	25.0		mg/L			09/20/23 18:00	1

Lab Sample ID: LCS 880-62954/2
Matrix: Water
Analysis Batch: 62954

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	953.0		mg/L		95	80 - 120		

Lab Sample ID: LCSD 880-62954/3
Matrix: Water
Analysis Batch: 62954

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids			1000	975.0		mg/L		98	80 - 120	2	10

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 880-33306-1 DU
Matrix: Water
Analysis Batch: 62954

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	3020			3084		mg/L				2	10

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

GC VOA

Analysis Batch: 63183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33306-1	MW-2	Total/NA	Water	8021B	
880-33306-2	MW-3	Total/NA	Water	8021B	
880-33306-3	Dup-1	Total/NA	Water	8021B	
MB 880-63183/40	Method Blank	Total/NA	Water	8021B	
MB 880-63187/5-A	Method Blank	Total/NA	Water	8021B	63187
LCS 880-63183/35	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-63183/36	Lab Control Sample Dup	Total/NA	Water	8021B	
880-33306-1 MS	MW-2	Total/NA	Water	8021B	
880-33306-1 MSD	MW-2	Total/NA	Water	8021B	

Prep Batch: 63187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63187/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 63324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33306-1	MW-2	Total/NA	Water	Total BTEX	
880-33306-2	MW-3	Total/NA	Water	Total BTEX	
880-33306-3	Dup-1	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 62849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33306-1	MW-2	Total/NA	Water	300.0	
880-33306-2	MW-3	Total/NA	Water	300.0	
880-33306-3	Dup-1	Total/NA	Water	300.0	
MB 880-62849/3	Method Blank	Total/NA	Water	300.0	
LCS 880-62849/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-62849/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-33369-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-33369-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 62954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33306-1	MW-2	Total/NA	Water	SM 2540C	
880-33306-2	MW-3	Total/NA	Water	SM 2540C	
880-33306-3	Dup-1	Total/NA	Water	SM 2540C	
MB 880-62954/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 880-62954/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 880-62954/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
880-33306-1 DU	MW-2	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Client Sample ID: MW-2

Date Collected: 09/14/23 12:22
Date Received: 09/15/23 09:01

Lab Sample ID: 880-33306-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	63183	09/25/23 22:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63324	09/25/23 22:21	AJ	EET MID
Total/NA	Analysis	300.0		20	50 mL	50 mL	62849	09/20/23 05:36	CH	EET MID
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	62954	09/20/23 18:00	SMC	EET MID

Client Sample ID: MW-3

Date Collected: 09/14/23 11:50
Date Received: 09/15/23 09:01

Lab Sample ID: 880-33306-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	63183	09/25/23 22:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63324	09/25/23 22:41	AJ	EET MID
Total/NA	Analysis	300.0		10	50 mL	50 mL	62849	09/20/23 05:46	CH	EET MID
Total/NA	Analysis	SM 2540C		1	50 mL	200 mL	62954	09/20/23 18:00	SMC	EET MID

Client Sample ID: Dup-1

Date Collected: 09/14/23 00:00
Date Received: 09/15/23 09:01

Lab Sample ID: 880-33306-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	63183	09/25/23 23:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63324	09/25/23 23:01	AJ	EET MID
Total/NA	Analysis	300.0		10	50 mL	50 mL	62849	09/20/23 05:57	CH	EET MID
Total/NA	Analysis	SM 2540C		1	50 mL	200 mL	62954	09/20/23 18:00	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Larson & Associates, Inc. Job ID: 880-33306-1
Project/Site: NMGSAU 1416 SDG: 21-0119-01

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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
Total BTEX		Water	Total BTEX

Method Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET MID
5030B	Purge and Trap	SW846	EET MID

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-33306-1
SDG: 21-0119-01

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-33306-1	MW-2	Water	09/14/23 12:22	09/15/23 09:01
880-33306-2	MW-3	Water	09/14/23 11:50	09/15/23 09:01
880-33306-3	Dup-1	Water	09/14/23 00:00	09/15/23 09:01

Released to Imaging: 4/16/2024 1:38:58 PM
Received by OCD: 3/14/2024 1:16:20 PM

33306 No. 3037

CHAIN-OF-CUSTODY

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

DATE 9/15/2023 PAGE 1 OF 1
PO# _____ LAB WORK ORDER# _____
PROJECT LOCATION OR NAME NMGSAU 1416
LAI PROJECT # 21-0119-01 COLLECTOR DSG/KG

Data Reported to Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE Time zone/State MNT/NM

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

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO3	H2SO4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D W 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☒ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
MW-2		9/14/23	1222	W	7	X			X		X														X		X			
MW-3		9/14/23	1150	W	7	X			X		X														X		X			Direct Bill to Apache
Dup-1		9/14/23	—	W	7	X			X		X														X		X			

880-33306 Chain of Custody

TOTAL 3

RELINQUISHED BY (Signature) David St-Germ DATE/TIME 9/15/23 901 RECEIVED BY (Signature)

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

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

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 4.8/4.5 THERM# IR2 -36
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL # _____
☐ HAND DELIVERED

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-33306-1
SDG Number: 21-0119-01

Login Number: 33306
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Appendix F

NMSLO Well Permits

Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands

310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

April 12, 2022

Apache Corporation
Attn: Larry Baker
303 Veteran Airpark Ln
Midland, TX 79705

Re: N.M. Water Easement WM-677

Dear Mr. Baker,

Enclosed please find the approved re-issue contract and bond for WM-677 Thank you for doing business with the New Mexico State Land Office.

If you require further assistance, please contact David Gallegos in the Water Bureau at (505) 476-0378 or dgallegos@slo.state.nm.us.

Sincerely,

Stephanie Garcia Richard
Commissioner of Public Lands
SGR/dg

encl.

xc: Lease File

2022 APR -1 AM 8:21

NEW MEXICO STATE LAND OFFICE

WATER MONITORING EASEMENT

NO. WM-677
New-Issue

THIS AGREEMENT, effective on September 30, 2021 and dated this 11th day of April, 2022, made and entered into between the State of New Mexico Commissioner of Public Lands, acting trustee pursuant to the Act of June 21, 1910, 36 Stat. 557, ch. 310, § 10, (Commissioner), and **Apache Corporation**, whose address is **303 Veteran Airpark Ln, Midland, TX 79705**, (Grantee). This Water Monitoring Easement ("Easement") is not effective until signed by the Commissioner.

1. **Grant of Easement**

For good and valuable consideration, including the covenants herein, the Commissioner grants to Grantee a Water Easement for **three (3)** well-sites as herein defined, to be located within the following described area in **Lea** County ("Easement Land"):

Quarter-Quarter	*Section*	*Township*	*Range*	*Number of Easement Acres*
NW4SE4	**36**	**19S**	**36E**	**10**

Well Sites & Access from West NM Highway 322

The monitoring wells permitted under this Easement are as follows:

SLO Well-Site Name	*Lat Long in decimal degrees*	*OSE Well POD Number*	*Volume of Use*
MW-1	**32.614431, -103.304356**		**<600 GPY**
MW-2	**32.614164, -103.304164**		
MW-3	**32.614492, -103.304717**		

A well-site is one half (0.5) acre with the denominated well in the center. Depending on their proximity, well-sites may overlap. The area of this granted easement is calculated based on 0.5 acres multiplied by the total number of well sites shown above.

2. **Purpose and Approved Use**

This Easement is for the purpose of allowing Grantee's placement of monitoring well(s) for the benefit of the trust and for the following specific purposes:

- **Collect depth to groundwater measurements.**

2022 APR -1 AM 8:21

- **Collect groundwater samples for laboratory analyses.**
- **Analyze for BTEX, TPH, chloride and total dissolved solids TDS.**

This grant of Easement entitles Grantee to the exclusive use of the easement for the permitted purposes, and to install such improvements as are necessary to those purposes for the term of this easement. This Easement does not entitle Grantee to divert water, or to develop or put to beneficial use any water rights. The Commissioner may permit other uses on or within this Easement to the extent that they do not impair Grantee's permitted purposes.

3. Term of Easement

A. Term

This Water Easement is for a term of five (5) years, commencing on **September 30, 2021** ("Anniversary Date"), and expiring **September 29, 2026**, unless terminated earlier as provided herein.

B. Renewal

Upon Grantee's written request submitted to the Commissioner at least sixty (60) days prior to the expiration of this Easement, the parties may renew this Easement if the Commissioner, in the Commissioner's sole discretion, determines such renewal to be in the best interests of the trust.

C. Reversion to Commissioner

At such time that this Water Easement expires, is not renewed, or is otherwise terminated, or if Grantee has failed to use the Easement Land for the permitted purposes for a period of one (1) year, the Easement Land shall *ipso facto* revert to the Commissioner who may, in the Commissioner's sole discretion, thereafter make this Water Easement, with improvements, if any, available for further use. The Commissioner shall give Grantee notice of this said non-renewal by registered mail and no further notice or action on the Commissioner's part shall be required. Any loss of any kind, arising from the non-renewal of this Easement is acknowledged and accepted by Grantee as a business risk and Grantee's acknowledgement and acceptance shall be considered an inducement by Grantee to the Commissioner to enter into this Water Easement, shall not be considered a "taking" of any rights or property of Grantee, and shall not be the basis of any action at law or in equity to recover damages of any kind.

4. Grantee Standard of Care

Grantee shall act prudently in drilling wells and performing water monitoring. "Prudent" within the context of this provision means that standard of care, operating and action of a reasonable water user acting pursuant to provisions of New Mexico water law and any other applicable laws, rules, and regulations. When Grantee has completed monitoring use of the well, Grantee will plug the well and provide Commissioner written evidence of having done so.

5. Permits and Reporting

A. Permit to Drill and Copies

Prior to drilling, Grantee shall obtain a permit to drill a well with no water right (Permit) for each well included in this Easement from the New Mexico Office of the State Engineer (OSE). The Permit application must name the Commissioner of Public Lands as co-applicant and indicate that the well is to be located on land owned by the New Mexico State Land Office. Grantee shall send the Commissioner a copy of all applications for a Permit or correspondence related to the applications contemporaneously with any OSE filing, and shall send to the Commissioner a copy of any and all OSE response(s), Permits, or other communication(s) regarding Permit within ten

2022 APR -1 AM 8:21

(10) days of receipt. Grantee shall comply with all applicable laws pertaining to, and with all rules and regulations and procedures of, any other state agency having proper jurisdiction over the water.

B. Monitoring Reports

Grantee shall provide to the Commissioner copies of all interim and final reports created using data collected from the wells permitted under this Easement.

C. Commissioner Participation in Filing

The Commissioner, in the Commissioner's discretion, may assist Grantee in any filings or proceedings before the OSE. However, the Commissioner may withhold approval of any filings with the OSE, may withdraw participation or approval of any joint filing with the OSE, and may contest or challenge any filing (even if the Commissioner was previously a joint applicant or party to the filing), if the Commissioner determines that a filing is not or is no longer in the best interest of the trust. At the written request of the Commissioner, Grantee shall withdraw any filing with the OSE.

6. Documentation

As soon as practicable, Grantee shall furnish to the Commissioner copies of records, reports and plats of its operation, produced during the term of this Easement, including but not limited to water quality tests, well logs, drill cores, meter readings, and any data relating to hydrology and geological formations.

7. Amendment

This Easement shall not be altered, changed, or amended except by a written instrument executed by both the Commissioner and Grantee. An amendment is required to add wells to or remove wells from this Easement, or to establish rights-of-way or install improvements outside of the Easement Land. Each such amendment application shall be accompanied by the filing fee set forth in the Commissioner's current schedule of fees, and an annual rental payment per well, to be calculated and due as described in Paragraph 11.

8. Rights-of-way

Grantee shall have the right, without further consideration, to establish such rights-of-way upon the Easement Land as are reasonably necessary to the Purpose and Approved Use of the Easement, to install or maintain any necessary equipment or facilities on the Easement Land. Grantee shall not establish any rights-of-way or install any improvements outside of the Easement Land without an amendment to this Easement. It is Grantee's sole responsibility to notify and obtain in advance the approval of any surface lessee for any right-of-way. The Commissioner reserves the right to require such rights-of-way to be moved when the development or other use of the surrounding trust lands require this. Rights of way outside the Easement Land will be granted by the Commissioner, in the Commissioner's discretion. No right-of-way, or other access across, or use of any lands other than those expressly granted in this Easement is implied or expressed.

9. Surveys

Grantee shall survey each well site as soon as practicable after drilling, and submit a copy of the survey plat when completed to the Commissioner.

10. Improvements

A. Authorized Improvements

Grantee may make or place such improvements and equipment upon or under the Easement Lands as are reasonably necessary to the purpose of the Easement, subject to the requirements for removal of improvements and equipment set forth in Paragraph C below. No pipelines shall be installed, and no water right shall be developed or used under this Easement. All Grantee improvements such as well housing, piping, casing, and related equipment installed

2022 APR -1 AM 8:21

or obtained by Grantee on the granted Easement shall remain Grantee's sole property and liability. All such improvements shall be subject to the lien described in NMSA 1978 § 19-7-34. Grantee shall submit a written request for approval from the Commissioner prior to making any changes or additions to Authorized Improvements on the Easement Land. At the request of the Commissioner, Grantee shall submit updated survey plats showing such changes or additions.

B. Unauthorized Improvements

In the event that improvements not authorized by the Commissioner are placed on or under the Easement Land, at the Commissioner's discretion, such improvements may thereafter be deemed forfeited to the Commissioner and for purposes of Sections 19-7-14 and 19-10-28 NMSA 1978, no payments shall be due pursuant to those sections for such remaining improvements, or the Commissioner may order the removal, at Grantee's expense, of such improvements and the restoration of the Easement Land to its condition existing prior to the placement of said improvements.

C. Removal of Improvements or Equipment

Upon the termination, expiration or assignment of Grantee's interest in this Easement, Grantee may remove all such improvements, but only to the extent that such removal will not cause material injury to the Easement Land, and provided that all sums due to the Commissioner have been paid and that such removal is accomplished within sixty (60) days of the date of termination, expiration or assignment; or, Grantee may sell its interest in such physical improvements to a subsequent grantee or assignee. Any such sale or removal shall be subject to the Commissioner's paramount statutory lien. The Commissioner may, in writing, consent to Grantee leaving designated improvements upon the Easement Land, and such improvements shall thereafter be deemed forfeited to the Commissioner, and no payments for such remaining improvements shall be due under Sections 19-7-14 and 19-10-28 NMSA 1978. Any other improvements not removed or sold by Grantee shall continue to be Grantee's sole property and liability, shall be deemed in trespass, and shall give rise to such remedies for trespass and waste as may be available to the Commissioner at law or in equity. The Commissioner may extend the 60-day period upon good cause shown.

11. Payment of Rental

A. Annual Rental

Grantee shall pay annual rental in the amount of **$1,500.00** (**$500.00** per well) to be due on or before the Anniversary Date **September 30th** of each year. If this Easement is relinquished, cancelled or otherwise terminated prior to the end of the term set forth above, the annual rental shall not be prorated, reduce or refunded for any part of any year during which the Easement is in effect.

B. Payment Submittal

Payment of all sums due hereunder shall be made payable to "Commissioner of Public Lands" and shall include the State Land Office Water Easement number **WM-677**, and shall be submitted to the Director of Oil Gas Minerals Division, New Mexico State Land Office, 310 Old Santa Fe Trail, P.O. Box 1148, Santa Fe, New Mexico 87504-1148.

12. Receipt of Monies:

A. Receipt of Monies

No receipt of monies, including rental, by the Commissioner from Grantee, or any other person acting for or on Grantee's behalf, after termination or expiration of this Easement shall reinstate, continue, or extend the Term; affect any notice previously given to Grantee; operate as a waiver of the Commissioner's right to enforce payment of any rent or other monies due or

2022 APR -1 AM 8:21

thereafter falling due; or, operate as waiver of the right of the Commissioner to recover possession of the Easement Land by legal action.

B. Acceptance of Payment

Grantee understands that the Commissioner's receipt of any monies is governed by the New Mexico State Land Office Rules. Grantee agrees that the Commissioner's negotiation of Grantee's check or other means of payment, and crediting the proceeds of such instrument to a suspense account, does not constitute acceptance of Grantee's payment.

C. Application of Payments

The Commissioner shall have the right to apply any payments made by Grantee to satisfy Grantee's obligations to the Commissioner in any order at the Commissioner's sole discretion, and without regard to Grantee's instructions as to the application of any such payment or part thereof, whether such instructions are endorsed on Grantee's check or otherwise, unless the Commissioner and Grantee otherwise agree, in writing, before the Commissioner accepts such payment. The Commissioner's acceptance of a check or payment by Grantee or others on Grantee's behalf shall not, in any way, affect Grantee's obligations hereunder nor shall it be deemed an approval of any assignment or subletting of this Water Easement.

13. Signage

Grantee shall post on each well a sign with Grantee's name, Easement number, State Land Office well number, OSE permit number and location by legal description.

14. Site Security and Fencing

Any and all site security of any kind for Grantee, Grantee's agents, employees or invitees, the Easement Land, or any personal property thereon shall be the sole responsibility and obligation of Grantee, and shall be provided by Grantee at Grantee's sole cost and expense. Grantee agrees to provide reasonable security for the Easement Land and all construction areas within the Easement Land consistent with standard industry practices and in conformity with Grantee's duty to prevent waste and trespass. If the Commissioner requires or approves in advance in writing, Grantee will furnish proof to the Commissioner that required or approved fencing is completed and in good repair.

15. Reclamation

Grantee agrees to reclaim by grading, levelling or terracing all areas disturbed by its activities on the Easement Land, and to landscape such areas at its own cost and expense. A Reclamation Plan must be submitted to and approved by Grantor prior to implementation. Grantor will not release Grantee from its responsibility for reclamation and revegetation until all work described in the Reclamation Plan has been completed and Grantor has performed an inspection on the Easement Land. The goal of the Reclamation Plan shall be to achieve native plant cover and diversity levels equal to or exceeding the natural potential levels in undisturbed soils adjacent to the project area. The Reclamation Plan shall include the following:

A. Narrative

The Reclamation Plan shall include a narrative describing all reclamation activities including removal of debris and equipment.

B. Re-Vegetation Requirements

A detailed description of the seed mix (native seed only), seeding rate/acre, method of dispersal, timing of dispersal, follow up monitoring plan, a re-seeding plan if initial efforts are unsuccessful, and a plan for addressing noxious weeds shall all be included in the Reclamation Plan. All seed mixtures submitted for approval shall specify pounds of pure live seed per acre. The seed shall contain no primary or secondary noxious weeds. Commercially sold seed shall be

2022 APR -1 AM 8:21

either certified or registered seed. The Noxious Weed component of the Reclamation Plan should include identification of the species of concern and the methods used to eradicate those species from the site. Eradication techniques may include mechanical treatment, chemical treatment, follow-up and monitoring. A Final Report is required on implementation and completion of the Reclamation that includes a brief narrative of the seeding and monitoring efforts and photos of the reclaimed area. Once Grantee has submitted the Final Report and the Grantor has approved the work, Grantor will provide acknowledgment that reclamation requirements have been met.

16. Compliance with State Land Office Rules and Other Laws

Grantee shall comply with all applicable laws pertaining to, and with all rules and regulations and procedures of, the OSE where the State Engineer has jurisdiction over the monitoring wells. Grantee shall fully comply with all federal, state and local laws, rules, regulations, ordinances and requirements applicable to the Easement Land or to Grantee's operations thereon, including but not limited to all applicable laws governing water; endangered or threatened species; hazardous materials; environmental protection; land use; health and safety; cultural, historic or archeological / paleontological properties; waste; trespass, and the New Mexico Cultural Properties Act, NMSA 1978, 18-6-1 et seq. Such agencies are not to be deemed third party beneficiaries hereunder; however, this clause is enforceable by the Commissioner as herein provided or as otherwise permitted by law. Grantee shall comply with all New Mexico State Land Office Rules and Regulations, 19.2 NMAC, including those that may be hereafter promulgated. Grantee's obligations under this paragraph include but are not limited to compliance with NMSA 1978 Section 19-6-5, requiring a lessee of State Trust Land to protect the Easement Land from waste or trespass. Grantee's compliance with all laws, regulations and policy shall be at its own expense.

17. Relinquishment

A. Relinquishment

Grantee may, with the Commissioner's approval, relinquish this Easement provided that Grantee is in compliance with all terms of this Easement, including the payment of all rentals due, and if all improvements made pursuant to the Easement on, for, or appurtenant to the Easement Land have been approved by the Commissioner and arrangements satisfactory to the Commissioner have been made for either their removal or retention. Grantee may request relinquishment of all or any part of the Easement Land by filing relinquishment forms prescribed by the Commissioner and paying the relinquishment fee in the Commissioner's schedule of fees. Granting the request is at the discretion of the Commissioner.

C. No Release of Liability or Obligations

Grantee shall not, by relinquishment, avoid or be released from any liability for known or unknown waste or damage to the Easement Land, including environmental damage arising from, or in connection with, Grantee's use or occupancy thereof. Likewise, by relinquishment Grantee shall not be relieved of or discharged of obligations accrued by Grantee as of the date of relinquishment, including the obligation to reclaim the surface, revegetate the surface, pay the rentals required under Paragraph 11 and indemnify the Commissioner in accordance with the terms of this Easement.

D. No Refunds for Relinquishment

Upon any relinquishment, Grantee shall not be entitled to the refund of any rental previously paid.

2022 APR -1 AM 8:21

18. Assignment or Sublease

Grantee shall not assign or sublease any rights granted hereunder, any part thereof, any portion of the Easement Land or any improvements located on the Easement Land without the prior amendment of this Water Easement pursuant to Paragraph 7 to permit such sublease or assignment, payment of the fee provided in the Commissioner's schedule of fees, and completion of required forms indicating the Commissioner's consent. Grantee may assign this Water Easement in whole only. The assignee shall succeed to all of the rights and privileges of Grantee hereunder and shall be held to have assumed all of the duties and obligations of Grantee to the Commissioner (including payments of rentals up to and after the date of the assignment), except that the Commissioner reserves the right to increase the annual rental and percent rental to be payable by the assigned under Paragraph 11. No such assignment or sublease shall attempt to convey any permanent interest in Water Rights. Any sublease or assignment without Water Easement amendment shall be null and void.

19. Collateral Assignment

Grantee shall obtain approval of the Commissioner before making any collateral assignment or mortgage of its interest in this Easement or its improvements, and any such collateral assignment or mortgage shall be subject to the conditions, limitations and requirements set forth in the State Land Office rules. The Commissioner's approval of a collateral assignment or mortgage shall not release Grantee from any of its obligations under this Easement, except as agreed to in writing by the Commissioner. If the Commissioner gives Grantee a notice of default, the Commissioner shall simultaneously provide a copy of the notice to an approved collateral assignee or mortgagee, which shall have the right to cure the default within the time provided, subject to the requirements of State Land Office rules. An approved collateral assignee or mortgagee may succeed to the rights and duties of Grantee, and it may assign the Water Easement in accordance with Paragraph 18, and State Land Office Rules governing assignments.

20. Grantee Breach and Cancellation

The Commissioner may terminate this Water Easement for breach of any term or covenant of this Easement. Any substantial deviation in water quantity or water quality, if reasonably attributable to Grantee, or any change in the purpose of the Easement from that stated herein, shall constitute grounds for the Commissioner, in the Commissioner's sole discretion, to terminate, amend, modify, renegotiate, cancel or otherwise change this Easement; provided, however, that the Commissioner shall mail to Grantee, by certified mail, addressed to the mailing address of Grantee shown in the Commissioner's current records, a thirty (30) day notice of intention to alter or terminate, specifying the reasons for which the notice is given. Proof of mailing, but no proof of receipt of notice, shall be necessary, and thirty (30) days after such mailing this Easement shall terminate *ipso facto* without further notice or proceeding required of the Commissioner; provided, however, there shall be no termination and reversion if Grantee has previously made arrangements satisfactory to the Commissioner to discharge or resolve the breach.

21. Holding Over

Upon termination or expiration of this Easement, any act or conduct of Grantee, including, but not limited to, the unapproved entry upon, occupancy, or use, whether continuous or not, of all or any part of the Easement Land by Grantee, Grantee's agents, or by any unauthorized improvements or other improvements required or ordered to be removed upon termination or expiration shall constitute Holding Over. At the termination or expiration of this Easement, Grantee immediately shall deliver possession to the Commissioner. In the event of Grantee's Holding Over, Grantee shall pay the Commissioner from time to time, upon demand, as rental for

2022 APR -1 AM 8:21

the period of any hold over, to be due for each month of such hold over, an amount equal to two hundred percent (200%) of the annual rent. Nothing contained herein shall be construed as a grant to Grantee of the right to hold over or otherwise enter the Easement Land for any purpose after the expiration or termination of this Easement without the prior written approval of the Commissioner. At any time that Grantee is holding over, the Commissioner shall, without requirement of further notice or grace period, have any and all rights to evict or otherwise remove Grantee by force or otherwise, with all costs and fees incurred in such action to be due and payable by Grantee. This Section shall survive the termination or expiration of this Easement.

22. Bond

Prior to commencement of operations under this Easement. Grantee shall obtain the Commissioner's approval of and file a bond with the Commissioner in the amount of **one thousand dollars ($1,000.00)** to secure payment to the Commissioner of such damage as may occur to livestock, range, water, crops or tangible improvements on the subject lands as may result from Grantee's use and occupation under this Easement. Such bond shall be payable for the term of this Easement, and may be utilized for reclamation of disturbed lands following the operations of Grantee under this Easement. Payment under this paragraph is to be made to the Commissioner and not to any other party. Grantee's bond shall not be liquidated damages, and the Commissioner reserves the right to pursue any other remedy for damages available at law or in equity.

23. Indemnification

Grantee shall hold harmless, indemnify and defend the State of New Mexico, the Commissioner and the Commissioner's employees, agents, and contractors, and beneficiaries, in both their official and individual capacities, from any and all liabilities, claims, losses, damages, or expenses, including but not limited to reasonable attorneys' fees, loss of land value, third party claims, penalties or removal, remedial or restoration costs arising out of, alleged to arise out of or indirectly connected with a) the operations hereunder of Grantee or Grantee's employees, agents, contractors, or invitees, b) any hazardous materials located in, under, or upon or otherwise affecting the Easement Land or adjacent property, or c) the activities of third parties on the Easement Land, whether with or without Grantee's knowledge or consent. In the event that any action, suit or proceeding is brought against Grantee, Grantee shall, as soon as practicable but no later than two (2) days after it receives notice thereof, notify the legal counsel of the Commissioner and the Risk Management Division of the New Mexico General Services Department by certified mail. This paragraph shall survive the termination, cancellation or relinquishment of this Water Easement, and any cause of action of the Commissioner to enforce this provision shall not be deemed to accrue until the Commissioner's actual discovery of said liability, claim, loss, damage, or expense.

24. Insurance

During the Term of this Water Easement, Grantee shall, at Grantee's cost and expense and at no cost to the Commissioner, insure all improvements against liability to third parties and for construction risks, in accordance with industry standards for the estimate probably loss. Grantee's insurance carriers shall be in good standing, adequately underwritten, and duly licensed to issue insurance policies in New Mexico. Grantee shall provide the Commissioner proof of insurance. In addition, Grantee shall obtain at its own expense, insurance coverage adequate to protect its operations, property, employees and agents in amounts Grantee finds sufficient. Grantee shall be solely responsible for obtaining insurance policies that provide coverage for losses of Grantee-owned property, including improvements. The Commissioner shall not be required to provide such insurance coverage or be responsible for payment of Grantee's costs for such insurance.

2022 APR -1 AM 8:21

25. No Waiver by Commissioner

No employee or agent of the Commissioner has the power, right, or authority to orally waive any of the conditions, covenants, or agreements of this Easement; and no waiver by the Commissioner of any of the conditions, covenants, or agreements of this Easement shall be effective unless in writing and executed by the Commissioner. The Commissioner's waiver of Grantee's breach or default of any of the conditions, covenants, or agreements hereof shall not constitute or be construed as a waiver of any other or subsequent breach or default by Grantee. The failure of the Commissioner to enforce at any time any of the conditions, covenants, or agreements of this Easement, or to exercise any option herein provided, or to require at any time performance by Grantee of any of the conditions, covenants, or agreements of this Easement shall not constitute or be construed to be a waiver of such conditions, covenants, or agreements, nor shall it affect the validity of this Easement or any part thereof, or the Commissioner's right to thereafter enforce each and every such condition, covenant, or agreement.

26. Scope of Agreement

This Easement incorporates all the agreements, covenants, and understandings between the Commissioner and Grantee concerning the subject matter hereof and all such agreements, covenants, and understandings are merged into this Easement. No prior agreement or understanding between the Commissioner and Grantee shall be valid or enforceable unless expressly embodied in this Easement.

27. Non-impairment

Nothing in this Easement is to be construed to allow the impairment of the rights of any lawful holder, present or future, of any geothermal resources, or any mineral, grazing, commercial, easement, or Water Rights on the subject or any other state trust lands.

28. Severability

In the event that any provision of this Easement is held invalid or unenforceable under applicable law, this Easement shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

29. Successors In Interest

All terms, conditions, and covenants of this Easement and all amendments thereto shall extend to and bind the permitted heirs, successors, and assigns of Grantee and the Commissioner. There are no third party beneficiaries of this Easement.

30. Dispute Resolution, Applicable Law and Venue

Any disputes arising under or in connection with this Easement shall be first resolved by mandatory contest pursuant to 19.2.15 NMAC. Subsequent appeal, if any, shall be in the First Judicial District Court of Santa Fe. In all instances, the law of New Mexico shall apply. The laws of the State of New Mexico shall govern this Easement, without giving effect to the conflict of law provisions of the State of New Mexico. Grantee consents to venue and jurisdiction in the District Court in and for the County of Santa Fe, State of New Mexico for purposes of any appeal pursuant to 19.2.15 NMAC, and to service of process under the laws of the State of New Mexico in any action relating to this Easement or its subject matter.

31. Time

Time is of the essence in the performance of each and every provision of this Easement. Grantee's failure to perform any or all of its obligations under this Easement in a timely manner shall be a breach of this Easement.

32. Singular And Plural

Whenever the singular is used herein, the same shall include the plural.

33. Headings And Titles

The use of section or paragraph headings and titles herein is for descriptive purposes only and is independent of the covenants, conditions, and agreements contained herein.

34. No Joint Venture

The Commissioner is not and will not be construed or held to be a partner, joint venturer or associate of Grantee in the conduct of the business of Grantee. The Commissioner will not be liable for any debts incurred by Grantee in the conduct of the business of Grantee. The relationship between the Commissioner and Grantee is, and will remain, solely that of the Commissioner and Grantee.

35. No Commissioner Personal Liability

In the event of a court action, Grantee shall not seek damages from the Commissioner or any employee of SLO or the State of New Mexico in their individual capacity. This Section shall survive termination of this Easement.

36. Stipulations

This easement is being issued with the expectation that all fees, bond(s) and requested data and information has been submitted or will imminently be received by the State Land Office. Should a subsequent audit of this easement reveal any of the above stated items have not been submitted, the New Mexico State Land Office will issue a letter to you requiring that you come into compliance, and the easement holder shall have 30 days to submit the missing item(s) or this easement may be terminated.

37. Notices

Written notice by registered or certified U.S. Postal Service, return receipt requested, or delivered by reputable overnight courier, return receipt of tracking system, to the addresses of the party hereunder shall constitute sufficient notice to comply with the terms of this Easement. Notice will be deemed effective upon delivery. Either the Commissioner or Grantee may change its respective address as provided in this Section effective three (3) business days after giving written notice of the change to the other. The addresses for notice are:

Notice to the Commissioner:
New Mexico Commissioner of Public Lands
Attn: Oil Gas Minerals Division
P.O. Box 1148
Santa Fe, New Mexico 87504-1148
Tel: (505) 827-5760

With copy to:
New Mexico State Land Office
General Counsel
P.O. Box 1148
Santa Fe, NM 87504-1148
Tel: (505) 827-5756

2022 APR -1 AM 8:21

Notice to Grantee:
Apache Corporation
Attn: Larry Baker
303 Veteran Airpark Ln
Midland, TX 79705
Phone: (432) 631-6982
Email: larry.baker@apachecorp.com

2022 APR -1 AM 8:21

IN WITNESS WHEREOF, the Commissioner of Public Lands and Grantee have signed this Easement to be effective on the date signed by the Commissioner.

GRANTEE:
APACHE CORPORATION

By: Larson and Associates Date: 3/22/22

Name: Tatum Peters 1st Pdt

Title: Engineering Technician

ACKNOWLEDGMENT IN A REPRESENTATIVE CAPACITY

State of Texas

County of Midland

This instrument was acknowledged before me on March 22, 2022 (date) by Tatum Peters (name) as Engineering Technician (title) of Larson and Associates (name of party on behalf of whom instrument is executed).

Lauren Burr
(Signature of notarial officer)

(seal)

LAUREN MARIE BURR
Notary Public, State of Texas
Comm. Expires 12-08-2025
Notary ID 128878482

My commission expires: 12/8/2025

2022 APR -1 AM 8:21

GRANTOR
NEW MEXICO COMMISSIONER OF PUBLIC LANDS

SEAL

S. G. Richard 4/6/83

Stephanie Garcia Richard, Commissioner of Public Lands

Dated: 4/11/22

Appendix G

RX Soil Inc. Remediation Plan

February 1, 2024

Remediation Plan

Apache Corporation
NMGSAU 1416
nAPP2112649963
Lea County, NM

February 1, 2024

RXSoil, Inc.
105 W Main St. Decatur, TX 76234

TABLE OF CONTENTS

I. Introduction 3
II. Site Assessment/Characterization 3
III. Remediation 4
IV. Restoration, Reclamation and Re-vegetation 4

Figures

1. Vicinity Map 5
2. Site Map 7
3. Hydrology Map 10

Appendix

A. Delineation Summary Table 12
B. Nearest Water Well Data 17
C. Lab Reports 19

I. Introduction

On behalf of Apache Corporation ("Apache"), RXSoil, Inc. ("RXSoil") has prepared this work plan that describes remediation of the release of produced water and crude oil at the NMGSAU 1416.

The release was discovered on 3/25/2021 in Unit Letter J, Section 36, Township 19S, Range 36E (see *Figure 1* for Vicinity Map) at approximate coordinates 32.61429, -103.30418. It was reported that an unknown amount of crude oil produced water was released. The C-141 is given as *Appendix A*.

II. Site Assessment/Characterization

1. **Site Map** – See *Figure 2*
2. **Depth to ground water** – Remediation standards for <50 feet will be used on this remediation project, based on the borings described in *Appendix B* that encountered groundwater at 35.3 feet BGS.
3. **Wellhead protection area** – There are no known wellheads in the area.
4. **Distance to nearest significant watercourse** – There are no known significant watercourses within 0.5 miles (see *Figure 3*).
5. **Soil/waste characteristics** – Soil samples were collected from Eleven (11) borehole locations. Samples from location "Source" and SP4 – SP9" tested above Table 1 thresholds at deepest depths from 5' BGS - 35' BGS, respectively. Full report of soil characteristics can be seen in *Appendix B*.

III. Remediation Plan

On behalf of Apache Corp, RXSoil is proposing a remediation treatment plan using RXBiotics, RXSoil's naturally occurring, nongenetically modified bioremediation agent to greatly reduce the hydrocarbon concentration in the expanded described affected areas.

Using the investigative report from Larson & Associates, Inc., the "source" and SP4 – SP9 locations were identified as contaminated. The "Source" had contamination to a depth of 30' BGS, SP-4 had a contamination to a depth of 5' BGS, SP5 had a contamination to a depth of 35' BGS, SP6 had a contamination to a depth of 1' BGS, SP7 had a contamination to a depth of 5' BGS and SP9 had a contamination to a depth of 25' BGS. SP-1-SP-3 and SP10-SP11 tested below threshold for all contaminants.

RXSoil is proposing a treatment plan that will inoculate all areas of contamination.

The treatment will consist of drilling (9) bore holes sixteen feet apart from each other. (BH-5 through BH-9) will be drilled to depths ranging from 5.0 ft to 35 ft BGS with an air rotary rig, with screen placement ranging from depths of 5 ft to 35 ft BGS at different depths to influence horizontal migration and contact the entire plume of contamination. Soil lithology has been studied and considered in screen sizing and placement. All bore holes will be injected by RXSoil personnel with RXBiotics. Simultaneously during treatment injection, RXSoil will install a pre-engineered delivery system to apply RXBiotics at a set delivery rate over the surface of the entire impacted area. The treatment is estimated to take approximately 90 days.

Following treatment, confirmation sampling will be collected midway between two boreholes. The proposed treatment bore hole locations are shown in Figure 2. RXSoil is proposing collecting remediation samples that would be taken in between each boring location at 1', 3', 5', 10', 20', 25', 30', 35', 40', and 45' depths for a total of 10 samples for 80 cubic yards. Following a rigorous sampling protocol combined with all sample points being lower than required thresholds, all infrastructure will be removed, and the bores will be backfilled per regulatory requirements.

All tools are to be decontaminated before each sample, as specified in Field Equipment Cleaning and Decontamination (EPA, 2015). This includes wiping the equipment clean, water-rinsing the equipment, washing the equipment in detergent and water, and rinsing the equipment in water. Samples will be transferred on ice in glass jars to a third-party laboratory to ensure tests are completed within an appropriate timeline.

Remediation efforts will commence following the approval of this remediation plan and are estimated to take approximately 90 days.

IV. Restoration, Reclamation and Re-Vegetation

Following remediation, in addition to actions described and performed by Larson & Associates, RXSoil will drill in seed to match native vegetation in any affected areas. A closure report will be submitted upon completion of this project.

FIGURE 1

VICINITY MAP

Received by OCD: 3/14/2024 1:16:20 PM

Vicinity Map

Figure 1

Legend

NMGSAU 1416

Hobbs

Monument

SP-9

NMGSAU 1416

SP-7

Nadine

NEW MEXICO

Google Earth

6 mi

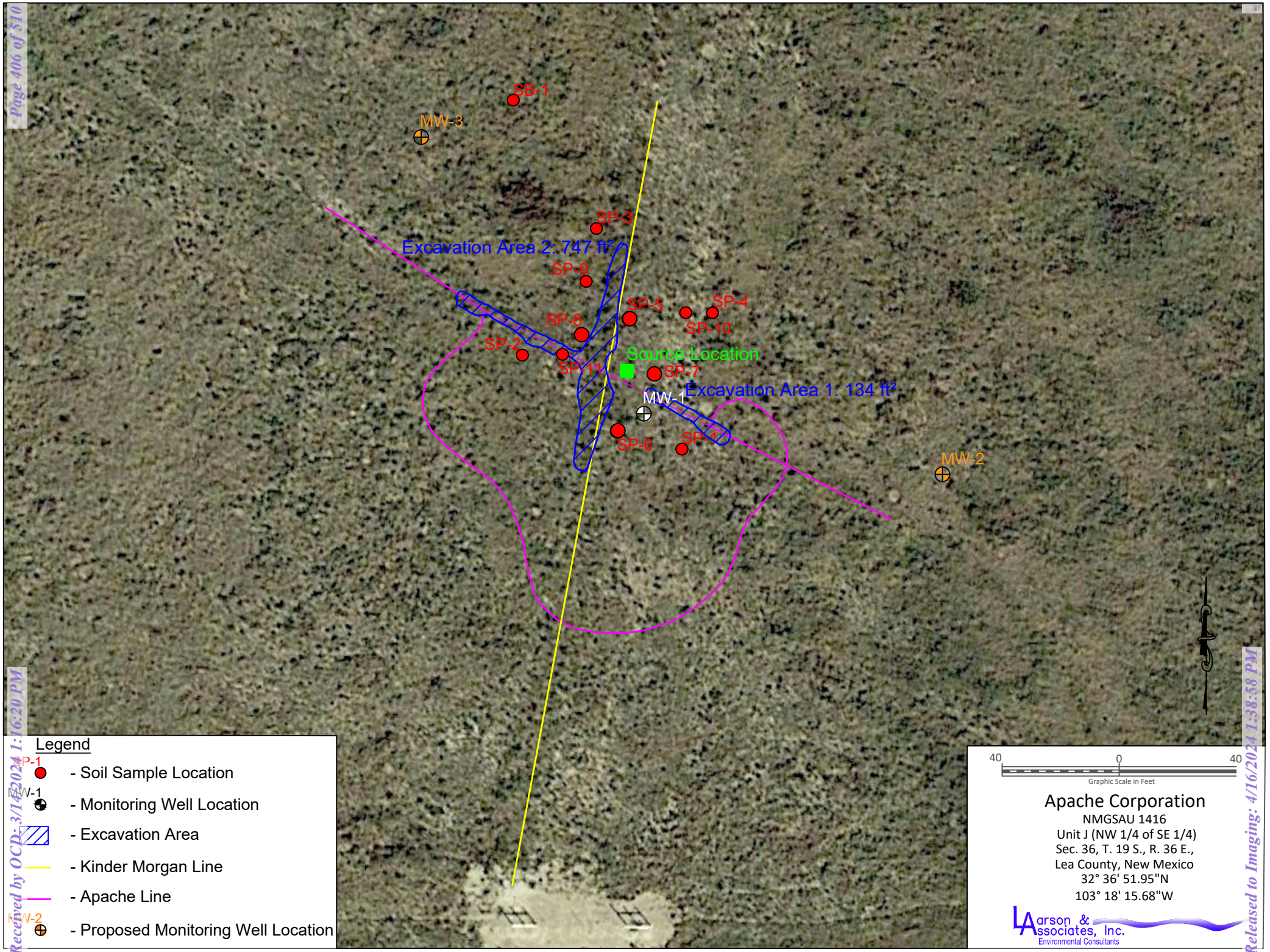
N

Released to Imaging: 4/16/2024 1:38:58 PM

FIGURE 2

SITE MAP

Page 406 of 510



Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Figure 3 - Aerial Map Showing Excavation Areas

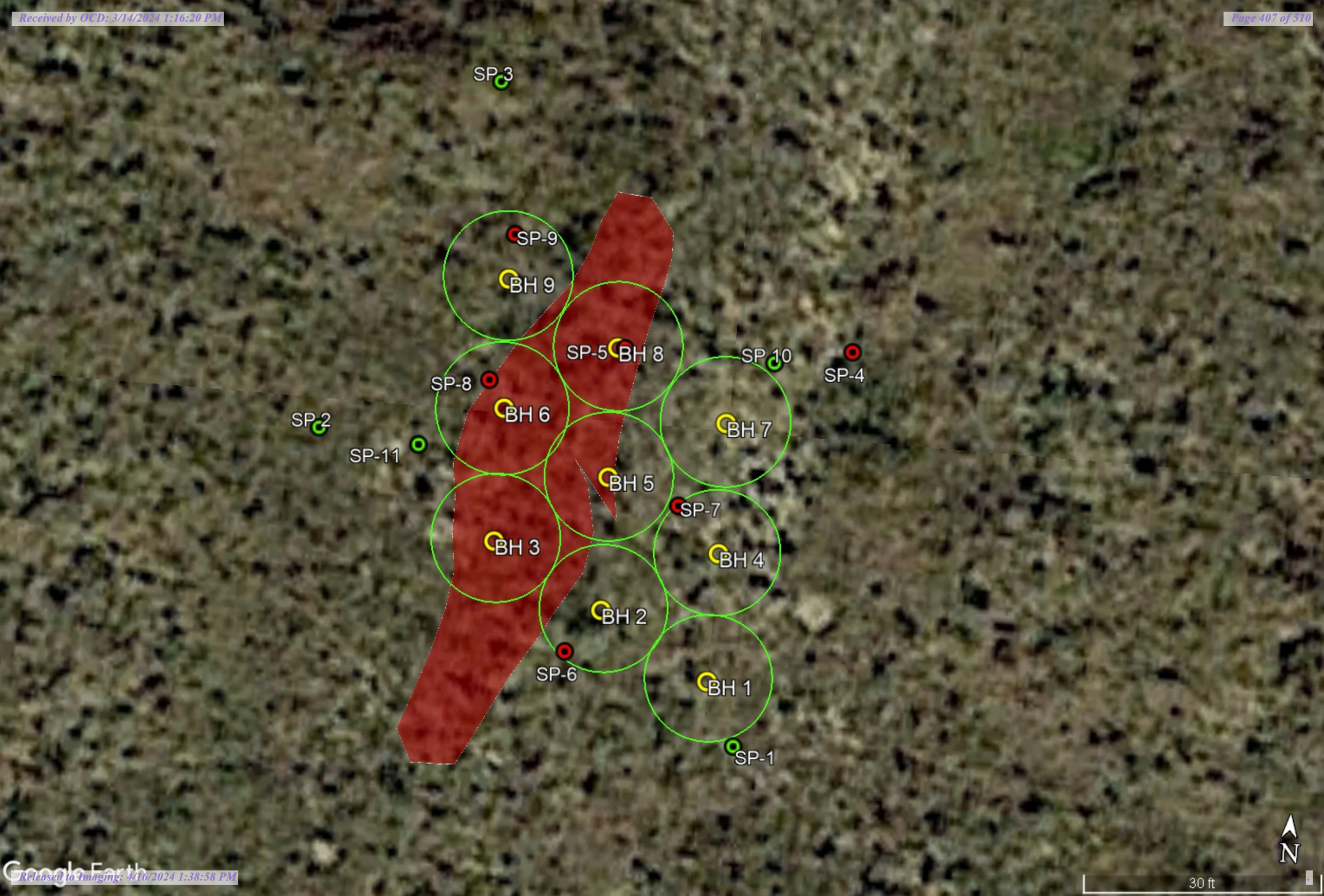
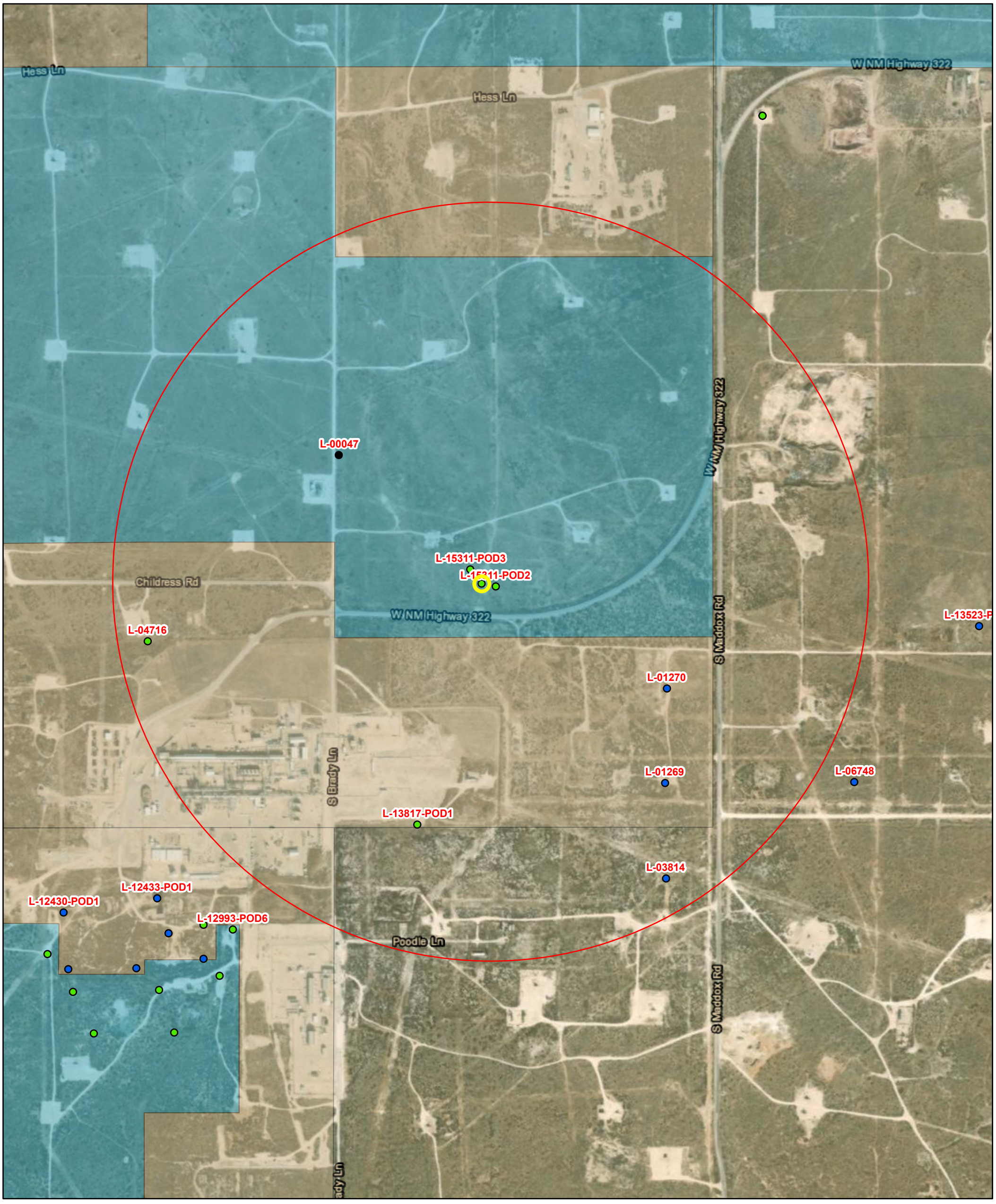

SP-3
SP-9
BH 9
SP-5
BH 8
SP 10
SP-4
SP-8
BH 6
BH 7
SP-2
SP-11
BH 5
SP-7
BH 3
BH 4
BH 2
SP-6
BH 1
SP-1
N
30 ft
Google Earth

FIGURE 3

HYDROLOGY MAP

OSE POD Location Map



1/26/2024, 1:30:02 PM

GIS WATERS PODs
- Active
- Pending
- Inactive

New Mexico State Trust Lands
- Subsurface Estate
- Both Estates
- Counties

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar

Online web user

This is an unofficial map from the OSE's online application.

APPENDIX A

DELINEATION SUMMARY TABLE

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
Source	**32°36'51.366"N**	15	05/24/2021	In-Situ	**0.10100**	**1.3**	**83.4**	**838**	**111**	**1,030**	**618**
	103°18'16.138"W	20	05/24/2021	In-Situ	**0.33800**	**3.48**	<49.9	**452**	**59.1**	**511**	**790**
		25	05/24/2021	In-Situ	**0.27800**	**3.29**	**73.9**	**634**	**82.1**	**790**	**788**
		30	05/25/2021	In-Situ	**0.14800**	**2.07**	<49.9	**590**	**72.2**	**662**	288
SP-1	**32°36'51.052"N**	1	05/24/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	56.8
	103°18'15.949"W	5	05/24/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	13.9
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	10.3
		15	05/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	8.45
		20	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	5.6
		25	05/24/2021	In-Situ	<0.00199	<0.00396	<49.9	<49.9	<49.9	<49.9	10.1
SP-2	**32°36'51.403"N**	1	05/24/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	12.9
	103°18'16.588"W	5	05/24/2021	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	5.83
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	10.3
		15	05/24/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	5.09
		20	05/24/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<4.98
		25	05/24/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	5.64
SP-3	**32°36'51.843"N**	1	05/24/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	7.42
	103°18'16.365"W	5	05/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	5.42
		10	05/24/2021	In-Situ	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	17.8
		15	05/24/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	42
		20	05/24/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	63.3
		25	05/24/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	86.2

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
SP-4	**32°36'51.548"N**	1	05/24/2021	In-Situ	<0.00202	<0.00403	<49.9	**1,840**	<49.9	**1,840**	224
	103°18'15.824"W	5	05/24/2021	In-Situ	<0.00199	<0.00398	<50.0	**122**	<50.0	**122**	50.4
		10	05/24/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	24.8
		15	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	31.7
		20	05/24/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	54.6
		25	05/24/2021	In-Situ	**0.00356**	<0.00396	<49.9	<49.9	<49.9	<49.9	75
SP-5	**32°36'51.530"N**	1	09/05/2023	In-Situ	<0.00199	<0.00398	<50.1	**92.4**	<50.1	**92.4**	144
	103°18'16.154"W	5	09/05/2023	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	253
		10	09/05/2023	In-Situ	<0.00201	**0.01640**	<50.2	**1,480**	<50.2	**1,480**	278
		15	09/05/2023	In-Situ	<0.00200	**0.01770**	**54.8**	**1,470**	<50.3	**1,520**	293
		20	09/05/2023	In-Situ	<0.00199	<0.00398	<50.5	**221**	<50.5	**221**	578
		25	09/05/2023	In-Situ	<0.00198	<0.00397	<50.5	<50.5	<50.5	<50.5	437
		30	09/05/2023	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	339
		35	09/05/2023	In-Situ	<0.00200	<0.00400	<49.6	**722**	<49.6	**722**	363
SP-6	**32°36'51.153"N**	1	09/05/2023	In-Situ	<0.00198	<0.00396	<49.8	**481**	<49.8	**481**	249
	103°18'16.206"W	5	09/05/2023	In-Situ	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	508
		10	09/05/2023	In-Situ	<0.00202	<0.00404	<50.1	<50.1	<50.1	<50.1	337
		15	09/05/2023	In-Situ	<0.00202	<0.00403	<50.5	<50.5	<50.5	<50.5	310
		20	09/05/2023	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	487
		25	09/05/2023	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	556
		30	09/05/2023	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	255
		35	09/05/2023	In-Situ	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	159
SP-7	**32°36'51.343"N**	1	09/05/2023	In-Situ	<0.0497	<0.0994	**447**	**1,150**	<50.1	**1,600**	157
	103°18'16.058"W	5	09/05/2023	In-Situ	<0.0495	<0.0990	<50.5	**250**	<50.5	**250**	165

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					*10*	*50*				*100*	*600*
		10	09/05/2023	In-Situ	**0.00236**	<0.00398	<50.4	**56.9**	<50.4	**56.9**	431
		15	09/05/2023	In-Situ	<0.0501	<0.100	<49.9	**908**	<49.9	**908**	233
		20	09/05/2023	In-Situ	**0.19200**	**12.4**	**616**	**4,630**	<250	**5,250**	255
		25	09/05/2023	In-Situ	**0.28900**	**11.4**	**460**	**4,440**	<248	**4,900**	462
		30	09/05/2023	In-Situ	**0.26000**	**2.13**	**90.0**	**1,540**	<49.6	**1,630**	484
		35	09/05/2023	In-Situ	**0.06910**	**0.13000**	<50.3	**539**	<50.3	**539**	237
SP-8	**32°36'51.478"N**	1	09/05/2023	In-Situ	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	154
	103°18'16.347"W	5	09/05/2023	In-Situ	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	315
		10	09/05/2023	In-Situ	**0.06930**	**8.12**	**1,270**	**6,230**	<251	**7,500**	114
		15	09/05/2023	In-Situ	**0.14100**	**13.1**	**1,270**	**5,660**	<250	**6,930**	133
		20	09/05/2023	In-Situ	**0.30500**	**10.4**	**1,020**	**5,920**	<249	**6,940**	183
		25	09/05/2023	In-Situ	**0.64100**	**12.8**	**927**	**5,920**	<250	**6,850**	198
		30	09/05/2023	In-Situ	**0.06430**	**2.74**	**166**	**1,820**	**139**	**2,130**	168
		35	09/05/2023	In-Situ	<0.0504	**2.24**	**78.6**	**1,620**	<50.3	**1,700**	197
SP-9	**32°36'51.658"N**	0	09/07/2023	In-Situ	<0.00200	<0.00400	<50.1	<50.1	<50.1	<50.1	80.1
	103°18'16.327"W	5	09/07/2023	In-Situ	<0.00200	<0.00401	<50.3	<50.3	<50.3	<50.3	241
		10	09/07/2023	In-Situ	**0.18400**	**10.2**	**1,400**	**6,290**	**438**	**8,130**	**615**
		15	09/07/2023	In-Situ	<0.0200	<0.0400	<50.5	**107**	<50.5	**107**	450
		20	09/07/2023	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	**784**
		25	09/07/2023	In-Situ	<0.0198	<0.0397	<50.0	**120**	<50.0	**120**	550
SP-10	**32°36'51.527"N**	0	09/07/2023	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	245
	103°18'15.936"W	5	09/07/2023	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	118
		10	09/07/2023	In-Situ	<0.00200	<0.00401	<50.2	<50.2	<50.2	<50.2	85.1
		15	09/07/2023	In-Situ	<0.00199	<0.00398	<50.4	<50.4	<50.4	<50.4	104
		20	09/07/2023	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	164

Table 1
Soil Sample Analytical Data Summary
NMGSAU 1416
Lea County, New Mexico
32° 36' 51.95" North, 103° 18' 15.68" West

Sample ID	GPS Coordinates	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)
Delineation Limit:					***10***	***50***				***100***	***600***
SP-11	**32°36'51.392"N**	0	09/07/2023	In-Situ	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	136
	103°18'16.442"W	5	09/07/2023	In-Situ	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	122
		10	09/07/2023	In-Situ	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	100
		15	09/07/2023	In-Situ	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	87.7
		20	09/07/2023	In-Situ	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	72.7

Notes:

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

Depth in feet below ground surface (bgs)

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

<: indicates parameter concentration is less than analytical method reporting limit

Bold and Highlighted exceeds NMOCD delineation limits

APPENDIX B

NEAREST WATER WELL

BORING RECORD

Start: 11:00
Finish: 11:50

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Caliche, 7.5 YR 8/2, Moderately Cemented	Caliche	
	5			
	10			
	15	Sand, 2.5 YR 7/6, Fine to Medium Quartz Sand, Sub Angular to Sub Rounded, Moderately Sorted	SW	
	20			
	25	Sand, 5YR 7/4, Fine Grained Quartz Sand, Sub Rounded to Rounded, Well Sorted		
	30	Fine Grained Quartz Sand, 5 YR 8/3, Sub Rounded to Rounded, Well Sorted		
Depth to Water: 35.3	35	5 YR 8/1, Well Cemented, Quartzite		
	40	TD: 40'		

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE: NUMBER | PID READING | RECOVERY | DEPTH (1, 5, 10, 15, 20, 25, 30, 35, 40)

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

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

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 5/24/2021

BORING NUMBER : SB-1

JOB NUMBER : Apache/ 21-0119-01
HOLE DIAMETER : 3"
LOCATION : NMGSAU 1416, Lea County
LAI GEOLOGIST : D. St.Germain
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary

APPENDIX C

LAB REPORTS

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2471-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
6/2/2021 10:16:06 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-2471-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 21
QC Sample Results 23
QC Association Summary 31
Lab Chronicle 36
Certification Summary 42
Method Summary 43
Sample Summary 44
Chain of Custody 45
Receipt Checklists 47

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Job ID: 880-2471-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2471-1

Receipt
The samples were received on 5/26/2021 8:47 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
Method 8021B: Surrogate recovery for the following sample was outside control limits: SP-4 25' (880-2471-24). 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.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 1'
Lab Sample ID: 880-2471-1
Date Collected: 05/24/21 15:00
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Ethylbenzene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
m-Xylene & p-Xylene	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Xylenes, Total	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1
Total BTEX	<0.00396	U F1	0.00396		mg/Kg		05/26/21 09:37	05/26/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:31*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.8**		5.03		mg/Kg			05/28/21 01:49	1

Client Sample ID: SP-1 5'
Lab Sample ID: 880-2471-2
Date Collected: 05/24/21 15:03
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:51*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 5'

Date Collected: 05/24/21 15:03
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-2
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)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 14:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.9**		5.05		mg/Kg			05/28/21 02:06	1

Client Sample ID: SP-1 10'

Date Collected: 05/24/21 15:05
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:12*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.05		mg/Kg			05/28/21 02:11	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-1 15'
Lab Sample ID: 880-2471-4
Date Collected: 05/24/21 15:10
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*
o-Terphenyl	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.45**		5.00		mg/Kg			05/28/21 02:16	1

Client Sample ID: SP-1 20'
Lab Sample ID: 880-2471-5
Date Collected: 05/24/21 15:15
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:37	05/27/21 00:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 00:53*	*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		05/26/21 10:32	05/26/21 15:59	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 20'

Date Collected: 05/24/21 15:15
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-5
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)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.60**		4.98		mg/Kg			05/28/21 02:21	1

Client Sample ID: SP-1 25'

Date Collected: 05/24/21 15:20
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-6
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		05/26/21 09:37	05/27/21 01:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:13*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*
o-Terphenyl	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		4.97		mg/Kg			05/28/21 02:26	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 1'
Lab Sample ID: 880-2471-7
Date Collected: 05/24/21 14:30
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:34*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.9**		4.95		mg/Kg			05/28/21 02:31	1

Client Sample ID: SP-2 5'
Lab Sample ID: 880-2471-8
Date Collected: 05/24/21 14:32
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/26/21 09:37*	*05/27/21 01:54*	*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		05/26/21 10:32	05/26/21 17:03	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 5'

Lab Sample ID: 880-2471-8
Matrix: Solid
Date Collected: 05/24/21 14:32
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 17:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.83**		5.00		mg/Kg			05/28/21 02:35	1

Client Sample ID: SP-2 10'

Lab Sample ID: 880-2471-9
Matrix: Solid
Date Collected: 05/24/21 14:35
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:14*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.3**		5.02		mg/Kg			05/27/21 21:33	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-2 15'
Lab Sample ID: 880-2471-10
Date Collected: 05/24/21 14:37
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 02:35*	*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		05/26/21 10:32	05/26/21 17:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/26/21 10:32*	*05/26/21 17:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.09**		5.02		mg/Kg			05/27/21 21:47	1

Client Sample ID: SP-2 20'
Lab Sample ID: 880-2471-11
Date Collected: 05/24/21 14:40
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/26/21 09:37	05/27/21 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 03:56*	*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		05/26/21 10:32	05/26/21 18:29	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 20'

Lab Sample ID: 880-2471-11
Matrix: Solid
Date Collected: 05/24/21 14:40
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 18:29	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:32	05/26/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*
o-Terphenyl	*100*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			05/27/21 21:52	1

Client Sample ID: SP-2 25'

Lab Sample ID: 880-2471-12
Matrix: Solid
Date Collected: 05/24/21 14:46
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/26/21 09:37	05/27/21 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:17*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 18:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.64**		5.03		mg/Kg			05/27/21 21:57	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 1'

Date Collected: 05/24/21 14:10
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-13
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/27/21 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*
o-Terphenyl	*102*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.42		4.98		mg/Kg			05/27/21 22:02	1

Client Sample ID: SP-3 5'

Date Collected: 05/24/21 14:12
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-14
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		05/26/21 09:37	05/27/21 04:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:37*	*05/27/21 04:57*	*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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 5'

Lab Sample ID: 880-2471-14
Matrix: Solid
Date Collected: 05/24/21 14:12
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 19:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*
o-Terphenyl	*79*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.42**		4.98		mg/Kg			05/27/21 22:07	1

Client Sample ID: SP-3 10'

Lab Sample ID: 880-2471-15
Matrix: Solid
Date Collected: 05/24/21 14:15
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/26/21 09:37	05/27/21 05:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.8**		5.05		mg/Kg			05/27/21 22:12	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 15'

Date Collected: 05/24/21 14:18
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-16
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:38*	*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	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/26/21 10:32*	*05/26/21 19:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.0**		4.98		mg/Kg			05/27/21 22:26	1

Client Sample ID: SP-3 20'

Date Collected: 05/24/21 14:21
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-17
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		05/26/21 09:37	05/27/21 05:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/26/21 09:37	05/27/21 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 05:59*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 20'

Lab Sample ID: 880-2471-17
Matrix: Solid
Date Collected: 05/24/21 14:21
Date Received: 05/26/21 08:47

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		05/26/21 10:32	05/26/21 20:37	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*
o-Terphenyl	*84*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.3**		5.00		mg/Kg			05/27/21 22:31	1

Client Sample ID: SP-3 25'

Lab Sample ID: 880-2471-18
Matrix: Solid
Date Collected: 05/24/21 14:25
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:37	05/27/21 06:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:19*	*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		05/26/21 10:32	05/26/21 20:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:32*	*05/26/21 20:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.2**		4.96		mg/Kg			05/27/21 22:46	1

Client Sample Results

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

Client Sample ID: SP-4 1'
Lab Sample ID: 880-2471-19
Date Collected: 05/24/21 13:35
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/26/21 09:37	05/27/21 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*05/26/21 09:37*	*05/27/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*05/26/21 09:37*	*05/27/21 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	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Diesel Range Organics (Over C10-C28)	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1
Total TPH	**1840**		49.9		mg/Kg		05/26/21 10:32	05/26/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**224**		5.00		mg/Kg			05/27/21 22:51	1

Client Sample ID: SP-4 5'
Lab Sample ID: 880-2471-20
Date Collected: 05/24/21 13:37
Matrix: Solid
Date Received: 05/26/21 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/26/21 09:37	05/27/21 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*05/26/21 09:37*	*05/27/21 07:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 5'

Date Collected: 05/24/21 13:37
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-20
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)	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1
Total TPH	**122**		50.0		mg/Kg		05/26/21 10:32	05/26/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*
o-Terphenyl	*86*		*70 - 130*	*05/26/21 10:32*	*05/26/21 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.4**		5.00		mg/Kg			05/27/21 22:56	1

Client Sample ID: SP-4 10'

Date Collected: 05/24/21 13:40
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-21
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		05/26/21 09:40	05/26/21 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*
o-Terphenyl	*92*		*70 - 130*	*05/26/21 10:57*	*05/26/21 13:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.8**		4.97		mg/Kg			05/27/21 23:01	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 15'

Date Collected: 05/24/21 13:45
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-22

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00267**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:04*	*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		05/26/21 10:57	05/26/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*
o-Terphenyl	*111*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.7**		4.99		mg/Kg			05/27/21 23:06	1

Client Sample ID: SP-4 20'

Date Collected: 05/24/21 13:52
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-23

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/26/21 09:40	05/27/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:25*	*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	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 20'

Date Collected: 05/24/21 13:52
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-23
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)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1
Total TPH	<49.8	U	49.8		mg/Kg		05/26/21 10:57	05/26/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*
o-Terphenyl	*101*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.6**		4.95		mg/Kg			05/27/21 23:11	1

Client Sample ID: SP-4 25'

Date Collected: 05/24/21 13:57
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2471-24
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00356**		0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/26/21 09:40	05/27/21 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 09:40*	*05/27/21 00:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1
Total TPH	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*
o-Terphenyl	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.0**		5.00		mg/Kg			05/27/21 23:15	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2471-1	SP-1 1'	90	93
880-2471-1 MS	SP-1 1'	103	102
880-2471-1 MSD	SP-1 1'	113	108
880-2471-2	SP-1 5'	84	96
880-2471-3	SP-1 10'	90	94
880-2471-4	SP-1 15'	98	98
880-2471-5	SP-1 20'	91	97
880-2471-6	SP-1 25'	96	97
880-2471-7	SP-2 1'	89	101
880-2471-8	SP-2 5'	84	93
880-2471-9	SP-2 10'	96	99
880-2471-10	SP-2 15'	83	95
880-2471-11	SP-2 20'	98	94
880-2471-12	SP-2 25'	100	92
880-2471-13	SP-3 1'	91	97
880-2471-14	SP-3 5'	90	98
880-2471-15	SP-3 10'	95	94
880-2471-16	SP-3 15'	100	97
880-2471-17	SP-3 20'	94	94
880-2471-18	SP-3 25'	89	95
880-2471-19	SP-4 1'	126	105
880-2471-20	SP-4 5'	125	106
880-2471-21	SP-4 10'	90	103
880-2471-21 MS	SP-4 10'	90	126
880-2471-21 MSD	SP-4 10'	86	107
880-2471-22	SP-4 15'	95	122
880-2471-23	SP-4 20'	96	112
880-2471-24	SP-4 25'	102	114
LCS 880-3516/1-A	Lab Control Sample	100	105
LCS 880-3517/1-A	Lab Control Sample	81	116
LCSD 880-3516/2-A	Lab Control Sample Dup	97	104
LCSD 880-3517/2-A	Lab Control Sample Dup	84	117
MB 880-3414/5-A	Method Blank	109	114
MB 880-3494/5-A	Method Blank	88	101
MB 880-3516/5-A	Method Blank	85	94
MB 880-3517/5-A	Method Blank	98	87

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2471-1	SP-1 1'	94	84
880-2471-1 MS	SP-1 1'	87	69 S1-
880-2471-1 MSD	SP-1 1'	86	69 S1-

Surrogate Summary

Client: Larson & Associates, Inc.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

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

Matrix: Solid
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
880-2471-2	SP-1 5'	95	85								
880-2471-3	SP-1 10'	97	88								
880-2471-4	SP-1 15'	98	89								
880-2471-5	SP-1 20'	94	84								
880-2471-6	SP-1 25'	115	98								
880-2471-7	SP-2 1'	95	85								
880-2471-8	SP-2 5'	98	88								
880-2471-9	SP-2 10'	89	78								
880-2471-10	SP-2 15'	97	88								
880-2471-11	SP-2 20'	115	100								
880-2471-12	SP-2 25'	97	86								
880-2471-13	SP-3 1'	120	102								
880-2471-14	SP-3 5'	93	79								
880-2471-15	SP-3 10'	93	81								
880-2471-16	SP-3 15'	96	85								
880-2471-17	SP-3 20'	94	84								
880-2471-18	SP-3 25'	112	95								
880-2471-19	SP-4 1'	111	86								
880-2471-20	SP-4 5'	97	86								
880-2471-21	SP-4 10'	88	92								
880-2471-21 MS	SP-4 10'	78	75								
880-2471-21 MSD	SP-4 10'	95	90								
880-2471-22	SP-4 15'	110	111								
880-2471-23	SP-4 20'	98	101								
880-2471-24	SP-4 25'	98	95								
LCS 880-3521/2-A	Lab Control Sample	93	76								
LCS 880-3527/2-A	Lab Control Sample	100	95								
LCSD 880-3521/3-A	Lab Control Sample Dup	90	77								
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96								
MB 880-3521/1-A	Method Blank	86	77								
MB 880-3527/1-A	Method Blank	100	103								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3414/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3414

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/26/21 08:45*	*05/26/21 11:39*	*1*

Lab Sample ID: MB 880-3494/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3494

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 08:45	05/26/21 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/26/21 08:45*	*05/26/21 12:17*	*1*

Lab Sample ID: MB 880-3516/5-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3516

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:37	05/26/21 23:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*05/26/21 09:37*	*05/26/21 23:10*	*1*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCS 880-3516/1-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1135		mg/Kg		113	70 - 130		
Toluene			0.100	0.1061		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1043		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2163		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1080		mg/Kg		108	70 - 130		

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

Lab Sample ID: LCSD 880-3516/2-A
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1113		mg/Kg		111	70 - 130	2	35
Toluene			0.100	0.1055		mg/Kg		106	70 - 130	1	35
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2076		mg/Kg		104	70 - 130	4	35
o-Xylene			0.100	0.1031		mg/Kg		103	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-2471-1 MS
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00198	U	0.100	0.07297		mg/Kg		73	70 - 130		
Toluene	<0.00198	U F1	0.100	0.06973	F1	mg/Kg		69	70 - 130		
Ethylbenzene	<0.00198	U F1	0.100	0.06514	F1	mg/Kg		65	70 - 130		
m-Xylene & p-Xylene	<0.00396	U F1	0.201	0.1332	F1	mg/Kg		66	70 - 130		
o-Xylene	<0.00198	U F1	0.100	0.06707	F1	mg/Kg		67	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0994	0.08519		mg/Kg		86	70 - 130	15	35
Toluene	<0.00198	U F1	0.0994	0.08145		mg/Kg		82	70 - 130	16	35
Ethylbenzene	<0.00198	U F1	0.0994	0.07595		mg/Kg		76	70 - 130	15	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3496

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00396	U F1	0.199	0.1574		mg/Kg		79	70 - 130	17	35
o-Xylene	<0.00198	U F1	0.0994	0.07953		mg/Kg		80	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 880-3517/5-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3517

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 09:40	05/26/21 23:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*05/26/21 09:40*	*05/26/21 23:22*	*1*

Lab Sample ID: LCS 880-3517/1-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1039		mg/Kg		104	70 - 130		
Toluene			0.100	0.09244		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.08359		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1660		mg/Kg		83	70 - 130		
o-Xylene			0.100	0.08061		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1097		mg/Kg		110	70 - 130	5	35
Toluene			0.100	0.09767		mg/Kg		98	70 - 130	6	35
Ethylbenzene			0.100	0.08869		mg/Kg		89	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1720		mg/Kg		86	70 - 130	4	35

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3517/2-A
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3517

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene			0.100	0.08510		mg/Kg		85	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1 F2	0.0990	0.09342		mg/Kg		93	70 - 130
Toluene	<0.00199	U	0.0990	0.08127		mg/Kg		82	70 - 130
Ethylbenzene	<0.00199	U	0.0990	0.07497		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1448		mg/Kg		73	70 - 130
o-Xylene	<0.00199	U F1	0.0990	0.07177		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3497

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0990	0.06139	F1 F2	mg/Kg		61	70 - 130	41	35
Toluene	<0.00199	U	0.0990	0.07213		mg/Kg		73	70 - 130	12	35
Ethylbenzene	<0.00199	U	0.0990	0.07003		mg/Kg		71	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1386		mg/Kg		70	70 - 130	4	35
o-Xylene	<0.00199	U F1	0.0990	0.06490	F1	mg/Kg		66	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-3521/1-A
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3521

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:32	05/26/21 12:45	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	05/26/21 10:32	05/26/21 12:45	1
o-Terphenyl	77		70 - 130	05/26/21 10:32	05/26/21 12:45	1

Lab Sample ID: LCS 880-3521/2-A
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3521

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	847.7		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	967.6		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: LCSD 880-3521/3-A
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3521

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	826.6		mg/Kg		83	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	972.9		mg/Kg		97	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: 880-2471-1 MS
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	888.4		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1027		mg/Kg		103	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	69	S1-	70 - 130

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	881.3		mg/Kg		88	70 - 130	1	20

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: 880-2471-1 MSD
Matrix: Solid
Analysis Batch: 3502

Client Sample ID: SP-1 1'
Prep Type: Total/NA
Prep Batch: 3521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1029		mg/Kg		103	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*69*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-3527/1-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1073		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*

Eurofins Xenco, Midland

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

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

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-2471-21 MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-2471-21 MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: SP-4 10'
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3525/1-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 23:43	1

Lab Sample ID: LCS 880-3525/2-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	266.2		mg/Kg		106	90 - 110

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-3525/3-A
Matrix: Solid
Analysis Batch: 3552

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	267.6		mg/Kg		107	90 - 110	1	20

Lab Sample ID: 880-2469-A-2-B MS
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.2		mg/Kg		107	90 - 110		

Lab Sample ID: 880-2469-A-2-C MSD
Matrix: Solid
Analysis Batch: 3552

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	49.0		248	313.4		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-3528/1-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/27/21 20:49	1

Lab Sample ID: LCS 880-3528/2-A
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	255.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-3528/3-A
Matrix: Solid
Analysis Batch: 3578

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	255.7		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-2471-15 MS
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	17.8		253	277.3		mg/Kg		103	90 - 110		

Lab Sample ID: 880-2471-15 MSD
Matrix: Solid
Analysis Batch: 3578

Client Sample ID: SP-3 10'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17.8		253	277.1		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA

Prep Batch: 3414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3414/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 3494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-3494/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 3496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-2	SP-1 5'	Total/NA	Solid	8021B	3516
880-2471-3	SP-1 10'	Total/NA	Solid	8021B	3516
880-2471-4	SP-1 15'	Total/NA	Solid	8021B	3516
880-2471-5	SP-1 20'	Total/NA	Solid	8021B	3516
880-2471-6	SP-1 25'	Total/NA	Solid	8021B	3516
880-2471-7	SP-2 1'	Total/NA	Solid	8021B	3516
880-2471-8	SP-2 5'	Total/NA	Solid	8021B	3516
880-2471-9	SP-2 10'	Total/NA	Solid	8021B	3516
880-2471-10	SP-2 15'	Total/NA	Solid	8021B	3516
880-2471-11	SP-2 20'	Total/NA	Solid	8021B	3516
880-2471-12	SP-2 25'	Total/NA	Solid	8021B	3516
880-2471-13	SP-3 1'	Total/NA	Solid	8021B	3516
880-2471-14	SP-3 5'	Total/NA	Solid	8021B	3516
880-2471-15	SP-3 10'	Total/NA	Solid	8021B	3516
880-2471-16	SP-3 15'	Total/NA	Solid	8021B	3516
880-2471-17	SP-3 20'	Total/NA	Solid	8021B	3516
880-2471-18	SP-3 25'	Total/NA	Solid	8021B	3516
880-2471-19	SP-4 1'	Total/NA	Solid	8021B	3516
880-2471-20	SP-4 5'	Total/NA	Solid	8021B	3516
MB 880-3494/5-A	Method Blank	Total/NA	Solid	8021B	3494
MB 880-3516/5-A	Method Blank	Total/NA	Solid	8021B	3516
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	8021B	3516
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3516
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8021B	3516
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8021B	3516

Analysis Batch: 3497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-22	SP-4 15'	Total/NA	Solid	8021B	3517
880-2471-23	SP-4 20'	Total/NA	Solid	8021B	3517
880-2471-24	SP-4 25'	Total/NA	Solid	8021B	3517
MB 880-3414/5-A	Method Blank	Total/NA	Solid	8021B	3414
MB 880-3517/5-A	Method Blank	Total/NA	Solid	8021B	3517
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	8021B	3517
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3517
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8021B	3517
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8021B	3517

Prep Batch: 3516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	5035	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC VOA (Continued)

Prep Batch: 3516 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-2	SP-1 5'	Total/NA	Solid	5035	
880-2471-3	SP-1 10'	Total/NA	Solid	5035	
880-2471-4	SP-1 15'	Total/NA	Solid	5035	
880-2471-5	SP-1 20'	Total/NA	Solid	5035	
880-2471-6	SP-1 25'	Total/NA	Solid	5035	
880-2471-7	SP-2 1'	Total/NA	Solid	5035	
880-2471-8	SP-2 5'	Total/NA	Solid	5035	
880-2471-9	SP-2 10'	Total/NA	Solid	5035	
880-2471-10	SP-2 15'	Total/NA	Solid	5035	
880-2471-11	SP-2 20'	Total/NA	Solid	5035	
880-2471-12	SP-2 25'	Total/NA	Solid	5035	
880-2471-13	SP-3 1'	Total/NA	Solid	5035	
880-2471-14	SP-3 5'	Total/NA	Solid	5035	
880-2471-15	SP-3 10'	Total/NA	Solid	5035	
880-2471-16	SP-3 15'	Total/NA	Solid	5035	
880-2471-17	SP-3 20'	Total/NA	Solid	5035	
880-2471-18	SP-3 25'	Total/NA	Solid	5035	
880-2471-19	SP-4 1'	Total/NA	Solid	5035	
880-2471-20	SP-4 5'	Total/NA	Solid	5035	
MB 880-3516/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3516/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3516/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	5035	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	5035	

Prep Batch: 3517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	5035	
880-2471-22	SP-4 15'	Total/NA	Solid	5035	
880-2471-23	SP-4 20'	Total/NA	Solid	5035	
880-2471-24	SP-4 25'	Total/NA	Solid	5035	
MB 880-3517/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3517/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3517/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	5035	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 3502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-2	SP-1 5'	Total/NA	Solid	8015B NM	3521
880-2471-3	SP-1 10'	Total/NA	Solid	8015B NM	3521
880-2471-4	SP-1 15'	Total/NA	Solid	8015B NM	3521
880-2471-5	SP-1 20'	Total/NA	Solid	8015B NM	3521
880-2471-6	SP-1 25'	Total/NA	Solid	8015B NM	3521
880-2471-7	SP-2 1'	Total/NA	Solid	8015B NM	3521
880-2471-8	SP-2 5'	Total/NA	Solid	8015B NM	3521
880-2471-9	SP-2 10'	Total/NA	Solid	8015B NM	3521
880-2471-10	SP-2 15'	Total/NA	Solid	8015B NM	3521

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Analysis Batch: 3502 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-11	SP-2 20'	Total/NA	Solid	8015B NM	3521
880-2471-12	SP-2 25'	Total/NA	Solid	8015B NM	3521
880-2471-13	SP-3 1'	Total/NA	Solid	8015B NM	3521
880-2471-14	SP-3 5'	Total/NA	Solid	8015B NM	3521
880-2471-15	SP-3 10'	Total/NA	Solid	8015B NM	3521
880-2471-16	SP-3 15'	Total/NA	Solid	8015B NM	3521
880-2471-17	SP-3 20'	Total/NA	Solid	8015B NM	3521
880-2471-18	SP-3 25'	Total/NA	Solid	8015B NM	3521
880-2471-19	SP-4 1'	Total/NA	Solid	8015B NM	3521
880-2471-20	SP-4 5'	Total/NA	Solid	8015B NM	3521
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015B NM	3521
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3521
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3521
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015B NM	3521
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015B NM	3521

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-22	SP-4 15'	Total/NA	Solid	8015B NM	3527
880-2471-23	SP-4 20'	Total/NA	Solid	8015B NM	3527
880-2471-24	SP-4 25'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015B NM	3527
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015B NM	3527

Prep Batch: 3521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-2	SP-1 5'	Total/NA	Solid	8015NM Prep	
880-2471-3	SP-1 10'	Total/NA	Solid	8015NM Prep	
880-2471-4	SP-1 15'	Total/NA	Solid	8015NM Prep	
880-2471-5	SP-1 20'	Total/NA	Solid	8015NM Prep	
880-2471-6	SP-1 25'	Total/NA	Solid	8015NM Prep	
880-2471-7	SP-2 1'	Total/NA	Solid	8015NM Prep	
880-2471-8	SP-2 5'	Total/NA	Solid	8015NM Prep	
880-2471-9	SP-2 10'	Total/NA	Solid	8015NM Prep	
880-2471-10	SP-2 15'	Total/NA	Solid	8015NM Prep	
880-2471-11	SP-2 20'	Total/NA	Solid	8015NM Prep	
880-2471-12	SP-2 25'	Total/NA	Solid	8015NM Prep	
880-2471-13	SP-3 1'	Total/NA	Solid	8015NM Prep	
880-2471-14	SP-3 5'	Total/NA	Solid	8015NM Prep	
880-2471-15	SP-3 10'	Total/NA	Solid	8015NM Prep	
880-2471-16	SP-3 15'	Total/NA	Solid	8015NM Prep	
880-2471-17	SP-3 20'	Total/NA	Solid	8015NM Prep	
880-2471-18	SP-3 25'	Total/NA	Solid	8015NM Prep	
880-2471-19	SP-4 1'	Total/NA	Solid	8015NM Prep	
880-2471-20	SP-4 5'	Total/NA	Solid	8015NM Prep	
MB 880-3521/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

GC Semi VOA (Continued)

Prep Batch: 3521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3521/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-1 MS	SP-1 1'	Total/NA	Solid	8015NM Prep	
880-2471-1 MSD	SP-1 1'	Total/NA	Solid	8015NM Prep	

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-21	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-22	SP-4 15'	Total/NA	Solid	8015NM Prep	
880-2471-23	SP-4 20'	Total/NA	Solid	8015NM Prep	
880-2471-24	SP-4 25'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-21 MS	SP-4 10'	Total/NA	Solid	8015NM Prep	
880-2471-21 MSD	SP-4 10'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	DI Leach	
880-2471-2	SP-1 5'	Soluble	Solid	DI Leach	
880-2471-3	SP-1 10'	Soluble	Solid	DI Leach	
880-2471-4	SP-1 15'	Soluble	Solid	DI Leach	
880-2471-5	SP-1 20'	Soluble	Solid	DI Leach	
880-2471-6	SP-1 25'	Soluble	Solid	DI Leach	
880-2471-7	SP-2 1'	Soluble	Solid	DI Leach	
880-2471-8	SP-2 5'	Soluble	Solid	DI Leach	
MB 880-3525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 3528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	DI Leach	
880-2471-10	SP-2 15'	Soluble	Solid	DI Leach	
880-2471-11	SP-2 20'	Soluble	Solid	DI Leach	
880-2471-12	SP-2 25'	Soluble	Solid	DI Leach	
880-2471-13	SP-3 1'	Soluble	Solid	DI Leach	
880-2471-14	SP-3 5'	Soluble	Solid	DI Leach	
880-2471-15	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-16	SP-3 15'	Soluble	Solid	DI Leach	
880-2471-17	SP-3 20'	Soluble	Solid	DI Leach	
880-2471-18	SP-3 25'	Soluble	Solid	DI Leach	
880-2471-19	SP-4 1'	Soluble	Solid	DI Leach	
880-2471-20	SP-4 5'	Soluble	Solid	DI Leach	
880-2471-21	SP-4 10'	Soluble	Solid	DI Leach	
880-2471-22	SP-4 15'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

HPLC/IC (Continued)

Leach Batch: 3528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-23	SP-4 20'	Soluble	Solid	DI Leach	
880-2471-24	SP-4 25'	Soluble	Solid	DI Leach	
MB 880-3528/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2471-15 MS	SP-3 10'	Soluble	Solid	DI Leach	
880-2471-15 MSD	SP-3 10'	Soluble	Solid	DI Leach	

Analysis Batch: 3552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-1	SP-1 1'	Soluble	Solid	300.0	3525
880-2471-2	SP-1 5'	Soluble	Solid	300.0	3525
880-2471-3	SP-1 10'	Soluble	Solid	300.0	3525
880-2471-4	SP-1 15'	Soluble	Solid	300.0	3525
880-2471-5	SP-1 20'	Soluble	Solid	300.0	3525
880-2471-6	SP-1 25'	Soluble	Solid	300.0	3525
880-2471-7	SP-2 1'	Soluble	Solid	300.0	3525
880-2471-8	SP-2 5'	Soluble	Solid	300.0	3525
MB 880-3525/1-A	Method Blank	Soluble	Solid	300.0	3525
LCS 880-3525/2-A	Lab Control Sample	Soluble	Solid	300.0	3525
LCSD 880-3525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3525
880-2469-A-2-B MS	Matrix Spike	Soluble	Solid	300.0	3525
880-2469-A-2-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	3525

Analysis Batch: 3578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2471-9	SP-2 10'	Soluble	Solid	300.0	3528
880-2471-10	SP-2 15'	Soluble	Solid	300.0	3528
880-2471-11	SP-2 20'	Soluble	Solid	300.0	3528
880-2471-12	SP-2 25'	Soluble	Solid	300.0	3528
880-2471-13	SP-3 1'	Soluble	Solid	300.0	3528
880-2471-14	SP-3 5'	Soluble	Solid	300.0	3528
880-2471-15	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-16	SP-3 15'	Soluble	Solid	300.0	3528
880-2471-17	SP-3 20'	Soluble	Solid	300.0	3528
880-2471-18	SP-3 25'	Soluble	Solid	300.0	3528
880-2471-19	SP-4 1'	Soluble	Solid	300.0	3528
880-2471-20	SP-4 5'	Soluble	Solid	300.0	3528
880-2471-21	SP-4 10'	Soluble	Solid	300.0	3528
880-2471-22	SP-4 15'	Soluble	Solid	300.0	3528
880-2471-23	SP-4 20'	Soluble	Solid	300.0	3528
880-2471-24	SP-4 25'	Soluble	Solid	300.0	3528
MB 880-3528/1-A	Method Blank	Soluble	Solid	300.0	3528
LCS 880-3528/2-A	Lab Control Sample	Soluble	Solid	300.0	3528
LCSD 880-3528/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3528
880-2471-15 MS	SP-3 10'	Soluble	Solid	300.0	3528
880-2471-15 MSD	SP-3 10'	Soluble	Solid	300.0	3528

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 1'

Lab Sample ID: 880-2471-1
Matrix: Solid
Date Collected: 05/24/21 15:00
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 01:49	CH	XEN MID

Client Sample ID: SP-1 5'

Lab Sample ID: 880-2471-2
Matrix: Solid
Date Collected: 05/24/21 15:03
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/26/21 23:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:06	CH	XEN MID

Client Sample ID: SP-1 10'

Lab Sample ID: 880-2471-3
Matrix: Solid
Date Collected: 05/24/21 15:05
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:11	CH	XEN MID

Client Sample ID: SP-1 15'

Lab Sample ID: 880-2471-4
Matrix: Solid
Date Collected: 05/24/21 15:10
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:16	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-1 20'

Lab Sample ID: 880-2471-5
Matrix: Solid
Date Collected: 05/24/21 15:15
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 00:53	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:21	CH	XEN MID

Client Sample ID: SP-1 25'

Lab Sample ID: 880-2471-6
Matrix: Solid
Date Collected: 05/24/21 15:20
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:26	CH	XEN MID

Client Sample ID: SP-2 1'

Lab Sample ID: 880-2471-7
Matrix: Solid
Date Collected: 05/24/21 14:30
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:31	CH	XEN MID

Client Sample ID: SP-2 5'

Lab Sample ID: 880-2471-8
Matrix: Solid
Date Collected: 05/24/21 14:32
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 01:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3525	05/26/21 10:52	CH	XEN MID
Soluble	Analysis	300.0		1			3552	05/28/21 02:35	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-2 10'

Lab Sample ID: 880-2471-9
Matrix: Solid
Date Collected: 05/24/21 14:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:14	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:33	CH	XEN MID

Client Sample ID: SP-2 15'

Lab Sample ID: 880-2471-10
Matrix: Solid
Date Collected: 05/24/21 14:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 02:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 17:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:47	CH	XEN MID

Client Sample ID: SP-2 20'

Lab Sample ID: 880-2471-11
Matrix: Solid
Date Collected: 05/24/21 14:40
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 03:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:52	CH	XEN MID

Client Sample ID: SP-2 25'

Lab Sample ID: 880-2471-12
Matrix: Solid
Date Collected: 05/24/21 14:46
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 21:57	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 1'

Lab Sample ID: 880-2471-13
Matrix: Solid
Date Collected: 05/24/21 14:10
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:37	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:02	CH	XEN MID

Client Sample ID: SP-3 5'

Lab Sample ID: 880-2471-14
Matrix: Solid
Date Collected: 05/24/21 14:12
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 04:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:07	CH	XEN MID

Client Sample ID: SP-3 10'

Lab Sample ID: 880-2471-15
Matrix: Solid
Date Collected: 05/24/21 14:15
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:12	CH	XEN MID

Client Sample ID: SP-3 15'

Lab Sample ID: 880-2471-16
Matrix: Solid
Date Collected: 05/24/21 14:18
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 19:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:26	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-3 20'

Lab Sample ID: 880-2471-17
Matrix: Solid
Date Collected: 05/24/21 14:21
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 05:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:31	CH	XEN MID

Client Sample ID: SP-3 25'

Lab Sample ID: 880-2471-18
Matrix: Solid
Date Collected: 05/24/21 14:25
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 20:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:46	CH	XEN MID

Client Sample ID: SP-4 1'

Lab Sample ID: 880-2471-19
Matrix: Solid
Date Collected: 05/24/21 13:35
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 06:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:21	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:51	CH	XEN MID

Client Sample ID: SP-4 5'

Lab Sample ID: 880-2471-20
Matrix: Solid
Date Collected: 05/24/21 13:37
Date Received: 05/26/21 08:47

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	3516	05/26/21 09:37	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3496	05/27/21 07:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3521	05/26/21 10:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3502	05/26/21 21:42	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 22:56	CH	XEN MID

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Client Sample ID: SP-4 10'

Lab Sample ID: 880-2471-21
Matrix: Solid
Date Collected: 05/24/21 13:40
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/26/21 23:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 13:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:01	CH	XEN MID

Client Sample ID: SP-4 15'

Lab Sample ID: 880-2471-22
Matrix: Solid
Date Collected: 05/24/21 13:45
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:06	CH	XEN MID

Client Sample ID: SP-4 20'

Lab Sample ID: 880-2471-23
Matrix: Solid
Date Collected: 05/24/21 13:52
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:11	CH	XEN MID

Client Sample ID: SP-4 25'

Lab Sample ID: 880-2471-24
Matrix: Solid
Date Collected: 05/24/21 13:57
Date Received: 05/26/21 08:47

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	3517	05/26/21 09:40	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	3497	05/27/21 00:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 15:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	3528	05/26/21 10:58	CH	XEN MID
Soluble	Analysis	300.0		1			3578	05/27/21 23:15	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.
Job ID: 880-2471-1
Project/Site: NMGSAU 1416

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: NMGSAU 1416

Job ID: 880-2471-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-2471-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2471-1	SP-1 1'	Solid	05/24/21 15:00	05/26/21 08:47	
880-2471-2	SP-1 5'	Solid	05/24/21 15:03	05/26/21 08:47	
880-2471-3	SP-1 10'	Solid	05/24/21 15:05	05/26/21 08:47	
880-2471-4	SP-1 15'	Solid	05/24/21 15:10	05/26/21 08:47	
880-2471-5	SP-1 20'	Solid	05/24/21 15:15	05/26/21 08:47	
880-2471-6	SP-1 25'	Solid	05/24/21 15:20	05/26/21 08:47	
880-2471-7	SP-2 1'	Solid	05/24/21 14:30	05/26/21 08:47	
880-2471-8	SP-2 5'	Solid	05/24/21 14:32	05/26/21 08:47	
880-2471-9	SP-2 10'	Solid	05/24/21 14:35	05/26/21 08:47	
880-2471-10	SP-2 15'	Solid	05/24/21 14:37	05/26/21 08:47	
880-2471-11	SP-2 20'	Solid	05/24/21 14:40	05/26/21 08:47	
880-2471-12	SP-2 25'	Solid	05/24/21 14:46	05/26/21 08:47	
880-2471-13	SP-3 1'	Solid	05/24/21 14:10	05/26/21 08:47	
880-2471-14	SP-3 5'	Solid	05/24/21 14:12	05/26/21 08:47	
880-2471-15	SP-3 10'	Solid	05/24/21 14:15	05/26/21 08:47	
880-2471-16	SP-3 15'	Solid	05/24/21 14:18	05/26/21 08:47	
880-2471-17	SP-3 20'	Solid	05/24/21 14:21	05/26/21 08:47	
880-2471-18	SP-3 25'	Solid	05/24/21 14:25	05/26/21 08:47	
880-2471-19	SP-4 1'	Solid	05/24/21 13:35	05/26/21 08:47	
880-2471-20	SP-4 5'	Solid	05/24/21 13:37	05/26/21 08:47	
880-2471-21	SP-4 10'	Solid	05/24/21 13:40	05/26/21 08:47	
880-2471-22	SP-4 15'	Solid	05/24/21 13:45	05/26/21 08:47	
880-2471-23	SP-4 20'	Solid	05/24/21 13:52	05/26/21 08:47	
880-2471-24	SP-4 25'	Solid	05/24/21 13:57	05/26/21 08:47	

880-2471

484

STODY

880-2471 Chain of Custody

Larson & Associates, Inc.
Environmental Consultants

Midland, TX
432-687-0901

Data Reported to

DATE: 5/25/2021 PAGE 1 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR: DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State: MST / NM

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

ANALYSES: BTEX ☑ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ | OTHER LIST ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | TCLP ☐ | RCI ☐ | TOX ☐ | FLASHPOINT ☐ | TDS ☐ | TSS ☐ | % MOISTURE ☐ | pH ☐ | HEXAVALENT CHROMIUM ☐ | CYANIDE ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDE ☒ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	BTEX	MTBE	TRPH	GASOLINE	DIESEL	OIL	VOC	SVOC	PAH	HOLDPAH	8081	8151	8082	TBLP	TCLP VOC	TCLP PEST	HERB	TOTAL METALS	Semi-VOC	OTHER LIST	LEAD	D W 200.8	TCLP	RCI	TOX	FLASHPOINT	TDS	TSS	% MOISTURE	pH	HEXAVALENT CHROMIUM	CYANIDE	EXPLOSIVES	PECHLORATE	CHLORIDE	ANIONS	ALKALINITY	FIELD NOTES
SP-1 1'		5/24/21	1500	S	1				X		X		X	X	X																																				# Direct Bill to Apache #
SP-1 5'			1503																																															
SP-1 10'			1505																																															
SP 1 15'			1510																																														
SP-1 20'			1515																																														
SP-1 25'			1520																																														
SP-2 1'			1430																																														
SP-2 5'			1432																																														
SP-2 10'			1435																																														
SP-2 15'			1437																																														
SP-2 20'			1440																																														
SP-2 25			1446																																														
SP-3 1'			1416																																														
SP-3 5'			1412																																														
SP-3 10'			1415																																														
TOTAL 15																																																	

RELINQUISHED BY (Signature) DATE/TIME 5/26/21 8:47 RECEIVED BY (Signature) KGM

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

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

LABORATORY XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Page 463 of 510

Loc: 880
2471

№1485

-OF-CUSTODY

6/2/2021

Larson & Associates, Inc.
Environmental Consultants

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

DATE: 5/25/2021 PAGE 2 OF 2

PO#. LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #: 21-0119-01 COLLECTOR. DSG

Data Reported to

TRRP report? ☐ Yes ☒ No

TIME ZONE Time zone/State: MST

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

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

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☒ | DIESEL - MOD 8015 ☒ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | TOTAL METALS (RCRA) ☐ | Semi-VOC ☐ | LEAD - TOTAL ☐ | D W 200.8 ☐ | OTHER LIST ☐ | RCI ☐ | TOX ☐ | TCLP ☐ | TDS ☐ | FLASHPOINT ☐ | pH ☐ | % MOISTURE ☐ | HEXAVALENT CHROMIUM ☐ | CYANIDE ☐ | EXPLOSIVES ☐ | PECHLORATE ☐ | CHLORIDE ☐ | ANIONS ☐ | ALKALINITY ☐

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	BTEX	GASOLINE MOD 8015	DIESEL - MOD 8015	OIL - MOD 8015	pH	FIELD NOTES
SP-3 15'		5/24/21	1418	S	1				X		X	X	X	X	X	* Direct Bill to Apache *
SP-3 20'		"	1421													
SP-3 25'			1425													
SP-4 1'			1335													
SP-4 5'			1337													
SP-4 10'			1340													
SP-4 15'			1345													
SP-4 20'			1352													
SP-4 25			1357													

TOTAL 9

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	5/26/21 8:07	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY XENCO

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4 3.9 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☒ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc.

Job Number: 880-2471-1

Login Number: 2471
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	

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-2472-1
Client Project/Site: Apache - NMUSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
5/28/2021 5:10:39 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: Apache - NMUSAU 1416

Laboratory Job ID: 880-2472-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 13
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 20

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Job ID: 880-2472-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-2472-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2021 8:47 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 3.9º C.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3530 recovered above the upper control limit for Toluene 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 880-3530/20).

Method 8021B: Surrogate recovery for the following samples were outside control limits: Source 15' (880-2472-1), Source 20' (880-2472-2), Source 25' (880-2472-3) and Source 30' (880-2472-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described 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: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 15'
Date Collected: 05/24/21 13:00
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.101**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Toluene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Ethylbenzene	**0.625**		0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
m-Xylene & p-Xylene	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
o-Xylene	<0.101	U	0.101		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Xylenes, Total	**0.575**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50
Total BTEX	**1.30**		0.201		mg/Kg		05/26/21 12:00	05/26/21 18:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:28*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**83.4**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Diesel Range Organics (Over C10-C28)	**838**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Oil Range Organics (Over C28-C36)	**111**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1
Total TPH	**1030**		49.8		mg/Kg		05/26/21 10:57	05/26/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*23*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**618**	**F1**	4.97		mg/Kg			05/26/21 13:30	1

Client Sample ID: Source 20'
Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.338**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Toluene	**0.392**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Ethylbenzene	**0.591**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
m-Xylene & p-Xylene	**1.61**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
o-Xylene	**0.553**		0.0998		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Xylenes, Total	**2.16**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50
Total BTEX	**3.48**		0.200		mg/Kg		05/26/21 12:00	05/26/21 18:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*05/26/21 12:00*	*05/26/21 18:54*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 20'

Date Collected: 05/24/21 13:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-2
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)	452		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Oil Range Organics (Over C28-C36)	59.1		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1
Total TPH	511		49.9		mg/Kg		05/26/21 10:57	05/26/21 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	790		5.03		mg/Kg			05/26/21 13:57	1

Client Sample ID: Source 25'

Date Collected: 05/24/21 13:20
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.278		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Toluene	1.41		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Ethylbenzene	0.267		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
m-Xylene & p-Xylene	0.697		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
o-Xylene	0.641		0.0990		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Xylenes, Total	1.34		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50
Total BTEX	3.29		0.198		mg/Kg		05/26/21 12:00	05/26/21 19:19	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*240*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:19*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	73.9		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Diesel Range Organics (Over C10-C28)	634		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Oil Range Organics (Over C28-C36)	82.1		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1
Total TPH	790		50.0		mg/Kg		05/26/21 10:57	05/26/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*05/26/21 10:57*	*05/26/21 17:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	788		5.02		mg/Kg			05/26/21 13:57	1

Client Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Client Sample ID: Source 30'

Date Collected: 05/24/21 09:16
Date Received: 05/26/21 08:47

Lab Sample ID: 880-2472-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.148**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Toluene	**0.775**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Ethylbenzene	<0.0994	U	0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
m-Xylene & p-Xylene	**0.975**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
o-Xylene	**0.171**		0.0994		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Xylenes, Total	**1.15**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50
Total BTEX	**2.07**		0.199		mg/Kg		05/26/21 12:00	05/26/21 19:45	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/26/21 12:00*	*05/26/21 19:45*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Diesel Range Organics (Over C10-C28)	**590**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Oil Range Organics (Over C28-C36)	**72.2**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1
Total TPH	**662**		49.9		mg/Kg		05/26/21 10:57	05/26/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*05/26/21 10:57*	*05/26/21 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		5.05		mg/Kg			05/26/21 14:02	1

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2472-1	Source 15'	208 S1+	70
880-2472-2	Source 20'	144 S1+	71
880-2472-3	Source 25'	240 S1+	72
880-2472-4	Source 30'	146 S1+	76
890-730-A-1-B MS	Matrix Spike	60 S1-	95
890-730-A-1-C MSD	Matrix Spike Duplicate	62 S1-	95
LCS 880-3520/1-A	Lab Control Sample	108	98
LCS 880-3520/2-A	Lab Control Sample	103	95
MB 880-3520/5-A	Method Blank	70	82

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-2471-A-21-F MS	Matrix Spike	78	75
880-2471-A-21-G MSD	Matrix Spike Duplicate	95	90
880-2472-1	Source 15'	23 S1-	21 S1-
880-2472-2	Source 20'	21 S1-	21 S1-
880-2472-3	Source 25'	21 S1-	21 S1-
880-2472-4	Source 30'	95	97
LCS 880-3527/2-A	Lab Control Sample	100	95
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96
MB 880-3527/1-A	Method Blank	100	103

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3520/5-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3520

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/26/21 12:00	05/26/21 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*05/26/21 12:00*	*05/26/21 15:31*	*1*

Lab Sample ID: LCS 880-3520/1-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1159		mg/Kg		116	70 - 130		
Toluene			0.100	0.09439		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.1041		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.2101		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1016		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 880-3520/2-A
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3520

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1131		mg/Kg		113	70 - 130		
Toluene			0.100	0.09802		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1016		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.2052		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1001		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U F1	0.100	0.07893		mg/Kg		79	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: 890-730-A-1-B MS
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U F1	0.100	0.06278	F1	mg/Kg		63	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.05543	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1111	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.05683	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-730-A-1-C MSD
Matrix: Solid
Analysis Batch: 3530

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3520

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0998	0.06735	F1	mg/Kg		67	70 - 130	16	35
Toluene	<0.00199	U F1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.0998	0.04920	F1	mg/Kg		49	70 - 130	12	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09888	F1	mg/Kg		50	70 - 130	12	35
o-Xylene	<0.00199	U F1	0.0998	0.05191	F1	mg/Kg		52	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-3527/1-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3527

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0		mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*
o-Terphenyl	*103*		*70 - 130*	*05/26/21 10:57*	*05/26/21 12:45*	*1*

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1073		mg/Kg		107	70 - 130

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Lab Sample ID: LCS 880-3527/2-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3527/3-A
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1193		mg/Kg		119	70 - 130	2	20

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

Lab Sample ID: 880-2471-A-21-F MS
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	762.1		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	891.6		mg/Kg		90	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Lab Sample ID: 880-2471-A-21-G MSD
Matrix: Solid
Analysis Batch: 3504

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	925.9		mg/Kg		93	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1071		mg/Kg		108	70 - 130	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3519/1-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/26/21 13:14	1

Lab Sample ID: LCS 880-3519/2-A
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	242.4		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-3519/3-A
Matrix: Solid
Analysis Batch: 3522

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	241.4		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-2472-1 MS
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110		

Lab Sample ID: 880-2472-1 MSD
Matrix: Solid
Analysis Batch: 3522

Client Sample ID: Source 15'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	618	F1	249	832.7	F1	mg/Kg		86	90 - 110	0	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

GC VOA

Prep Batch: 3520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	5035	
880-2472-2	Source 20'	Total/NA	Solid	5035	
880-2472-3	Source 25'	Total/NA	Solid	5035	
880-2472-4	Source 30'	Total/NA	Solid	5035	
MB 880-3520/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	5035	
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 3530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8021B	3520
880-2472-2	Source 20'	Total/NA	Solid	8021B	3520
880-2472-3	Source 25'	Total/NA	Solid	8021B	3520
880-2472-4	Source 30'	Total/NA	Solid	8021B	3520
MB 880-3520/5-A	Method Blank	Total/NA	Solid	8021B	3520
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	8021B	3520
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	8021B	3520
890-730-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	3520
890-730-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3520

GC Semi VOA

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015B NM	3527
880-2472-2	Source 20'	Total/NA	Solid	8015B NM	3527
880-2472-3	Source 25'	Total/NA	Solid	8015B NM	3527
880-2472-4	Source 30'	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015B NM	3527
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	3527

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Total/NA	Solid	8015NM Prep	
880-2472-2	Source 20'	Total/NA	Solid	8015NM Prep	
880-2472-3	Source 25'	Total/NA	Solid	8015NM Prep	
880-2472-4	Source 30'	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-2471-A-21-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-2471-A-21-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

HPLC/IC

Leach Batch: 3519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	DI Leach	
880-2472-2	Source 20'	Soluble	Solid	DI Leach	
880-2472-3	Source 25'	Soluble	Solid	DI Leach	
880-2472-4	Source 30'	Soluble	Solid	DI Leach	
MB 880-3519/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-2472-1 MS	Source 15'	Soluble	Solid	DI Leach	
880-2472-1 MSD	Source 15'	Soluble	Solid	DI Leach	

Analysis Batch: 3522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-2472-1	Source 15'	Soluble	Solid	300.0	3519
880-2472-2	Source 20'	Soluble	Solid	300.0	3519
880-2472-3	Source 25'	Soluble	Solid	300.0	3519
880-2472-4	Source 30'	Soluble	Solid	300.0	3519
MB 880-3519/1-A	Method Blank	Soluble	Solid	300.0	3519
LCS 880-3519/2-A	Lab Control Sample	Soluble	Solid	300.0	3519
LCSD 880-3519/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3519
880-2472-1 MS	Source 15'	Soluble	Solid	300.0	3519
880-2472-1 MSD	Source 15'	Soluble	Solid	300.0	3519

Lab Chronicle

Client: Larson & Associates, Inc.
Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

Client Sample ID: Source 15'
Lab Sample ID: 880-2472-1
Date Collected: 05/24/21 13:00
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:30	CH	XEN MID

Client Sample ID: Source 20'
Lab Sample ID: 880-2472-2
Date Collected: 05/24/21 13:16
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 18:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 16:42	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 25'
Lab Sample ID: 880-2472-3
Date Collected: 05/24/21 13:20
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:19	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:03	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 13:57	CH	XEN MID

Client Sample ID: Source 30'
Lab Sample ID: 880-2472-4
Date Collected: 05/24/21 09:16
Matrix: Solid
Date Received: 05/26/21 08:47

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	3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	3530	05/26/21 19:45	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1			3504	05/26/21 17:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	3519	05/26/21 10:04	SC	XEN MID
Soluble	Analysis	300.0		1			3522	05/26/21 14:02	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.
Job ID: 880-2472-1
Project/Site: Apache - NMUSAU 1416

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: Apache - NMUSAU 1416

Job ID: 880-2472-1

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: Apache - NMUSAU 1416

Job ID: 880-2472-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-2472-1	Source 15'	Solid	05/24/21 13:00	05/26/21 08:47	
880-2472-2	Source 20'	Solid	05/24/21 13:16	05/26/21 08:47	
880-2472-3	Source 25'	Solid	05/24/21 13:20	05/26/21 08:47	
880-2472-4	Source 30'	Solid	05/24/21 09:16	05/26/21 08:47	

Page 483 of 510



880-2472 №1483

CHAIN-OF-CUSTODY

5/28/2021

Larson & Associates, Inc.
Environmental Consultants

Midland, TX 79701
432-687-0901

Date: 5/25/2021 PAGE 1 OF 1

Data Reported to

PO#. LAB WORK ORDER#:

PROJECT LOCATION OR NAME: NMGSAU 1416

LAI PROJECT #. 21-0119-01 COLLECTOR DSG

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State: MST / NM

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐	PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐	8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐	TCLP VOC ☐	TCLP - PEST ☐ HERB ☐	Semi-VOC ☐	TOTAL METALS (RCRA) ☐	OTHER LIST ☐	LEAD - TOTAL ☐ D W 200.8 ☐	TCLP ☐	RCI ☐ TOX ☐	FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐	CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
~~Source~~ Source 15		5/24/21	1300	S	1				X		X			X	X	X																				X	* Direct Bill to Apache *
Source 20'		5/24/21	1316	S	|				|		|			|	|	|																	|	
Source 25'		5/24/21	1320	S	|				|		|			|	|	|																	|	
Source 30'		5/25/21	0916	S	|				|		|			|	|	|																	|	

TOTAL 4

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
[signature]	5/26/21 8:47	[signature]
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 3.4/3.9 THERM# IR8 92
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Page 19 of 20

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-2472-1

Login Number: 2472 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Phillips, Kerianna

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	

END OF REPORT

Table 2
Groundwater Sample Organic and Inorganic Analytical Data Summary
Apache Corporation, NMGSAU 1416
Lea County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C10 (mg/L)	>C10-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)	TDS (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	**--**	**--**	**--**	**--**	****250**	****1,000**
MW-1	12/21/2021	<0.200	0.391	0.221	<0.400	1,350	2,210	<459	3,560	**1,710**	--

Notes: Analysis performed by Eurofins - Xenco (Xenco) Laboratories, Midland, Texas, by EPA SW-846 Method 8021B (BTEX), Method 8015M (TPH) and Method 300 (chloride)
All values reported in milligrams per liter (mg/L) equivelent to parts per million (ppm)
-- No data available
< values - denootes concentration is less than method reporting limit (RL).
* - Human health standard
** - Domestic water quality standard
Bold and highlighted denotes analyte concentration exceeds NMWQCC domestic water quality standard

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 880-9659-1
Client Project/Site: NMGSAU 1416

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

Attn: Mr. Mark J Larson

Holly Taylor

Authorized for release by:
1/5/2022 8:47:48 AM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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: NMGSAU 1416

Laboratory Job ID: 880-9659-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 6
QC Sample Results 7
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Job ID: 880-9659-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-9659-1

Receipt
The sample was received on 12/22/2021 3:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 7.7°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 880-15649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: MW-1 (880-9659-1) and (880-9698-B-1). 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: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Toluene	**0.221**		0.200		mg/L			12/29/21 07:35	100
Ethylbenzene	**0.391**		0.200		mg/L			12/29/21 07:35	100
m,p-Xylenes	<0.400	U	0.400		mg/L			12/29/21 07:35	100
o-Xylene	<0.200	U	0.200		mg/L			12/29/21 07:35	100
Xylenes, Total	<0.400	U	0.400		mg/L			12/29/21 07:35	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*12/29/21 07:35*	*100*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*		*12/29/21 07:35*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.612**		0.400		mg/L			12/30/21 10:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3560**		459		mg/L			01/04/22 15:21	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	**1350**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Diesel Range Organics (Over C10-C28)	**2210**		459		mg/L		01/03/22 14:39	01/04/22 01:17	100
Oil Range Organics (Over C28-C36)	<459	U	459		mg/L		01/03/22 14:39	01/04/22 01:17	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0*	*S1-*	*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*
o-Terphenyl	*123*		*70 - 130*	*01/03/22 14:39*	*01/04/22 01:17*	*100*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		25.0		mg/L			12/30/21 15:56	50

Surrogate Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	108	78
880-9698-B-1 MS	Matrix Spike	125	71
880-9698-B-1 MSD	Matrix Spike Duplicate	118	92
LCS 880-15649/34	Lab Control Sample	130	70
LCSD 880-15649/35	Lab Control Sample Dup	129	71
MB 880-15649/39	Method Blank	100	64 S1-
MB 880-15650/5-A	Method Blank	108	60 S1-

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-9659-1	MW-1	0 S1-	123

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-15919/2-A	Lab Control Sample	102	93
LCSD 880-15919/3-A	Lab Control Sample Dup	109	100
MB 880-15919/1-A	Method Blank	120	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15649/39
Matrix: Water
Analysis Batch: 15649

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Toluene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
m,p-Xylenes	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1
o-Xylene	<0.00200	U	0.00200		mg/L			12/29/21 06:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			12/29/21 06:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*12/29/21 06:40*	*1*
1,4-Difluorobenzene (Surr)	*64*	*S1-*	*70 - 130*		*12/29/21 06:40*	*1*

Lab Sample ID: LCS 880-15649/34
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07587		mg/L		76	70 - 130		
Toluene			0.100	0.08056		mg/L		81	70 - 130		
Ethylbenzene			0.100	0.07723		mg/L		77	70 - 130		
m,p-Xylenes			0.200	0.1542		mg/L		77	70 - 130		
o-Xylene			0.100	0.07294		mg/L		73	70 - 130		

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

Lab Sample ID: LCSD 880-15649/35
Matrix: Water
Analysis Batch: 15649

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07470		mg/L		75	70 - 130	2	20
Toluene			0.100	0.08077		mg/L		81	70 - 130	0	20
Ethylbenzene			0.100	0.08063		mg/L		81	70 - 130	4	20
m,p-Xylenes			0.200	0.1579		mg/L		79	70 - 130	2	20
o-Xylene			0.100	0.08143		mg/L		81	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	0.00223	F1 F2	0.100	0.06449	F1	mg/L		62	70 - 130		
Toluene	0.0252	F1 F2	0.100	0.08513	F1	mg/L		60	70 - 130		

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: 880-9698-B-1 MS
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.00902	F1 F2	0.100	0.07678	F1	mg/L		68	70 - 130
m,p-Xylenes	0.0668	F1	0.200	0.1957	F1	mg/L		64	70 - 130
o-Xylene	0.00311	F1	0.100	0.07003	F1	mg/L		67	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*

Lab Sample ID: 880-9698-B-1 MSD
Matrix: Water
Analysis Batch: 15649

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00223	F1 F2	0.100	0.08628	F2	mg/L		84	70 - 130	29	25
Toluene	0.0252	F1 F2	0.100	0.1488	F2	mg/L		124	70 - 130	54	25
Ethylbenzene	0.00902	F1 F2	0.100	0.1839	F1 F2	mg/L		175	70 - 130	82	25
m,p-Xylenes	0.0668	F1	0.200	0.2512		mg/L		92	70 - 130	25	25
o-Xylene	0.00311	F1	0.100	0.08910		mg/L		86	70 - 130	24	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-15650/5-A
Matrix: Water
Analysis Batch: 15649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15650

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Toluene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
m,p-Xylenes	<0.00400	U	0.00400	mg/L		12/28/21 12:49	12/28/21 16:34	1
o-Xylene	<0.00200	U	0.00200	mg/L		12/28/21 12:49	12/28/21 16:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/L		12/28/21 12:49	12/28/21 16:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*
1,4-Difluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*12/28/21 12:49*	*12/28/21 16:34*	*1*

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<4.57	U	4.57	mg/L		01/03/22 14:39	01/03/22 23:35	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

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

Lab Sample ID: MB 880-15919/1-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15919

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1
Oil Range Organics (Over C28-C36)	<4.57	U	4.57		mg/L		01/03/22 14:39	01/03/22 23:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*
o-Terphenyl	*126*		*70 - 130*	*01/03/22 14:39*	*01/03/22 23:35*	*1*

Lab Sample ID: LCS 880-15919/2-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			91.7	87.97		mg/L		96	75 - 125		
Diesel Range Organics (Over C10-C28)			91.7	92.37		mg/L		101	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-15919/3-A
Matrix: Water
Analysis Batch: 15869

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15919

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			92.0	87.57		mg/L		95	75 - 125	0	20
Diesel Range Organics (Over C10-C28)			92.0	90.57		mg/L		98	75 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15806/3
Matrix: Water
Analysis Batch: 15806

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			12/30/21 12:24	1

QC Sample Results

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-15806/4
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			25.0	24.54		mg/L		98	90 - 110		

Lab Sample ID: LCSD 880-15806/5
Matrix: Water
Analysis Batch: 15806

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			25.0	24.59		mg/L		98	90 - 110	0	20

Lab Sample ID: 880-9657-B-3 MS
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	284		250	535.7		mg/L		101	90 - 110		

Lab Sample ID: 880-9657-B-3 MSD
Matrix: Water
Analysis Batch: 15806

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	284		250	532.8		mg/L		100	90 - 110	1	20

QC Association Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

GC VOA

Analysis Batch: 15649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8021B	
MB 880-15649/39	Method Blank	Total/NA	Water	8021B	
MB 880-15650/5-A	Method Blank	Total/NA	Water	8021B	15650
LCS 880-15649/34	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-15649/35	Lab Control Sample Dup	Total/NA	Water	8021B	
880-9698-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
880-9698-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Prep Batch: 15650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15650/5-A	Method Blank	Total/NA	Water	5035	

Analysis Batch: 15797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	Total BTEX	

GC Semi VOA

Analysis Batch: 15869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015B NM	15919
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015B NM	15919
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015B NM	15919
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015B NM	15919

Analysis Batch: 15912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015 NM	

Prep Batch: 15919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	8015NM Aq Prep	
MB 880-15919/1-A	Method Blank	Total/NA	Water	8015NM Aq Prep	
LCS 880-15919/2-A	Lab Control Sample	Total/NA	Water	8015NM Aq Prep	
LCSD 880-15919/3-A	Lab Control Sample Dup	Total/NA	Water	8015NM Aq Prep	

HPLC/IC

Analysis Batch: 15806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9659-1	MW-1	Total/NA	Water	300.0	
MB 880-15806/3	Method Blank	Total/NA	Water	300.0	
LCS 880-15806/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-15806/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-9657-B-3 MS	Matrix Spike	Total/NA	Water	300.0	
880-9657-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Client Sample ID: MW-1
Date Collected: 12/21/21 12:33
Date Received: 12/22/21 15:50

Lab Sample ID: 880-9659-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	5 mL	5 mL	15649	12/29/21 07:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15797	12/30/21 10:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15912	01/04/22 15:21	AJ	XEN MID
Total/NA	Prep	8015NM Aq Prep			32.7 mL	3 mL	15919	01/03/22 14:39	DM	XEN MID
Total/NA	Analysis	8015B NM		100			15869	01/04/22 01:17	AJ	XEN MID
Total/NA	Analysis	300.0		50			15806	12/30/21 15:56	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. Job ID: 880-9659-1
Project/Site: NMGSAU 1416

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
8015 NM		Water	Total TPH
Total BTEX		Water	Total BTEX

Method Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID
8015NM Aq Prep	Microextraction	SW846	XEN MID

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Larson & Associates, Inc.
Project/Site: NMGSAU 1416

Job ID: 880-9659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-9659-1	MW-1	Water	12/21/21 12:33	12/22/21 15:50

Page 502 of 510

No. 2299

9659 CHAIN-OF-CUSTODY

1/5/2022

Larson & Associates, Inc.
Environmental Consultants

507 N Marienfeld Ste 202
Midland TX 79701
432-687 0901

Data Reported to

DATE 12/22/2021 PAGE 1 OF 1

PO#: LAB WORK ORDER#

PROJECT LOCATION OR NAME NMGSAU 1416

LAI PROJECT # 21-0119-01 COLLECTOR DS & JR

TRRP report? ☐ Yes ☒ No

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

TIME ZONE
Time zone/State
MST/MDT

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

Field Sample I D	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	BTEX 8021 ☐ MTBE ☐	TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL MOD 8015 ☒	OIL MOD 8015 ☒	VOC 8260 ☐	SVOC 8270 ☐	PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐	8151 HERBICIDES ☐	8082 PCBS ☐	TCLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ DW 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☒ TSS ☐ % MOISTURE ☐	pH ☐ HEXAVALENT CHROMIUM ☐ CYANIDE ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALK/ALINITY ☐	FIELD NOTES
MW-1		12/21/21	1233	W	2				X		X		X	X	X											X		X		Direct Bill to Apache
TOTAL																														

880-9659 Chain of Custody

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
	12/22/21 1550	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)

LABORATORY Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP 16/17 THERM# IR8
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☐ CARRIER BILL #
☒ HAND DELIVERED

Page 16 of 17

Received by OCD: 3/14/2024 1:16:20 PM

Released to Imaging: 4/16/2024 1:38:58 PM

Login Sample Receipt Checklist

Client: Larson & Associates, Inc. Job Number: 880-9659-1

Login Number: 9659 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Teel, Brianna

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").	True	

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

QUESTIONS

Action 323349

QUESTIONS

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2112649963**
Incident Name	**NAPP2112649963 NMGSAU 1416 @ 0**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Approved**
Incident Facility	**[fAPP2301045364] NMGSAU SAT 14**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	NMGSAU 1416
Date Release Discovered	03/25/2021
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Other | Flow Line - Production | Crude Oil | Released: 0 BBL (Unknown Released Amount) | Recovered: 0 BBL | Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Other | Flow Line - Production | Produced Water | Released: 0 BBL (Unknown Released Amount) | Recovered: 0 BBL | Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	The release original assessment was less than 5 barrels. During line repair the visual hydrocarbon staining was larger than expected. On 4/29/2021 OCD was notified that the release was reportable with an explanation via email. The release is currently being delineated to determine the depth of contamination.

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

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Larry Baker Title: Sr Environmemtal Tech Email: larry.baker@apachecorp.com Date: 03/14/2024

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

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	Yes
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	790
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	8130
GRO+DRO (EPA SW-846 Method 8015M)	7690
BTEX (EPA SW-846 Method 8021B or 8260B)	12.8
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	05/01/2024
On what date will (or did) the final sampling or liner inspection occur	07/31/2024
On what date will (or was) the remediation complete(d)	08/01/2024
What is the estimated surface area (in square feet) that will be reclaimed	6200
What is the estimated volume (in cubic yards) that will be reclaimed	7000
What is the estimated surface area (in square feet) that will be remediated	6200
What is the estimated volume (in cubic yards) that will be remediated	7000
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Yes
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement	Name: Larry Baker Title: Sr Environmemtal Tech Email: larry.baker@apachecorp.com Date: 03/14/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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

QUESTIONS (continued)

Operator: APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	OGRID: 873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	*{Unavailable.}*

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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 323349

CONDITIONS

Operator:	OGRID:
APACHE CORPORATION 303 Veterans Airpark Ln Midland, TX 79705	873
	Action Number: 323349
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Delineation and remediation plan is approved. Continue with plans to install monitoring wells as provided in the work plan and as approved. Submit future lab analysis and monitoring reports thirty days (30) after each ending quarter.	4/16/2024