# Incident ID: nAPP2109651124 REMEDIATION AND CLOSURE REPORT

Salado Draw 13 SWD Produced Water Release Lea County, New Mexico

> Latitude: 32.03556 Longitude: -103.63799

LAI Project No. 21-0100-20

February 7, 2024

#### Prepared for:

Chevron USA Inc. 6301 Deauville Boulevard Midland, Texas 79706

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#### 1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this remediation and closure report on behalf of Chevron USA Inc. (Chevron) for submittal to the New Mexico Oil Conservation Division (NMOCD) District I for a produced water release at the Salado Draw 13 SWD (Site) located in Unit P, Section 14, Township 26 South, Range 32 East in Lea County, New Mexico. The geodetic position is North 32.03556 and West - 103.63799. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

#### 1.1 Background

The release was discovered on March 25, 2021, due to a pinhole leak in a ball valve, causing approximately 6.44 barrels (bbls) of produced water to be released over an area of 2,597 square feet on federally owned land (BLM). Chevron recovered 5.5 bbls of the released fluid. The release occurred entirely on the production pad and no off-site areas were affected. The initial C-141 was submitted to the NMOCD on April 6, 2021. The release was assigned incident number nAPP2109651124. Appendix A presents the initial C-141 and spill calculation.

#### 1.2 Physical Setting

The physical setting is as follows:

- Surface elevation is approximately 3,170 feet above mean sea level (msl).
- Surface topography slopes gently towards the southeast.
- Soils are designated Pyote and Maljamar fine sands, where the Pyote setting consists of 0 to 30 inches of fine sand underlain by 30 to 60 inches of fine sandy loam, and where the Maljamar setting consists of 0 to 24 inches of fine sand underlain by 24 to 50 inches of sandy clay loam and 50 to 60 inches of cemented material (caliche).
- The geology is described as Holocene to middle Pleistocene aged eolian and piedmont deposits consisting interlayered eolian sands and piedmont-slope deposits.
- Groundwater is greater 101.5 feet below ground surface (bgs), based on a dry groundwater bore (SB-1) drilled on April 14, 2020.
- The minimum distance between the release and the following areas is as follows:
  - Continuously flowing watercourse: twenty-two (22) miles to the west.
  - Lakebed, sinkhole, or playa lake: 1.1 miles southeast.
  - o Occupied residence: 2.75 miles to the southwest.
  - Privately owned domestic freshwater well: 2.7 miles to the southwest.
  - o Municipal boundary: Jal, New Mexico, twenty-five (25) miles to the northeast.
  - Wetland: 1.1 miles southeast.
  - o Subsurface mine: twenty-six (26) miles to the northwest.
  - o There are no known unstable (non-karst) areas within a 5-mile radius.
- The site is not located in a 100-year flood plain.
- USGS karst occurrence potential data designates the area as medium risk.
- The spill was contained entirely on the production pad, and no off-site areas were impacted.
- Neither surface water nor groundwater was impacted by the release.

Figure 3 presents an aerial map with the groundwater bore location. Appendix B presents the karst risk potential map. Appendix C presents the boring log.

#### 1.3 Remediation Levels

The following remediation standards are based on closure criteria for groundwater greater than one hundred feet bgs for soils impacted by a release as presented in Table 1 of 19.15.29 NMAC:

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

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

#### 2.0 DELINEATION

The release was delineated between May 20, 2021, and November 11, 2021. A delineation report and remediation plan titled, *Delineation Report and Remediation Plan, Salado Draw 13 SWD, Produced Water Release, Lea County, New Mexico*, was received and approved by the NMOCD on June 7, 2022.

The remediation plan proposed the following remedial actions:

- Excavate soil from an area measuring approximately 2,144 square feet encompassing S-2, S-5, S-S-8, S-6, S-7, and S-10 to a depth of two feet bgs.
- Excavate soil from an area measuring approximately 1,194 square feet encompassing S-1, S-3, and S-4 to a depth of 4.1 feet bgs.
- Collect five (5) point composite bottom and sidewall confirmation soil samples every 200 square feet and analyze for BTEX, TPH and chloride.
- Backfill excavation with clean caliche assuming achievement of NMOCD remediation levels.
- Prepare report with photographs for submittal to NMOCD District I.

Table 1 presents the delineation soil sample analytical data summary. Figure 4 presents an aerial map with the proposed excavation areas. Appendix D presents NMOCD communications.

#### 3.0 REMEDIATION

Between May 24, 2023, and December 18, 2023, SDR Enterprises (SDR) and Warrior Technologies, LLC (Warrior), under the guidance of LAI, excavated 323 cubic yards of impacted soil from an area of about 2,241 square feet using mechanical and hydro excavation methods. Mechanically excavated soil was temporally stored on a polyethylene liner near the excavation and the hydro excavated material was stored in vacuum boxes. All excavated material was disposed of at the Milestone Orla Facility near Orla, Texas.

LAI personnel collected a total of twenty-six (26) confirmation soil samples, including seventeen (17) initial confirmation samples and nine (9) final confirmation samples where addition excavation occurred due to chloride values exceeding NMOCD closure criteria. Each initial confirmation sample represents an area of 200 square feet or less. All samples were delivered under chain-of- custody and preservation to Eurofins-Xenco (Xenco) in Midland, Texas. Xenco analyzed the samples for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA SW-846 Method 8021B; total petroleum hydrocarbons (TPH),

including gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (MRO) by EPA SW-846 Method 8015M; and chloride by EPA Method 300.

#### 3.1 Remediation Activities

On May 24, 2023, LAI personnel collected seventeen initial composite confirmation soil samples (C-1 through C-17) from the bottom and sidewalls of the excavation. Xenco reported that all samples were below closure criteria and analytical reporting limit (RL) for benzene, BTEX, and TPH. Chloride was reported above closure criteria C-6 (693 mg/Kg), C-7 (1,190 mg/Kg), C-8 (827 mg/Kg), C-9 (2,380 mg/Kg), C-11 (688 mg/Kg), C-15 (1,570 mg/Kg), C-17 (1,280 mg/Kg).

On June 14, 2023, LAI personnel collected two initial composite confirmation soil samples (C-18 and C-19) from the bottom and sidewall of the excavation. Xenco reported that the samples below were below closure criteria and analytical RL for benzene, BTEX, and TPH. Chloride was reported above closure criteria in sample C-19 (2,160 mg/Kg).

On December 18 and 19, 2023, LAI personnel collected seven samples from areas where additional excavation was performed due to chloride being reported closure criteria. The resampled areas included C-6, C-7, C-8a, C-11, C-15a, C-17a, and C-19a. Xenco reported that all samples were below closure criteria for benzene, BTEX, TPH, and chloride. Notification of the sampling event was submitted to and approved on December 12, 2023.

Laboratory analysis demonstrates that that benzene, BTEX, TPH, and chloride are below NMOCD closure standards listed in Table 1 of 19.15.29 NMAC in all confirmation samples, apart from sample locations (C-8, C-9, C-15, C-17, and C-19) where a deferral is requested. Figure 5 presents the excavation areas and confirmation soil sample location map. Table 2 presents the confirmation sample analytical summary. Appendix D presents NMOCD communications. Appendix E presents the laboratory reports.

# 3.2 Backfill

On May 5, 2023, LAI personnel collected two (2) composite soil samples (BF-1 and BF-3) of backfill material from a borrow pit located in Unit K (NE/4, SW/4), Section 21, Township 26 South, Range 32 East, in Lea County, New Mexico. Xenco analyzed the samples for BTEX, TPH and chloride, and reported that all parameters were below NMOCD requirements outlined in NMAC 19.25.29.13D(1). Benzene, BTEX and TPH were below analytical reporting limits. Chloride was reported at 61.5 mg/Kg and 82.6 mg/Kg in samples BF-1 and BF-3, respectively.

On January 17 and 18, 2024, the excavation was backfilled with about 323 cubic yards of caliche and topsoil from the borrow pit. The pad was graded and compacted to surface conditions prior to the remediation. Table 2 presents the laboratory analytical data summary. Appendix E presents the laboratory reports. Appendix F presents photographic documentation of the backfilled excavation.

# **4.0 DERFERAL REQUEST**

Chevron requests a deferral for a 756 square foot area bounded by sample locations C-8, C-9, C-15, C-17, and C-19. The total volume of soil within the deferral area is approximately 114.8 cubic yards. The sample locations are in close proximity to flowlines, electrical lines, concrete support structures, production and automation equipment, and lined containments. Remediation of these areas would require major facility deconstruction and do not pose an imminent risk to human health or the environment. Figure 6 presents an aerial image with the deferral area.

Tables

## Lea County, New Mexico 32° 02' 10.85" North, 103° 38' 16.73" West

Sample	Depth	Collection	Status	Benzene	BTEX	C6 - C10	C10 - C28	C28 - C36	TPH	Chloride
	(Feet)	Date		(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Remediation	Level:			10	50				100/2,500	600/20,000
S-1	0.5	5/20/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	3,750
	1	5/20/2021	In-Situ	0.00252	<0.00401	<49.8	<49.8	<49.8	<49.8	11,300
	1	11/11/2021	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	2,680
	3	11/11/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	1,370
	5	11/11/2021	In-Situ	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	1,190
	10	11/11/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	449
S-2	0.5	5/20/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	3,830
	1	5/20/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	1,330
	1	11/11/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	949
	3	11/11/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	37.3
	5	11/11/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	12.7
	10	11/11/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	114
S-3	0.5	5/20/2021	In-Situ	<0.00200	<0.00400	<49.9	72.7	<49.9	72.7	4,540
	1	5/20/2021	In-Situ	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	1,030
	1	11/11/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	1,040
	3	11/11/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	1,240
	5	11/11/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	752
	10	11/11/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	612
	15	5/10/2022	In-Situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	90.2
	20	5/10/2022	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	74.2
S-4	0.5	5/20/2021	In-Situ	<0.00199	<0.00398	<50.0	59.6	<50.0	59.6	2,110
	1	5/20/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	3,220

## Lea County, New Mexico 32° 02' 10.85" North, 103° 38' 16.73" West

Sample	Depth	Collection	Status	Benzene	BTEX	C6 - C10	C10 - C28	C28 - C36	TPH	Chloride
	(Feet)	Date		(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Remediation	Level:			10	50				100/2,500	600/20,000
	1	11/11/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	785
	3	11/11/2021	In-Situ	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	633
	5	11/11/2021	In-Situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	784
	10	11/11/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	53.0
S-5	0.5	5/20/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	8,660
	1	11/11/2021	In-Situ	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	855
	3	11/11/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	213
	5	11/11/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	588
	10	11/11/2021	In-Situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<5.01
S-6	0.5	5/20/2021	In-Situ	<0.00199	<0.00398	<50.0	54.2	<50.0	54.2	5,550
	1	5/20/2021	In-Situ	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	5,460
	1	11/12/2021	In-Situ	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	68.7
	3	11/12/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	2.44
	5	11/12/2021	In-Situ	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	237
	10	11/12/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	114
S-7	0.5	5/20/2021	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	7,060
	1	11/12/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	723
	3	11/12/2021	In-Situ	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	108
	5	11/12/2021	In-Situ	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	113
	10	11/12/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	41.6
S-8	0.5	5/20/2021	In-Situ	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	4,930

## Lea County, New Mexico 32° 02' 10.85" North, 103° 38' 16.73" West

Sample	Depth	Collection	Status	Benzene	BTEX	C6 - C10	C10 - C28	C28 - C36	TPH	Chloride
	(Feet)	Date		(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Remediation	Level:			10	50				100/2,500	600/20,000
	1	5/20/2021	In-Situ	<0.00200	<0.00401	<49.9	59.3	<49.9	59.3	1,650
	1	11/12/2021	In-Situ	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	587
	3	11/12/2021	In-Situ	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	350
	5	11/12/2021	In-Situ	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	455
	10	11/12/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	79.8
S-9	0.5	5/20/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	39.0
	1	5/20/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	25.2
S-10	0.5	5/20/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	6,230
	1	5/20/2021	In-Situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	2,630
	1	11/11/2021	In-Situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	948
	3	11/11/2021	In-Situ	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	225
	5	11/11/2021	In-Situ	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	28.7
	10	11/11/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	19.2
S-11	0.5	5/20/2021	In-Situ	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	11.6
	1	5/20/2021	In-Situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	21.2
S-12	0.5	5/20/2021	In-Situ	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	209
	1	5/20/2021	In-Situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	292
S-13	0.5	11/12/2021	In-Situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	7.24
	1	11/12/2021	In-Situ	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	12.4

#### Lea County, New Mexico

32° 02' 10.85" North, 103° 38' 16.73" West

Sample	Depth	Collection	Status	Benzene	BTEX	C6 - C10	C10 - C28	C28 - C36	TPH	Chloride
	(Feet)	Date		(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Remediation Level:				10	50			100/2,500	600/20,000	

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

Depth in feet below ground surface (bgs)

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

<: denotes concentration less than analytical method reporting limit

**Bold and Highlighted exceeds OCD remediation action limits** 

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron - Salado Draw 13 SWD
Lea County, New Mexico
32° 02' 10.85" North, 103° 38' 16.73" West

Sample ID	Position	Depth (feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28	C28 - C35	TPH (mg/Kg)	Chloride
a		(leet)			(mg/Kg)		(IIIg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
Closure Crite					10	50				100/2,500	600/20,000
C-1	Bottom	2	05/24/2023	In-situ	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	83.4
C-2	Bottom	2	05/24/2023	In-situ	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	326
C-3	Bottom	2	05/24/2023	In-situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	270
C-4	Bottom	2	05/24/2023	In-situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	524
C-5	Bottom	2	05/24/2023	In-situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	455
C-6	Bottom	2	05/24/2023	Excavated	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	693
		4.1	12/18/2023	In-situ	<0.00200	<0.00399	<50.2	<50.2	<50.2	<50.2	208
C-7	Bottom	2	05/24/2023	Excavated	< 0.00201	< 0.00402	<50.0	<50.0	<50.0	<50.0	1,190
		4.1	12/18/2023	In-situ	<0.00198	< 0.00397	<50.1	<50.1	<50.1	<50.1	412
C-8	Sidewall	0 - 2	05/24/2023	Excavated	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	827
C-8a	Sidewall	0 - 4.1	12/18/2023	In-situ	< 0.00201	<0.00402	<50.5	<50.5	<50.5	<50.5	82.4
C-9	Sidewall	0 - 2	05/24/2023	In-situ	< 0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	2,380
C-10	Sidewall	0 - 2	05/24/2023	In-situ	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	422
C-11	Bottom	3	05/24/2023	Excavated	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	688
		4.1	12/18/2023	In-situ	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	125
C-12	Bottom	4.1	05/24/2023	In-situ	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	451
C-13	Bottom	4.1	05/24/2023	In-situ	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	171
C-14	Sidewall	0 - 3	05/24/2023	In-situ	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	520
C-15	Sidewall	0 - 3	05/24/2023	Excavated	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	1,570
C-15a	Sidewall	0 - 3	12/18/2023	In-situ	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	172
C-16	Bottom	4.1	05/24/2023	In-situ	<0.00202	<0.00402	<50.0	<50.0	<50.0	<50.0	1,050
C-17	Sidewall	0 - 4.1	05/24/2023	Excavated	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	1,280
C-17a	Sidewall	0 - 4.1	12/18/2023	In-situ	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	143
C-18	Bottom	2	06/14/2023	In-situ	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	105
C-19	Sidewall	0 - 2	06/14/2023	Excavated	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	2,160
C-19a	Sidewall	0 - 2	12/19/2023	In-situ	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	93.1
				В	ackFill Samp	les					
BF-1		I	05/11/2023	In-Situ	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	61.5
BF-3			05/11/2023	In-Situ	<0.00201	<0.00399	<49.9	<49.9	<49.9	<49.9	82.6
			03, 11, 2023	iii Situ	10.00200	10.00555	17.5	17.3	173.3	173.3	52.0

#### Table 2

# Confirmation Soil Sample Analytical Data Summary Chevron - Salado Draw 13 SWD Lea County, New Mexico 32° 02' 10.85" North, 103° 38' 16.73" West

#### Notes:

Analysis performed by Eurofins-Xenco Laboratories (Xenco), Midland, Texas, by EPA SW-846 Methods 8021B (BTEX) and 8015M (TPH), and Method 300 (chloride).

Depth in feet below ground surface (bgs)

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

Bold and highlighted indicates analyte concentrations above NMOCD closure criteria.

Bold and highlighted indicates sample location where a deferral is requested.

Figures

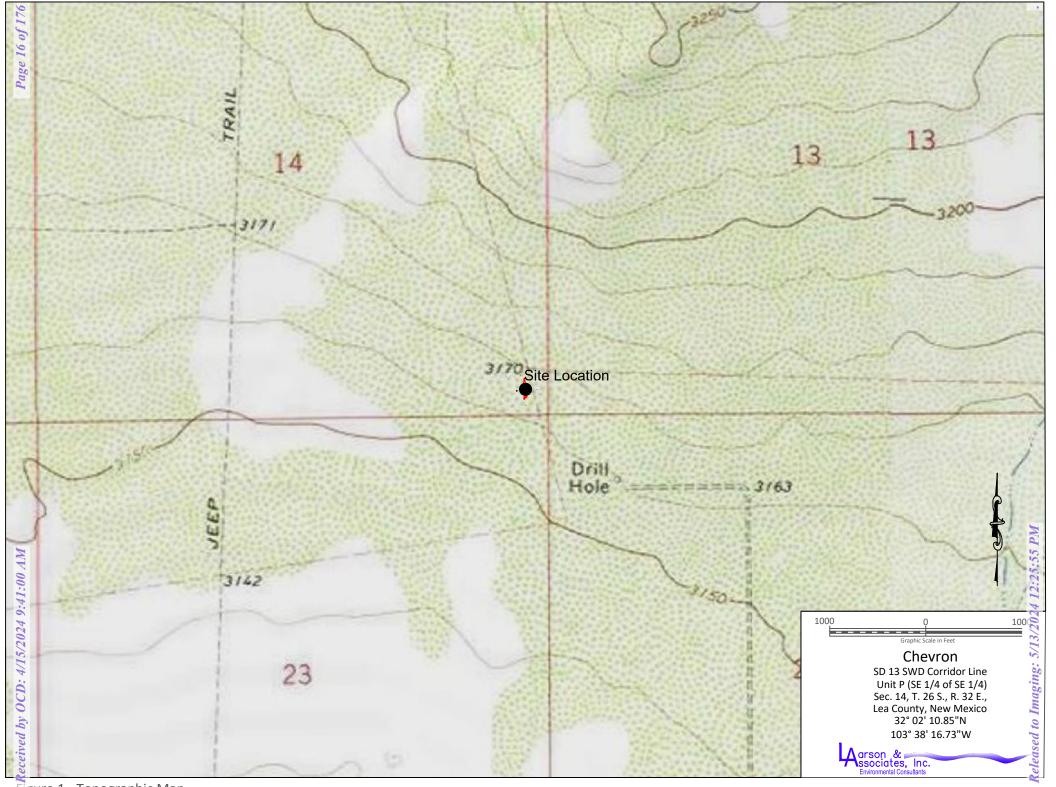


Figure 1 - Topographic Map

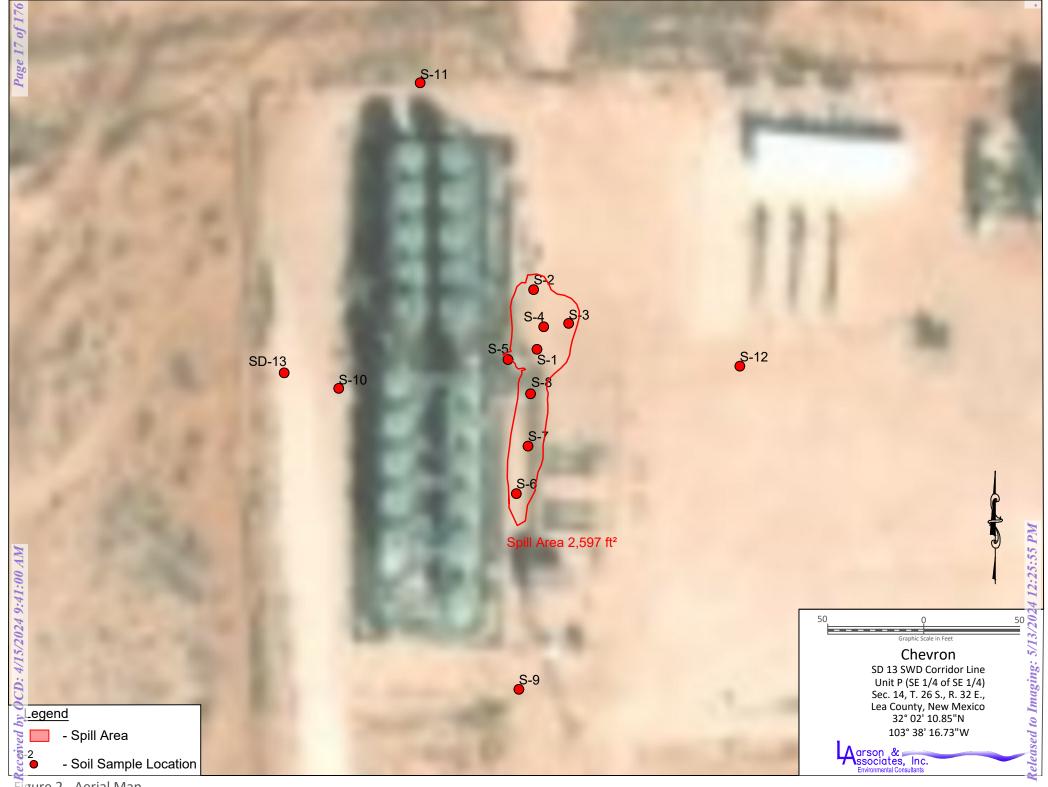


Figure 2 - Aerial Map



Figure 3 - Aerial Map Showing Soil Bore Location

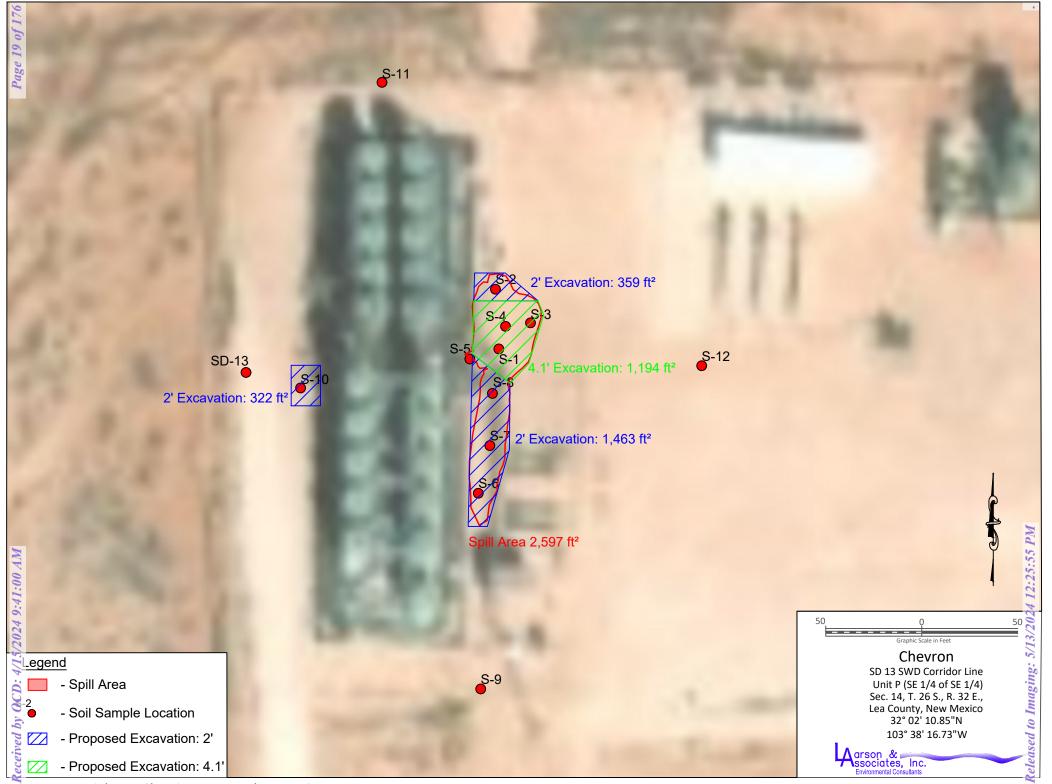


Figure 4 - Aerial Map Showing Proposed Excavation Areas

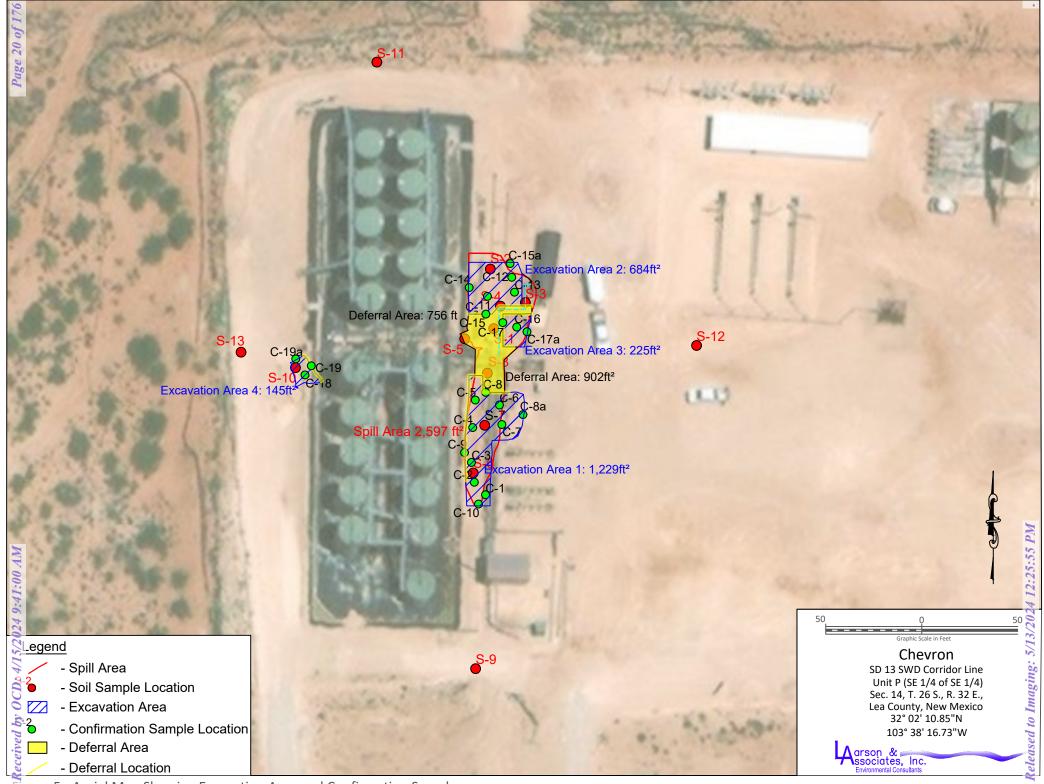


Figure 5 - Aerial Map Showing Excavation Area and Confirmation Samples



Figure 6 - Focused Aerial Map Showing Deferral Area

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	nAPP2109651124
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party: Chevron USA Inc	OGRID: 4323
Contact Name: Amy Barnhill	Contact Telephone: 432-687-7108
Contact email: ABarnhill@chevron.com	Incident #nAPP2109651124
Contact mailing address: 6301 Deauville Blvd Midland, Tx 79706	
Location of R	elease Source

Latitude	Latitude: 32.035564 Longitude: -103.637997  (NAD 83 in decimal degrees to 5 decimal places)										
Site Name: Sa	alado Draw	13 SWD Discharge	e Line		Site Type: Oil						
Date Release	Discovered:	3-25-21			API# (if applicable)						
Unit Letter	Section	Township	Range		County						

-		_00	022	24	
Surface Owner	r: State	Federal Tr	ribal Private ( <i>N</i>	Name:	)
Bullace Owner	State		Ibai I II vaic (I	vame.	

#### **Nature and Volume of Release**

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls) Produced Water Volume Released (bbls): 6.44 Volume Recovered (bbls): 5.5 Is the concentration of dissolved chloride in the ⊠ Yes □ No produced water >10,000 mg/l? Condensate Volume Recovered (bbls) Volume Released (bbls) Natural Gas Volume Recovered (Mcf) Volume Released (Mcf) Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units) Cause of Release: Spill was due to a pin hole leak in the spool piece on the common discharge line off of the three charge pumps. Immediate Actions Taken: Shut off pumps. Isolated closest upstream and downstream isolation valves for spool piece.

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible p	arty consider this a major release?
☐ Yes ⊠ No		
If YES, was immediate n	notice given to the OCD? By whom? To whom? W	Then and by what means (phone, email, etc)?
	Initial Respon	se
The responsible	party must undertake the following actions immediately unless t	hey could create a safety hazard that would result in injury
☐ The source of the rele	ease has been stopped.	
The impacted area ha	as been secured to protect human health and the env	ironment.
Released materials ha	ave been contained via the use of berms or dikes, at	sorbent pads, or other containment devices.
All free liquids and re	recoverable materials have been removed and manage	ged appropriately.
If all the actions describe	ed above have <u>not</u> been undertaken, explain why:	
D 40.47.20.0 D (4) NH		
has begun, please attach		ion immediately after discovery of a release. If remediation have been successfully completed or if the release occurred tach all information needed for closure evaluation.
		y knowledge and understand that pursuant to OCD rules and
		and perform corrective actions for releases which may endanger s not relieve the operator of liability should their operations have
		undwater, surface water, human health or the environment. In bility for compliance with any other federal, state, or local laws
and/or regulations.	of a C-141 report does not reneve the operator of responsi	of the comphance with any other rederal, state, or local laws
Printed Name: Amy Barn	nhill Title	: Water Specialist
Signature.	2 Shill Date	: 4-6-21
email: ABarnhill@chevro		phone: 432-687-7108
OCD Only		
Received by:	Date:	

# **Spill Calculations**

#### Area 1

Shape:Rectangle

Secondary Containment?:No

Standing Liquid Dimensions: 18 ft x 9 ft x 1 in

Standing Liquid Volume:2.404 bbl
Oil Skim Dimensions: 18 ft x 9 ft x 0 in

Oil Volume: .000 bbl Penetration Depth: 0 in Water to Soil Volume: .000 bbl Water Volume: **2.404 bbl** 

#### Area 2

Shape:Rectangle
Secondary Containment?:No
Standing Liquid Dimensions:30 ft x 9 ft x 1 in
Standing Liquid Volume:4.007 bbl
Oil Skim Dimensions:30 ft x 9 ft x 0 in
Oil Volume: .000 bbl

Penetration Depth:0 in
Water to Soil Volume: .000 bbl
Water Volume:4.007 bbl

#### Area 3

Shape:Rectangle
Secondary Containment?:No
Standing Liquid Dimensions:4 ft x 2 ft x .25 in
Standing Liquid Volume:.030 bbl
Oil Skim Dimensions:4 ft x 2 ft x 0 in
Oil Volume: .000 bbl

Penetration Depth:0 in

Water to Soil Volume: .000 bbl

Water Volume: 0.03 bbl

Appendix B
Karst Potential Map



Appendix C

Boring Log

					BORING	RECORD										
		Start: 10	):35 MDT		DESCRIPTION USCS GRAPHIC LOG			PID	RE	ΕΑΕ	OING	i	S	AMP	LE	REMARKS
GEOLOGIC	DEPTH	Finish: 1			SS	SRAPHIC LOG	PF	PM 2	X	1			~	ING	Ϋ́	BACKGROUND
UNIT			CRIPTION LIT	HOI OGIC	SCR	Hd	2 4	6	8 10	12	14 1	6 18	1 1BER	PID READING	RECOVERY	PID READING
		DLS	DIVIE FION LIT	HOLOGIC	DE	GR/							¬W NOW	유		SOIL: PPM
	0	Silty Sar	nd, 5YR 5/4	1, Reddish					Ħ	Ť	+					_
	_		/ery Fine C													
	5 —		Sand, Poor	ly Sorted,	ML										5	_
	_	Dry											1			] =
	-			, Pink, Very											'	-
	10 —		ined, Poor	ly Sorted,											10	)
		Dry														
	1 -															_
	15				Caliche										15	
	_															_
	20														20	_
																_
	=															
	25 —	0	. => /= = /			1 1 1 1 1 1							2		25	
			nd, 5YR 5/4 Fine Graine	1, Reddish												
	_		th Caliche		ML											_
	30 —		), Poorly S										3		30	<u> </u>
	_	Caliche.	2.5YR 8/3	,Pink, Very												_
	35 —		ined, Poor		Caliche										35	
	33		angular Cl	asts	Canone	<del></del>										<u> </u>
	=	(~10mm	)										4			
	40 —	Silty Sar	nd, 5YR 6/4	4. Liaht									Ī		39 40	— —
	=		Brown, Ve													
			Quartz Sa													
	45			gular Caliche											45	<u> </u>
	_	Clasts (	-10mm)													_
	50 —														50	_
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	_															_
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	_					<u> </u>	$\perp$		Ш			Щ	\ \h-	\ <u>\</u>	     1	0.0180.01
		JOUS AUGER S		WATER TAE	BLE ( TIME	OF BORING	, ,	)B N								9-0180-01
		ENETRATION T	EST		HOLE DIAMETER : 2"  LOCATION : Salado Draw 24 CTB				L CTB							
	NDISTURBEI ATER TABLI			•	E Chavez											
1 -		_ ( 24 NK3 )	DRILL DATE :	NR NO RECOVI				G CONTRACTOR : Scarborough								
Aarson & ssociates, I	nc.		04-14-	-2020		3-01									otary	

				E	BORING	RECORD													
	Start: 10:35 MDT					96	PID READING						SAMPLE				REMARKS		
GEOLOGIC	DEPTH	Finish: 1	5:15	DESCRIPTION	GRAPHIC LOG	PPM X 1						2	PID READING	/ERY		BACKGROUND PID READING			
UNIT		DESCRIPTION			LITHOLOGIC	RAP	2 4 6 8 10 12 14 16 18				NUMBER PID READIN	) RE/	RECOVERY	힑	SOIL :PPM				
	65-				0	++	+		+		T	$\neg$	PII	R		SOIL:PPM			
	_			6, Yellowish									5		H	66			
			/ery Fine Grained, Poorly I with Subangular Caliche lack Chert Clasts																
					ML												$\dashv$		
	70—	(~0.5mm														70			
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				SYR 4/6, Yellowish rained, Poorly	ML														
	_																$\dashv$		
	90 —	City Can	L CVD 4/													90	$\exists$		
	_																$\dashv$		
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	_	(~2mm)														-			
	95 —														9	95			
	_																$\dashv$		
	_																$\exists$		
	100—														10¢				
	_												6		$\sqcup$	10	— 1.5		
	TD:101.5'  Dry After 72 Hours																$\exists$		
																	$\dashv$		
	105—															105	コ		
	_																_		
ONE CONTINUOUS AUGED SAMPLED										JOB NUMBER : Chevron/ 19-0180-01									
ONE CONTINUOUS AUGER SAMPLER WATER TABLE ( TIME OF BORING )  STANDARD PENETRATION TEST LABORATORY TEST LOCATION								HOLE DIAMETER :2"											
UNDISTURBED SAMPLE + PENETROMI							Salado Draw 24 CTB					СТВ							
WATER TABLE ( 24 HRS ) NR NO RECOVERY								LAI GEOLOGIST : E. Chavez											
Associates, Inc. Environmental Consultants  DRILL DATE: 04-14-2020					NUMBER : 6-01	DRILLING CONTRACTOR: Scarborough													
/ ISSOCIATES, INC. Environmental Consultants  U4-14-2020						-U I	DRILLING METHOD : Air Rotary												

# Appendix D NMOCD Communications

From: Barnhill, Amy D.
To: Robert Nelson

**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 114489

**Date:** Monday, June 13, 2022 12:34:39 PM

#### **SWD 13**

#### Thank you, Amy

From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

Sent: Tuesday, June 7, 2022 4:43 PM

To: Barnhill, Amy D. <ABarnhill@chevron.com>

Subject: [\*\*EXTERNAL\*\*] The Oil Conservation Division (OCD) has approved the application,

Application ID: 114489

To whom it may concern (c/o Amy Barnhill for CHEVRON U S A INC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2109651124, with the following conditions:

#### • Remediation Plan Approved.

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you, Jennifer Nobui Environmental Specialist-Advanced 505-476-3441 Jennifer.Nobui@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

Districts:

Counties:





Operator Data 🗸 Searches v **Hearing Fee Application** 

Hobbs

Lea

# **OCD Permitting**

Home > Operator Data > Action Status > Action Search Results > Action Status Item Details

#### [NOTIFY] Notification Of Sampling (C-141N) Application

#### **Submission Information**

Submission ID:

293468

[4323] CHEVRON U S A INC

Operator: Description:

CHEVRON U S A INC [4323]

, SALADO DRAW 13 SWD

, nAPP2109651124

Status:

APPROVED

Status Date:

12/12/2023

References (1):

nAPP2109651124

#### **Forms**

This application type does not have attachments.

#### Questions

#### Prerequisites

Incident ID (n#)

nAPP2109651124

Incident Name

NAPP2109651124 SALADO DRAW 13 SWD @ 0

Incident Type

**Produced Water Release** 

Incident Status

Remediation Plan Approved

#### Location of Release Source

Site Name

SALADO DRAW 13 SWD

Date Release Discovered

03/25/2021

Surface Owner

Federal

#### **Sampling Event General Information**

Please answer all the questions in this group.

What is the sampling surface area in square feet

1,600

What is the estimated number of samples that will be gathered

Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC

12/18/2023

Time sampling will commence

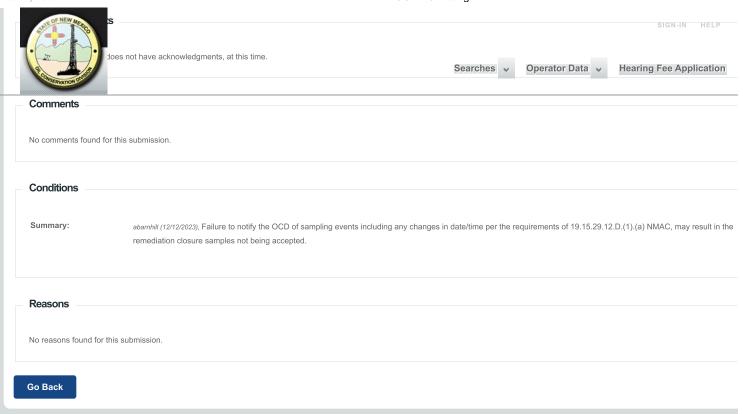
10:00 AM

#### Warning: Notification can not be less than two business days prior to conducting final sampling.

Please provide any information necessary for observers to contact samplers Please provide any information necessary for navigation to sampling site

432-687-0901 Robert Nelson

Navigation to the site can be a gps coordinate and is as follows: 32.036338, -103.637711



New Mexico Energy, Minerals and Natural Resources Department | Copyright 2012

1220 South St. Francis Drive | Santa Fe. NM 87505 | P: (505) 476-3200 | F: (505) 476-3220



NRD Home OCD Main Pag

CD Rules

Appendix E

Laboratory Reports

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Mr. Mark J Larson Larson & Associates, Inc. 507 N Marienfeld Suite 202 Midland, Texas 79701

Generated 5/22/2023 4:58:06 PM

# **JOB DESCRIPTION**

SD 13 SWD SDG NUMBER 21-0100-20

# **JOB NUMBER**

880-28402-1

Eurofins Midland 1211 W. Florida Ave Midland TX 79701

# **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 5/22/2023 4:58:06 PM

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

Eurofins Midland is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies
Page 2 of 19
5/22/2023

Released to Imaging: 5/13/2024 12:25:55 PM

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Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Laboratory Job ID: 880-28402-1 SDG: 21-0100-20

# **Table of Contents**

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## **Definitions/Glossary**

Client: Larson & Associates, Inc.

Project/Site: SD 13 SWD

Job ID: 880-28402-1

SDG: 21-0100-20

100-20

### **Qualifiers**

GC VOA Qualifier

 Qualifier
 Qualifier Description

 S1 Surrogate recovery exceeds control limits, low biased.

 U
 Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

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

**HPLC/IC** 

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.

z Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery

CFL Contains Free Liquid

CFU Colony Forming Unit

CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Midland

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### **Case Narrative**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1 SDG: 21-0100-20

Job ID: 880-28402-1

**Laboratory: Eurofins Midland** 

Narrative

Job Narrative 880-28402-1

#### Receipt

The samples were received on 5/15/2023 8:33 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 -6.6°C

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: BF-1 (880-28402-1) and BF-3 (880-28402-2).

#### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-53724/52). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-53496/5-A). Evidence of matrix interferences is not obvious.

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

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-53468 and analytical batch 880-53448 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.

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# **Client Sample Results**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1 SDG: 21-0100-20

Lab Sample ID: 880-28402-1

Matrix: Solid

Client Sample ID: BF-1
Date Collected: 05/11/23 11:00

Date Received: 05/15/23 08:33

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
Toluene	< 0.00201	U	0.00201	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
o-Xylene	< 0.00201	U	0.00201	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/16/23 15:13	05/20/23 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			05/16/23 15:13	05/20/23 15:21	1
1,4-Difluorobenzene (Surr)	91		70 - 130			05/16/23 15:13	05/20/23 15:21	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/22/23 15:52	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH			<b>RL</b> 49.9		D	Prepared	Analyzed 05/17/23 11:56	Dil Fac
- <sup></sup>				99				
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:15	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:15	
5 5 ,				0 0				1
C10-C28)			40.0			05/40/00 44-44	05/47/02 02:45	
5 5 ,	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:15	1
C10-C28)			49.9 <b>Limits</b>			05/16/23 11:44  Prepared	05/17/23 03:15  Analyzed	
C10-C28) OII Range Organics (Over C28-C36)	<49.9							1
C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 %Recovery		Limits			Prepared	Analyzed	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	<49.9	Qualifier	Limits 70 - 130 70 - 130			<b>Prepared</b> 05/16/23 11:44	Analyzed 05/17/23 03:15	1 <b>Dil Fac</b>
C10-C28) Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane (Surr) o-Terphenyl (Surr)	<49.9  **Recovery 112 82  Chromatograp	Qualifier	Limits 70 - 130 70 - 130		D	<b>Prepared</b> 05/16/23 11:44	Analyzed 05/17/23 03:15	1 <b>Dil Fac</b>

Client Sample ID: BF-3

Lab Sample ID: 880-28402-2

Date Collected: 05/11/23 11:05

Matrix: Solid

Date Received: 05/15/23 08:33

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/16/23 15:13	05/20/23 15:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			05/16/23 15:13	05/20/23 15:41	1
1,4-Difluorobenzene (Surr)	83		70 - 130			05/16/23 15:13	05/20/23 15:41	1

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# **Client Sample Results**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1

SDG: 21-0100-20

Lab Sample ID: 880-28402-2

Matrix: Solid

Client Sample ID: BF-3
Date Collected: 05/11/23 11:05
Date Received: 05/15/23 08:33

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			05/22/23 15:52	1			
Method: SW846 8015 NM - Diese	Range Organi	ics (DRO) (G	C)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/17/23 11:56	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:36	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:36	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/17/23 03:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			05/16/23 11:44	05/17/23 03:36	1
o-Terphenyl (Surr)	87		70 - 130			05/16/23 11:44	05/17/23 03:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	82.6		5.05	mg/Kg			05/17/23 13:22	1

## **Surrogate Summary**

Client: Larson & Associates, Inc. Job ID: 880-28402-1 Project/Site: SD 13 SWD SDG: 21-0100-20

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-28402-1	BF-1	110	91	
880-28402-2	BF-3	116	83	
LCS 880-53496/1-A	Lab Control Sample	116	101	
LCSD 880-53496/2-A	Lab Control Sample Dup	111	110	
MB 880-53496/5-A	Method Blank	69 S1-	88	
MB 880-53768/5-A	Method Blank	90	100	
Surrogate Legend				
BFB = 4-Bromofluorobenzen	e (Surr)			
DFBZ = 1,4-Difluorobenzene	e (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)	
880-28402-1	BF-1	112	82	
880-28402-2	BF-3	118	87	
LCS 880-53468/2-A	Lab Control Sample	104	83	
LCSD 880-53468/3-A	Lab Control Sample Dup	103	79	
MB 880-53468/1-A	Method Blank	191 S1+	156 S1+	

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

## **QC Sample Results**

 Client: Larson & Associates, Inc.
 Job ID: 880-28402-1

 Project/Site: SD 13 SWD
 SDG: 21-0100-20

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-53496/5-A

Matrix: Solid Analysis Batch: 53724 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 53496

	MB	MB					
Analyte	Result	Qualifier	RL	Unit D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	05/16/23 15:13	05/20/23 08:49	1
Toluene	<0.00200	U	0.00200	mg/Kg	05/16/23 15:13	05/20/23 08:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	05/16/23 15:13	05/20/23 08:49	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg	05/16/23 15:13	05/20/23 08:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	05/16/23 15:13	05/20/23 08:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	05/16/23 15:13	05/20/23 08:49	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	05/16/23 15:13	05/20/23 08:49	1
1,4-Difluorobenzene (Surr)	88		70 - 130	05/16/23 15:13	05/20/23 08:49	1

Lab Sample ID: LCS 880-53496/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 53724

Prep Type: Total/NA Prep Batch: 53496

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1100		mg/Kg		110	70 - 130	
Toluene	0.100	0.09513		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.1021		mg/Kg		102	70 - 130	
m,p-Xylenes	0.200	0.2096		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.1271		mg/Kg		127	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-53496/2-A

Matrix: Solid

Analysis Batch: 53724

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 53496

RPD LCSD LCSD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1234 mg/Kg 123 70 - 130 11 35 Toluene 0.100 0.1044 mg/Kg 104 70 - 130 9 35 Ethylbenzene 0.100 0.1038 mg/Kg 104 70 - 130 2 35 0.200 m,p-Xylenes 0.2166 mg/Kg 108 70 - 130 35 0.100 0.1176 70 - 130 o-Xylene mg/Kg 118 35

LCSD LCSD

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1.4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: MB 880-53768/5-A

Matrix: Solid

Analysis Batch: 53724

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 53768

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/19/23 11:17	05/19/23 22:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/19/23 11:17	05/19/23 22:14	1

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## QC Sample Results

Client: Larson & Associates, Inc. Job ID: 880-28402-1 SDG: 21-0100-20 Project/Site: SD 13 SWD

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

Lab Sample ID: MB 880-53768/5-A **Matrix: Solid** 

Analysis Batch: 53724

Analyte Ethylbenzene m,p-Xylenes o-Xylene Xylenes, Total Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 53768

MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
 <0.00200	U	0.00200	mg/Kg		05/19/23 11:17	05/19/23 22:14	1
<0.00400	U	0.00400	mg/Kg		05/19/23 11:17	05/19/23 22:14	1
<0.00200	U	0.00200	mg/Kg		05/19/23 11:17	05/19/23 22:14	1
<0.00400	U	0.00400	mg/Kg		05/19/23 11:17	05/19/23 22:14	1

MR MR

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90	70 - 130	05/19/23 11:17	05/19/23 22:14	1
1,4-Difluorobenzene (Surr)	100	70 - 130	05/19/23 11:17	05/19/23 22:14	1

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

Lab Sample ID: MB 880-53468/1-A

**Matrix: Solid** 

Analysis Batch: 53448

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 53468

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/16/23 19:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/16/23 19:50	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/16/23 11:44	05/16/23 19:50	1
	MB	MB						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	191	S1+	70 - 130	05/16/23 11:44	05/16/23 19:50	1
o-Terphenyl (Surr)	156	S1+	70 - 130	05/16/23 11:44	05/16/23 19:50	1

Lab Sample ID: LCS 880-53468/2-A

**Matrix: Solid Analysis Batch: 53448**  **Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 53468

Spike LCS LCS Added Result Qualifier Analyte Unit %Rec Limits 1000 Gasoline Range Organics 900.4 mg/Kg 90 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 949.6 mg/Kg 95 70 - 130

C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	83		70 - 130

Lab Sample ID: LCSD 880-53468/3-A

Matrix: Solid Analysis Batch: 53448 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 53468

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	999	843.8		mg/Kg		84	70 - 130	6	20
(GRO)-C6-C10									
Diesel Range Organics (Over	999	890.3		mg/Kg		89	70 - 130	6	20
C10-C28)									

## QC Sample Results

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1 SDG: 21-0100-20

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

Lab Sample ID: LCSD 880-53468/3-A

**Matrix: Solid** 

Analysis Batch: 53448

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

Client Sample ID: BF-1

Client Sample ID: BF-1

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Prep Type: Total/NA Prep Batch: 53468

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 103 70 - 130 o-Terphenyl (Surr) 79 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: Method Blank Lab Sample ID: MB 880-53366/1-A **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 53577

мв мв

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 5.00 Chloride <5.00 mg/Kg 05/17/23 12:50

Lab Sample ID: LCS 880-53366/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 53577

LCS LCS Spike %Rec Analyte Added Qualifier Result Unit %Rec Limits Chloride 250 250.0 100 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-53366/3-A

**Matrix: Solid** 

**Analysis Batch: 53577** 

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 250.8 100 90 - 110 mg/Kg

Lab Sample ID: 880-28402-1 MS

Matrix: Solid

**Analysis Batch: 53577** 

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte %Rec Limits Unit D 251 301.0 95 90 - 110 Chloride 61.5 mg/Kg

Lab Sample ID: 880-28402-1 MSD

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**Matrix: Solid** 

**Analysis Batch: 53577** 

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Qualifier Analyte Result Unit %Rec Limits RPD Limit Chloride 61.5 251 300.2 mg/Kg 90 - 110 20

## **QC Association Summary**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1 SDG: 21-0100-20

## **GC VOA**

### Prep Batch: 53496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	5035	
880-28402-2	BF-3	Total/NA	Solid	5035	
MB 880-53496/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-53496/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-53496/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 53724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	8021B	53496
880-28402-2	BF-3	Total/NA	Solid	8021B	53496
MB 880-53496/5-A	Method Blank	Total/NA	Solid	8021B	53496
MB 880-53768/5-A	Method Blank	Total/NA	Solid	8021B	53768
LCS 880-53496/1-A	Lab Control Sample	Total/NA	Solid	8021B	53496
LCSD 880-53496/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	53496

### Prep Batch: 53768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-53768/5-A	Method Blank	Total/NA	Solid	5035	

### Analysis Batch: 53915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	Total BTEX	
880-28402-2	BF-3	Total/NA	Solid	Total BTEX	

### **GC Semi VOA**

### Analysis Batch: 53448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	8015B NM	53468
880-28402-2	BF-3	Total/NA	Solid	8015B NM	53468
MB 880-53468/1-A	Method Blank	Total/NA	Solid	8015B NM	53468
LCS 880-53468/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	53468
LCSD 880-53468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	53468

### Prep Batch: 53468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	8015NM Prep	
880-28402-2	BF-3	Total/NA	Solid	8015NM Prep	
MB 880-53468/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-53468/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-53468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 53591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Total/NA	Solid	8015 NM	
880-28402-2	BF-3	Total/NA	Solid	8015 NM	

### HPLC/IC

### Leach Batch: 53366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Soluble	Solid	DI Leach	

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5/22/2023

## **QC Association Summary**

Client: Larson & Associates, Inc. Job ID: 880-28402-1 Project/Site: SD 13 SWD SDG: 21-0100-20

## **HPLC/IC** (Continued)

## Leach Batch: 53366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-2	BF-3	Soluble	Solid	DI Leach	
MB 880-53366/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-53366/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-53366/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28402-1 MS	BF-1	Soluble	Solid	DI Leach	
880-28402-1 MSD	BF-1	Soluble	Solid	DI Leach	

### Analysis Batch: 53577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28402-1	BF-1	Soluble	Solid	300.0	53366
880-28402-2	BF-3	Soluble	Solid	300.0	53366
MB 880-53366/1-A	Method Blank	Soluble	Solid	300.0	53366
LCS 880-53366/2-A	Lab Control Sample	Soluble	Solid	300.0	53366
LCSD 880-53366/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	53366
880-28402-1 MS	BF-1	Soluble	Solid	300.0	53366
880-28402-1 MSD	BF-1	Soluble	Solid	300.0	53366

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1 SDG: 21-0100-20

**Client Sample ID: BF-1** 

Lab Sample ID: 880-28402-1

Matrix: Solid

Date Collected: 05/11/23 11:00 Date Received: 05/15/23 08:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	53496	05/16/23 15:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53724	05/20/23 15:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53915	05/22/23 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			53591	05/17/23 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	53468	05/16/23 11:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53448	05/17/23 03:15	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	53366	05/17/23 11:48	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53577	05/17/23 13:06	CH	EET MID

**Client Sample ID: BF-3** 

Lab Sample ID: 880-28402-2

Matrix: Solid

Date Collected: 05/11/23 11:05 Date Received: 05/15/23 08:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	53496	05/16/23 15:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53724	05/20/23 15:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53915	05/22/23 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			53591	05/17/23 11:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	53468	05/16/23 11:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53448	05/17/23 03:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	53366	05/17/23 11:48	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53577	05/17/23 13:22	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: SD 13 SWD

Job ID: 880-28402-1

SDG: 21-0100-20

## **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	6-30-23 Expiration Date	
		ELAP	T104704400-22-25		
The following analytes	are included in this report hi	it the laboratory is not cortifi	ed by the governing authority. This list ma	av include analytee for	
the agency does not of	• •	it the laboratory is not certifi	ed by the governing authority. This list his	ay iliciude allaiytes toi	
0 ,	• •	Matrix	Analyte	ay include analytes for	
the agency does not of	fer certification.	•	, , ,	ay include analytes for	

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## **Method Summary**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1

SDG: 21-0100-20

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

**Eurofins Midland** 

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## **Sample Summary**

Client: Larson & Associates, Inc. Project/Site: SD 13 SWD

Job ID: 880-28402-1

SDG: 21-0100-20

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-28402-1	BF-1	Solid	05/11/23 11:00	05/15/23 08:33
880-28402-2	BF-3	Solid	05/11/23 11:05	05/15/23 08:33

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5/13/2024 12:25:55 PM	TRRP report?  Yes X No  TIME ZONE Time zone/State  Field Sample I D	S=SOIL W=WATE A=AIR Lab#		AINT SLUDGE DTHER Time	Matrix	# of Containers			H <sub>2</sub> SO <sub>4</sub> □ NaOH □ NA	UNPRESSERVED Z			/													LD NOTES		OCD: 4/15/2024 9:41:00 AM
Page 18 of 19			5/ <b>19</b> /3	1105	\$ \$	1					X		XX	X								X			lor			
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## **Login Sample Receipt Checklist**

Job Number: 880-28402-1 Client: Larson & Associates, Inc. SDG Number: 21-0100-20

Login Number: 28402 **List Source: Eurofins Midland** 

List Number: 1

Creator: Rodriguez, Leticia

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

**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Mr. Mark J Larson Larson & Associates, Inc. 507 N Marienfeld Suite 202 Midland, Texas 79701

Generated 6/5/2023 4:15:53 PM

# **JOB DESCRIPTION**

Saldo Draw 13 SWD SDG NUMBER 21-0100-20

# **JOB NUMBER**

880-28880-1

Eurofins Midland 1211 W. Florida Ave Midland TX 79701

# **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 6/5/2023 4:15:53 PM

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

Page 2 of 43 6/5/2023

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Laboratory Job ID: 880-28880-1

SDG: 21-0100-20

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## **Definitions/Glossary**

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

SDG: 21-0100-20

0-20

### **Qualifiers**

### **GC VOA**

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

### **GC Semi VOA**

### Qualifier Qualifier Description

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

### HPLC/IC

Qualifier Qualifier Description

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.
--------------	---

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Midland** 

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### **Case Narrative**

Client: Larson & Associates, Inc.
Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1 SDG: 21-0100-20

Job ID: 880-28880-1

**Laboratory: Eurofins Midland** 

Narrative

Job Narrative 880-28880-1

#### Receipt

The samples were received on 5/30/2023 8:51 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 -11.3°C

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: C-1, 2' (880-28880-1), C-2, 2' (880-28880-2), C-3, 2' (880-28880-3), C-4, 2' (880-28880-4), C-5, 2' (880-28880-5), C-6, 2' (880-28880-6), C-7, 2' (880-28880-7), C-8, 0-2' (880-28880-8), C-9 0-2' (880-28880-9), C-10 0-2' (880-28880-10), C-11 3' (880-28880-11), C-12, 4.1' (880-28880-12), C-13, 4.1' (880-28880-13), C-14, 0-3' (880-28880-14), C-15, 0-3' (880-28880-15), C-16, 4.1' (880-28880-16) and C-17, 0-4.1' (880-28880-17).

#### GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54640 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The samples with a detection are being re-analyzed for confirmation. The associated samples are impacted: (CCV 880-54640/33), (CCV 880-54640/61), (CCV 880-54640/82) and (CCV 880-54640/95).

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

### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: C-1, 2' (880-28880-1), C-2, 2' (880-28880-2), C-3, 2' (880-28880-3), C-4, 2' (880-28880-4), C-5, 2' (880-28880-5), C-6, 2' (880-28880-6) and C-8, 0-2' (880-28880-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-54429 and analytical batch 880-54329 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-54329/14). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-54453 and analytical batch 880-54532 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: C-9 0-2' (880-28880-9), C-10 0-2' (880-28880-10), C-11 3' (880-28880-11), C-12, 4.1' (880-28880-12), C-13, 4.1' (880-28880-13), C-14, 0-3' (880-28880-14), C-15, 0-3' (880-28880-15), C-16, 4.1' (880-28880-16), C-17, 0-4.1' (880-28880-17), (880-28880-A-9-B MS) and (880-28880-A-9-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-54461 and analytical batch 880-54527 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 880-54463 and analytical batch 880-54515 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.

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# **Client Sample Results**

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD Job ID: 880-28880-1

SDG: 21-0100-20

Client Sample ID: C-1, 2'

Lab Sample ID: 880-28880-1

Matrix: Solid

Date Collected: 05/24/23 08:00 Date Received: 05/30/23 08:51

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 15:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			05/31/23 13:45	06/03/23 15:14	1
1,4-Difluorobenzene (Surr)	95		70 - 130			05/31/23 13:45	06/03/23 15:14	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	П	0.00399				06/05/23 16:54	1
IOIAI BIEX	10.00000	U	0.00399	mg/Kg			06/05/23 16:54	'
Method: SW846 8015 NM - Diese Analyte	el Range Organ			mg/Kg Unit	D	Prepared	Analyzed	·
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Result <50.0	ics (DRO) (Gualifier	<b>GC)</b> RL  50.0	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <	ics (DRO) (Gualifier	<b>GC)</b> RL  50.0	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte  Gasoline Range Organics	el Range Organ Result <	Qualifier Unics (DRO) Qualifier	RL 50.0	<mark>Unit</mark> mg/Kg			Analyzed 05/31/23 09:49	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	el Range Organ Result <50.0 sel Range Orga Result	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL	Unit mg/Kg		Prepared	Analyzed 05/31/23 09:49 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 05/30/23 16:07	Analyzed 05/31/23 09:49  Analyzed 05/31/23 00:08	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <50.0 sel Range Orga Result <50.0	ics (DRO) (Control of the control of	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 05/30/23 16:07	Analyzed 05/31/23 09:49  Analyzed 05/31/23 00:08	Dil Fac  Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	ics (DRO) (COMPANIES (DRO)) Qualifier U Qualifier U U U	GC)  RL  50.0  (GC)  RL  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 05/30/23 16:07 05/30/23 16:07	Analyzed 05/31/23 09:49  Analyzed 05/31/23 00:08 05/31/23 00:08	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Range Organ   Result   <50.0	ics (DRO) ( Qualifier U  nics (DRO) Qualifier U  U	GC)  RL  50.0  (GC)  RL  50.0  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 05/30/23 16:07 05/30/23 16:07 05/30/23 16:07	Analyzed 05/31/23 09:49  Analyzed 05/31/23 00:08 05/31/23 00:08 05/31/23 00:08	Dil Fac

Client Sample ID: C-2, 2' Lab Sample ID: 880-28880-2 Date Collected: 05/24/23 08:10 **Matrix: Solid** 

RL

5.01

Unit

mg/Kg

D

Prepared

Analyzed

05/31/23 19:30

Dil Fac

Result Qualifier

83.4

Date Received: 05/30/23 08:51

Analyte

Chloride

Method: SW846 8021B - Volati	le Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/31/23 13:45	06/03/23 15:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			05/31/23 13:45	06/03/23 15:35	1
1,4-Difluorobenzene (Surr)	96		70 - 130			05/31/23 13:45	06/03/23 15:35	1

Job ID: 880-28880-1

SDG: 21-0100-20

Project/Site: Saldo Draw 13 SWD Client Sample ID: C-2, 2'

Client: Larson & Associates, Inc.

Lab Sample ID: 880-28880-2 Date Collected: 05/24/23 08:10 Date Received: 05/30/23 08:51

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			05/31/23 09:49	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		05/30/23 16:07	05/31/23 00:30	
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/30/23 16:07	05/31/23 00:30	•
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/30/23 16:07	05/31/23 00:30	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane (Surr)	132	S1+	70 - 130			05/30/23 16:07	05/31/23 00:30	
o-Terphenyl (Surr)	104		70 - 130			05/30/23 16:07	05/31/23 00:30	

Client Sample ID: C-3, 2' Lab Sample ID: 880-28880-3 Date Collected: 05/24/23 08:20 **Matrix: Solid** 

RL

4.95

Unit

mg/Kg

D

Prepared

Analyzed

05/31/23 19:35

Result Qualifier

326

Date Received: 05/30/23 08:51

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
Toluene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 15:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			05/31/23 13:45	06/03/23 15:55	1
			70 - 130			05/31/23 13:45	06/03/23 15:55	1
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX Analyte		culation Qualifier	70 - 130 RL	Unit	D	Prepared	Analyzed	
		culation	70 - 130			05/31/23 13:45	00/03/23 15.55	,
Method: TAL SOP Total BTEX	- Total BTEX Cald	Qualifier		Unit mg/Kg	<u>D</u>			Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Cald Result <0.00398	<b>Qualifier</b> U	RL 0.00398		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00398 esel Range Organ	<b>Qualifier</b> U	RL 0.00398		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX Method: SW846 8015 NM - Die	- Total BTEX Calc Result <0.00398 esel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00398	mg/Kg		Prepared	Analyzed 06/05/23 16:54	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Did Analyte	- Total BTEX Calc Result <0.00398 esel Range Organ Result <50.0	Qualifier U ics (DRO) ( Qualifier U	RL 0.00398  GC)  RL 50.0	mg/Kg		Prepared	Analyzed  06/05/23 16:54  Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Did Analyte Total TPH	- Total BTEX Calc Result <0.00398 esel Range Organ Result <50.0	Qualifier U ics (DRO) ( Qualifier U	RL 0.00398  GC)  RL 50.0	mg/Kg		Prepared	Analyzed  06/05/23 16:54  Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Did Analyte Total TPH  Method: SW846 8015B NM - E	- Total BTEX Calc Result <0.00398 esel Range Organ Result <50.0	Qualifier U  ics (DRO) ( Qualifier U  nics (DRO) Qualifier	RL 0.00398  GC)  RL 50.0	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 06/05/23 16:54  Analyzed 05/31/23 09:49	Dil Fac

**Eurofins Midland** 

Released to Imaging: 5/13/2024 12:25:55 PM

Dil Fac

Job ID: 880-28880-1

SDG: 21-0100-20

Lab Sample ID: 880-28880-3 **Matrix: Solid** 

Dil Fac

**Matrix: Solid** 

Client Sample ID: C-3, 2'

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

Date Collected: 05/24/23 08:20 Date Received: 05/30/23 08:51

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued) Result Qualifier

Unit D Prepared Analyzed Oll Range Organics (Over C28-C36) <50.0 50.0 mg/Kg 05/30/23 16:07 05/31/23 00:51

Qualifier Dil Fac Surrogate %Recovery Limits Analyzed Prepared 70 - 130 1-Chlorooctane (Surr) S1+ 05/30/23 16:07 05/31/23 00:51 134 o-Terphenyl (Surr) 105 70 - 130 05/30/23 16:07 05/31/23 00:51

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier RL Unit D Dil Fac Analyte Prepared Analyzed 5.02 270 05/31/23 19:41 Chloride mg/Kg

Client Sample ID: C-4, 2'

Lab Sample ID: 880-28880-4 Date Collected: 05/24/23 08:30 Date Received: 05/30/23 08:51

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00199 U 0.00199 05/31/23 13:45 06/03/23 16:15 mg/Kg Toluene <0.00199 U 0.00199 05/31/23 13:45 06/03/23 16:15 mg/Kg Ethylbenzene <0.00199 0.00199 05/31/23 13:45 06/03/23 16:15 mg/Kg 06/03/23 16:15 m,p-Xylenes <0.00398 U 0.00398 mg/Kg 05/31/23 13:45 o-Xylene <0.00199 U 0.00199 mg/Kg 05/31/23 13:45 06/03/23 16:15 <0.00398 U 06/03/23 16:15 Xylenes, Total 0.00398 mg/Kg 05/31/23 13:45

%Recovery Limits Surrogate Qualifier Prepared Analyzed Dil Fac 70 - 130 05/31/23 13:45 4-Bromofluorobenzene (Surr) 89 06/03/23 16:15 97 1,4-Difluorobenzene (Surr) 70 - 130 05/31/23 13:45 06/03/23 16:15

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte Result Qualifier RL Unit D Dil Fac Prepared Analyzed Total BTEX <0.00398 U 0.00398 mg/Kg 06/05/23 16:54

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total TPH <50.0 Ū 50.0 05/31/23 09:49 mg/Kg

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Result Qualifier Analyte RL Unit Prepared Analyzed Dil Fac <50.0 U 50.0 05/30/23 16:07 05/31/23 01:13 Gasoline Range Organics mg/Kg (GRO)-C6-C10 50.0 05/30/23 16:07 05/31/23 01:13 Diesel Range Organics (Over <50.0 U mg/Kg OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 05/30/23 16:07 05/31/23 01:13

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane (Surr) 135 S1+ 70 - 130 05/30/23 16:07 05/31/23 01:13 05/30/23 16:07 05/31/23 01:13 o-Terphenyl (Surr) 107 70 - 130

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 524 4.99 mg/Kg 05/31/23 19:46

Job ID: 880-28880-1 SDG: 21-0100-20

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

Lab Sample ID: 880-28880-5

Analyzed

Matrix: Solid

Date Collected: 05/24/23 08:40 Date Received: 05/30/23 08:51

Client Sample ID: C-5, 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 16:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			05/31/23 13:45	06/03/23 16:36	1
1,4-Difluorobenzene (Surr)	98		70 - 130			05/31/23 13:45	06/03/23 16:36	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/05/23 16:54	1

Total TPH	<49.8	U	49.8	mg/Kg			05/31/23 09:49	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		05/30/23 16:07	05/31/23 01:35	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		05/30/23 16:07	05/31/23 01:35	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/30/23 16:07	05/31/23 01:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	136	S1+	70 - 130			05/30/23 16:07	05/31/23 01:35	1

RL

Unit

D

Prepared

Result Qualifier

107

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	455	F1	4.98	mg/Kg			05/31/23 19:51	1

70 - 130

Client Sample ID: C-6, 2' Lab Sample ID: 880-28880-6 Date Collected: 05/24/23 08:50 **Matrix: Solid** 

Date Received: 05/30/23 08:51

Analyte

o-Terphenyl (Surr)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/31/23 13:45	06/03/23 16:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			05/31/23 13:45	06/03/23 16:56	1
1,4-Difluorobenzene (Surr)	93		70 - 130			05/31/23 13:45	06/03/23 16:56	1

**Eurofins Midland** 

Dil Fac

Job ID: 880-28880-1

SDG: 21-0100-20

Lab Sample ID: 880-28880-6

Analyzed

05/31/23 01:56

05/31/23 01:56

Prepared

05/30/23 16:07

05/30/23 16:07

Matrix: Solid

Client Sample ID: C-6, 2'

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Date Collected: 05/24/23 08:50 Date Received: 05/30/23 08:51

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diesel F	Range Organ	ics (DRO) (G	iC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	-110.0		40.0				05/31/23 09:49	
	<49.9		49.9	mg/Kg			05/31/23 09.49	ı
Method: SW846 8015B NM - Diesel Analyte	l Range Orga			mg/k.g Unit	D	Prepared	05/31/23 09.49  Analyzed	Dil Fac
: Method: SW846 8015B NM - Diesel	l Range Orga	nics (DRO) ( Qualifier	(GC)		<u>D</u>	Prepared 05/30/23 16:07		Dil Fac
Method: SW846 8015B NM - Diesel Analyte	I Range Orga Result	nics (DRO) ( Qualifier	(GC)	Unit	<u>D</u>		Analyzed	Dil Fac
Method: SW846 8015B NM - Diesel Analyte Gasoline Range Organics	I Range Orga Result	nics (DRO) ( Qualifier	(GC)	Unit	<u>D</u>		Analyzed	Dil Fac 1
Method: SW846 8015B NM - Diesel Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9	nics (DRO) ( Qualifier	(GC)  RL  49.9	Unit mg/Kg	<u> </u>	05/30/23 16:07	<b>Analyzed</b> 05/31/23 01:56	Dil Fac

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	693	5.05	mg/Kg			05/31/23 20:07	1

Limits

70 - 130

70 - 130

%Recovery Qualifier

103

132 S1+

Client Sample ID: C-7, 2' Lab Sample ID: 880-28880-7 Date Collected: 05/24/23 09:00 **Matrix: Solid** 

Date Received: 05/30/23 08:51

Surrogate

1-Chlorooctane (Surr)

o-Terphenyl (Surr)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 17:17	
Toluene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 17:17	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 17:17	
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		05/31/23 13:45	06/03/23 17:17	
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 17:17	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/31/23 13:45	06/03/23 17:17	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	85		70 - 130			05/31/23 13:45	06/03/23 17:17	
Method: TAL SOP Total BTEX -			70 - 130			05/31/23 13:45	06/03/23 17:17	
Method: TAL SOP Total BTEX - Analyte	Total BTEX Cald	Qualifier	70 - 130  RL 0.00402	Unit ma/Ka	<u>D</u>	05/31/23 13:45 Prepared	06/03/23 17:17  Analyzed  06/05/23 16:54	
Method: TAL SOP Total BTEX - Analyte Total BTEX	Total BTEX Calc Result <0.00402	<b>Qualifier</b> U	RL 0.00402	<mark>Unit</mark> mg/Kg	<u>D</u>		Analyzed	
Analyte Total BTEX  Method: SW846 8015 NM - Dies	Total BTEX Calc Result < 0.00402 sel Range Organ	<b>Qualifier</b> U	RL 0.00402		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX - Analyte	Total BTEX Calc Result < 0.00402 sel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00402	mg/Kg	=	Prepared	Analyzed 06/05/23 16:54	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte	rotal BTEX Calc Result <0.00402  sel Range Organ Result <50.0	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.0	mg/Kg	=	Prepared	Analyzed 06/05/23 16:54 Analyzed	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte Total TPH	rotal BTEX Calc Result <0.00402 sel Range Organ Result <50.0 esel Range Organ	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.0	mg/Kg	=	Prepared	Analyzed 06/05/23 16:54 Analyzed	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte Total TPH  Method: SW846 8015B NM - Die	rotal BTEX Calc Result <0.00402 sel Range Organ Result <50.0 esel Range Organ	Qualifier U  ics (DRO) ( Qualifier U  nics (DRO) Qualifier	RL 0.00402  GC)  RL 50.0	mg/Kg  Unit  mg/Kg	<u></u>	Prepared Prepared	Analyzed 06/05/23 16:54  Analyzed 05/31/23 09:49	Dil Fac

**Eurofins Midland** 

Dil Fac

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD Job ID: 880-28880-1

SDG: 21-0100-20

Client Sample ID: C-7, 2'

Lab Sample ID: 880-28880-7

Matrix: Solid

Date Collected: 05/24/23 09:00 Date Received: 05/30/23 08:51

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/31/23 02:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	129		70 - 130			05/30/23 16:07	05/31/23 02:18	1
o-Terphenyl (Surr)	102		70 - 130			05/30/23 16:07	05/31/23 02:18	1

Analyte RL Unit D Analyzed Dil Fac Result Qualifier Prepared 24.9 05/31/23 20:12 Chloride mg/Kg 1190

Client Sample ID: C-8, 0-2'

Lab Sample ID: 880-28880-8

Analyzed

06/05/23 16:54

Dil Fac

Date Collected: 05/24/23 09:10 Date Received: 05/30/23 08:51

Analyte

Total BTEX

**Matrix: Solid** 

Method: SW846 8021B - Volatile Organic Compounds (GC)

Wethou. 344040 0021B - Volati	ne Organic Comp	ounus (OO)	<i>,</i>					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
m,p-Xylenes	<0.00404	U	0.00404	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/31/23 13:45	06/03/23 17:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	-	70 - 130			05/31/23 13:45	06/03/23 17:37	1

Method: TAL SOP Total BTEX - Total BTEX	Calculation				
1,4-Difluorobenzene (Surr)	89	70 - 130	05/31/23 13:45	06/03/23 17:37	1
4-Bromofluorobenzene (Surr)	95	70 - 130	05/31/23 13:45	06/03/23 17:37	1

RL

Unit

mg/Kg

Prepared

Result Qualifier

<0.00404 U

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			05/31/23 09:49	1

0.00404

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/31/23 02:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/31/23 02:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/31/23 02:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	137	S1+	70 - 130			05/30/23 16:07	05/31/23 02:39	1
o-Terphenyl (Surr)	106		70 - 130			05/30/23 16:07	05/31/23 02:39	1

Method: EPA 300.0 - Anions, Ion Ch	romatography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	827	5.03	mg/Kg			05/31/23 20:29	1

Job ID: 880-28880-1

SDG: 21-0100-20

Project/Site: Saldo Draw 13 SWD Client Sample ID: C-9 0-2'

Client: Larson & Associates, Inc.

Lab Sample ID: 880-28880-9 Date Collected: 05/24/23 09:20 Date Received: 05/30/23 08:51

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
Toluene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 17:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			05/31/23 13:45	06/03/23 17:58	1
1,4-Difluorobenzene (Surr)	94		70 - 130			05/31/23 13:45	06/03/23 17:58	1
- Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diese Analyte		ics (DRO) (	GC)	Unit	D	Prepared	Analyzad	Dil Fac
Total TPH	- <del>Kesuit</del> <50.0		50.0	mg/Kg			Analyzed 06/02/23 09:38	1
10tal 1FF	<50.0	U	50.0	ilig/Kg			00/02/23 09.36	'
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 11:21	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 11:21	1
C10-C28)	<b>450.0</b>		50.0			05/04/02 00:45	00/04/00 44:04	4
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 11:21	1
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	149	S1+	70 - 130			05/31/23 09:15	06/01/23 11:21	1
o-Terphenyl (Surr)	117		70 - 130			05/31/23 09:15	06/01/23 11:21	1
Method: EPA 300.0 - Anions, Ion	Chromatogran	hy - Solubi	e					

Client Sample ID: C-10 0-2' Lab Sample ID: 880-28880-10

2380

24.9

mg/Kg

Date Collected: 05/24/23 09:30 **Matrix: Solid** 

Date Received: 05/30/23 08:51

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			05/31/23 13:45	06/03/23 18:18	1
1,4-Difluorobenzene (Surr)	102		70 - 130			05/31/23 13:45	06/03/23 18:18	1

**Eurofins Midland** 

05/31/23 20:34

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1

SDG: 21-0100-20

Client Sample ID: C-10 0-2'

Date Collected: 05/24/23 09:30 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-10

Matrix: Solid

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/05/23 16:54	1
- Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			06/02/23 09:38	1
- Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 12:26	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 12:26	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 12:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	145	S1+	70 - 130			05/31/23 09:15	06/01/23 12:26	1
o-Terphenyl (Surr)	111		70 - 130			05/31/23 09:15	06/01/23 12:26	1
- Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	422		4.95	mg/Kg			05/31/23 20:39	1

Client Sample ID: C-11 3' Lab Sample ID: 880-28880-11

Date Collected: 05/24/23 10:00

Date Received: 05/30/23 08:51

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 20:09	
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 20:09	,
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 20:09	
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 20:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 20:09	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 20:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			05/31/23 13:45	06/03/23 20:09	1
	99		70 - 130			05/31/23 13:45	06/03/23 20:09	1
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald	culation Qualifier	RL	Unit	D	Prepared	Analyzed	
·		culation	70 - 700			00/01/20 10:40	00/00/20 20:03	,
Method: TAL SOP Total BTEX	- Total BTEX Cald	Qualifier		Unit mg/Kg	<u>D</u>			·
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <0.00399	Qualifier U	RL 0.00399		<u>D</u>		Analyzed	·
Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00399 esel Range Organ	Qualifier U	RL 0.00399		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die	- Total BTEX Calc Result <0.00399 esel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00399	mg/Kg		Prepared	Analyzed 06/05/23 16:54	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00399 esel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00399  GC)  RL 49.9	mg/Kg		Prepared	Analyzed 06/05/23 16:54 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00399 esel Range Organ Result <49.9	Qualifier U ics (DRO) ( Qualifier U	RL 0.00399  GC)  RL 49.9	mg/Kg		Prepared	Analyzed 06/05/23 16:54 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00399 esel Range Organ Result <49.9	Qualifier U  ics (DRO) ( Qualifier U  nics (DRO) Qualifier	RL 0.00399  GC)  RL 49.9	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 06/05/23 16:54  Analyzed 06/02/23 09:38	Dil Fac

Job ID: 880-28880-1

SDG: 21-0100-20

Project/Site: Saldo Draw 13 SWD Client Sample ID: C-11 3'

Date Received: 05/30/23 08:51

Client: Larson & Associates, Inc.

Lab Sample ID: 880-28880-11 Date Collected: 05/24/23 10:00

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 12:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	146	S1+	70 - 130			05/31/23 09:15	06/01/23 12:48	1
o-Terphenyl (Surr)	113		70 - 130			05/31/23 09:15	06/01/23 12:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 688 5.04 05/31/23 20:45 mg/Kg

Client Sample ID: C-12, 4.1'

Lab Sample ID: 880-28880-12 Date Collected: 05/24/23 10:10 **Matrix: Solid** 

Date Received: 05/30/23 08:51

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198	mg/Kg		05/31/23 13:45	06/03/23 20:29	
Toluene	<0.00198	U	0.00198	mg/Kg		05/31/23 13:45	06/03/23 20:29	
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/31/23 13:45	06/03/23 20:29	
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		05/31/23 13:45	06/03/23 20:29	
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/31/23 13:45	06/03/23 20:29	
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/31/23 13:45	06/03/23 20:29	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	91		70 - 130			05/31/23 13:45	06/03/23 20:29	
1,4-Difluorobenzene (Surr)	98		70 - 130			05/31/23 13:45	06/03/23 20:29	
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00396	U	0.00396	mg/Kg			06/05/23 16:54	
Analyte Total TPH	<49.9	U	49.9	mg/Kg		Prepared	Analyzed 06/02/23 09:38	
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 13:10	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 13:10	
010-0201						05/04/00 00 45		
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 13:10	
,	<49.9 %Recovery		49.9 <i>Limits</i>	mg/Kg		05/31/23 09:15  Prepared	06/01/23 13:10  Analyzed	
Oll Range Organics (Over C28-C36)  Surrogate				mg/Kg				
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane (Surr)	%Recovery	Qualifier	Limits	mg/Kg		Prepared	Analyzed	
Oll Range Organics (Over C28-C36)	%Recovery 152 119	Qualifier S1+	Limits 70 - 130 70 - 130	mg/Kg		Prepared 05/31/23 09:15	Analyzed 06/01/23 13:10	Dil Fa
Oll Range Organics (Over C28-C36)  Surrogate  1-Chlorooctane (Surr) o-Terphenyl (Surr)	%Recovery 152 119 Chromatograp	Qualifier S1+	Limits 70 - 130 70 - 130	mg/Kg Unit	D	Prepared 05/31/23 09:15	Analyzed 06/01/23 13:10	Dil Fa

Chefft Sample Results

Job ID: 880-28880-1 SDG: 21-0100-20

Project/Site: Saldo Draw 13 SWD

Client Sample ID: C-13, 4.1'

Date Collected: 05/24/23 10:20 Date Received: 05/30/23 08:51

Client: Larson & Associates, Inc.

Lab Sample ID: 880-28880-13

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
Toluene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 20:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			05/31/23 13:45	06/03/23 20:50	1
1,4-Difluorobenzene (Surr)	92		70 - 130			05/31/23 13:45	06/03/23 20:50	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)					
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) ( Qualifier	GC)	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 06/02/23 09:38	Dil Fac
Analyte	Result   <50.0	Qualifier U	<b>RL</b> 50.0		<u>D</u>	Prepared		
Analyte Total TPH  . Method: SW846 8015B NM - Die	Result  <50.0 sel Range Orga	Qualifier U	<b>RL</b> 50.0		<u>D</u>	Prepared Prepared		1
Analyte Total TPH	Result  <50.0 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 50.0	mg/Kg			06/02/23 09:38	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0  Sel Range Orga Result <50.0	Qualifier U  nics (DRO) Qualifier U	(GC) RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/31/23 09:15	06/02/23 09:38  Analyzed  06/01/23 13:31	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga	Qualifier U  nics (DRO) Qualifier U	RL 50.0 (GC)	mg/Kg		Prepared	06/02/23 09:38  Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  nics (DRO) Qualifier U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15	06/02/23 09:38  Analyzed  06/01/23 13:31  06/01/23 13:31	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0  Sel Range Orga Result <50.0	Qualifier U  nics (DRO) Qualifier U	(GC) RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 05/31/23 09:15	06/02/23 09:38  Analyzed  06/01/23 13:31	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 50.0 (GC) RL 50.0 50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15	06/02/23 09:38  Analyzed  06/01/23 13:31  06/01/23 13:31	1 Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U  nics (DRO) Qualifier U  U	RL 50.0  (GC)  RL 50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15 05/31/23 09:15	06/02/23 09:38  Analyzed 06/01/23 13:31 06/01/23 13:31	Dil Face 1 1 1 Dil Face
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U  U  Qualifier	RL 50.0  (GC)  RL 50.0  50.0  50.0  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15 05/31/23 09:15 Prepared	06/02/23 09:38  Analyzed 06/01/23 13:31 06/01/23 13:31  Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	Result   <50.0	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1+	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15 05/31/23 09:15  Prepared 05/31/23 09:15	06/02/23 09:38  Analyzed 06/01/23 13:31  06/01/23 13:31  Analyzed 06/01/23 13:31	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	Result   <50.0	Qualifier U  nics (DRO) Qualifier U  U  Qualifier S1+	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 05/31/23 09:15 05/31/23 09:15 05/31/23 09:15  Prepared 05/31/23 09:15	06/02/23 09:38  Analyzed 06/01/23 13:31  06/01/23 13:31  Analyzed 06/01/23 13:31	Dil Fac

Client Sample ID: C-14, 0-3'

Date Collected: 05/24/23 10:30

Lab Sample ID: 880-28880-14

Matrix: Solid

Date Received: 05/30/23 08:51

Method: SW846 8021B - Volati	ie Organic Comp	ounas (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/31/23 13:45	06/03/23 21:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			05/31/23 13:45	06/03/23 21:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130			05/31/23 13:45	06/03/23 21:10	1

# **Client Sample Results**

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD Job ID: 880-28880-1

SDG: 21-0100-20

Client Sample ID: C-14, 0-3'

Date Collected: 05/24/23 10:30 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-14

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diese	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			06/02/23 09:38	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 13:53	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 13:53	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/31/23 09:15	06/01/23 13:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	149	S1+	70 - 130			05/31/23 09:15	06/01/23 13:53	1
o-Terphenyl (Surr)	113		70 - 130			05/31/23 09:15	06/01/23 13:53	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	520	-	5.03	mg/Kg		-	05/31/23 21:01	

Client Sample ID: C-15, 0-3' Lab Sample ID: 880-28880-15

Date Collected: 05/24/23 10:40 Date Received: 05/30/23 08:51

**Matrix: Solid** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 21:31	
Toluene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 21:31	,
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 21:31	,
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		05/31/23 13:45	06/03/23 21:31	,
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/31/23 13:45	06/03/23 21:31	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/31/23 13:45	06/03/23 21:31	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			05/31/23 13:45	06/03/23 21:31	
	00		70 - 130			05/31/23 13:45	06/03/23 21:31	-
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX Analyte		culation Qualifier	70 - 730 RL	Unit	D	Prepared	Analyzed	
• • • • • • • • • • • • • • • • • • • •		culation	70 - 130			05/31/23 13.45	00/03/23 21.31	,
Method: TAL SOP Total BTEX	- Total BTEX Cald	Qualifier		<b>Unit</b> mg/Kg	<u>D</u>			Dil Fac
Method: TAL SOP Total BTEX Analyte	- Total BTEX Calc Result <0.00402	<b>Qualifier</b> U	RL 0.00402		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <	<b>Qualifier</b> U	RL 0.00402		<u>D</u>		Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die	- Total BTEX Calc Result <	Qualifier U ics (DRO) ( Qualifier	RL 0.00402	mg/Kg		Prepared	Analyzed 06/05/23 16:54	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc  Result  <0.00402  sel Range Organ  Result  <50.0	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.0	mg/Kg		Prepared	Analyzed 06/05/23 16:54  Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00402  sel Range Organ Result <50.0  iesel Range Orga	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.0	mg/Kg		Prepared	Analyzed 06/05/23 16:54  Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00402  sel Range Organ Result <50.0  iesel Range Orga	Qualifier U ics (DRO) (Qualifier U nics (DRO) Qualifier	RL 0.00402  GC)  RL 50.0	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 06/05/23 16:54  Analyzed 06/02/23 09:38	Dil Fac

Job ID: 880-28880-1 SDG: 21-0100-20

Client Sample ID: C-15, 0-3'

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Date Collected: 05/24/23 10:40 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-15

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 14:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	148	S1+	70 - 130			05/31/23 09:15	06/01/23 14:15	1
o-Terphenyl (Surr)	114		70 - 130			05/31/23 09:15	06/01/23 14:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride 1570 F1 25.1 05/31/23 21:43 mg/Kg

Client Sample ID: C-16, 4.1'

Date Collected: 05/24/23 10:50 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-16 **Matrix: Solid** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
m,p-Xylenes	<0.00404	U	0.00404	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/31/23 13:45	06/03/23 21:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			05/31/23 13:45	06/03/23 21:51	1
1,4-Difluorobenzene (Surr)	99		70 - 130			05/31/23 13:45	06/03/23 21:51	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			06/05/23 16:54	1

Method: SW846	6 8015 NM - Diesel Range Organ	ics (DRO) (G	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			06/02/23 09:38	1
Method: SW846	6 8015B NM - Diesel Range Orga	nics (DRO) (	GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Or	ganics <50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 14:36	1

1-Chlorooctane (Surr)	144	S1+	70 - 130		05/31/23 09:15	06/01/23 14:36	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	05/31/23 09:15	06/01/23 14:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	05/31/23 09:15	06/01/23 14:36	1

Method: EPA 300.0 - Anions, Ion C	hromatography -	Soluble					
Analyte	Result Qual	lifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050	5.02	mg/Kg			05/31/23 21:59	1

70 - 130

112

**Eurofins Midland** 

06/01/23 14:36

05/31/23 09:15

(GRO)-C6-C10

o-Terphenyl (Surr)

Date Received: 05/30/23 08:51

Total TPH

o-Terphenyl (Surr)

## **Client Sample Results**

Client: Larson & Associates, Inc. Job ID: 880-28880-1 Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

Client Sample ID: C-17, 0-4.1' Lab Sample ID: 880-28880-17 Date Collected: 05/24/23 11:00

06/02/23 09:38

06/01/23 14:58

05/31/23 09:15

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/31/23 13:45	06/03/23 22:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130			05/31/23 13:45	06/03/23 22:12	1
1,4-Difluorobenzene (Surr)	94		70 - 130			05/31/23 13:45	06/03/23 22:12	1

	rinaryto	rtoouit	Qualifici		Onic	_	opa. oa	7 ilialy 20 a	5
	Total BTEX	<0.00398	U	0.00398	mg/Kg			06/05/23 16:54	1
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

49.9

mg/Kg

<49.9 U

108

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 14:58	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 14:58	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/31/23 09:15	06/01/23 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	144	S1+	70 - 130			05/31/23 09:15	06/01/23 14:58	1

Method: EPA 300.0 - Anions, Ion Cl	hromatograph	ny - Soluble						
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1280		25.0	mg/Kg			05/31/23 22:05	5

70 - 130

## **Surrogate Summary**

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

SDG: 21-0100-20

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-28880-1	C-1, 2'	86	95	· —— · — — — — — —
880-28880-1 MS	C-1, 2'	100	96	
880-28880-1 MSD	C-1, 2'	104	92	
880-28880-2	C-2, 2'	88	96	
880-28880-3	C-3, 2'	87	93	
880-28880-4	C-4, 2'	89	97	
880-28880-5	C-5, 2'	82	98	
880-28880-6	C-6, 2'	93	93	
880-28880-7	C-7, 2'	85	97	
880-28880-8	C-8, 0-2'	95	89	
880-28880-9	C-9 0-2'	95	94	
880-28880-10	C-10 0-2'	92	102	
880-28880-11	C-11 3'	86	99	
880-28880-12	C-12, 4.1'	91	98	
880-28880-13	C-13, 4.1'	89	92	
880-28880-14	C-14, 0-3'	96	98	
880-28880-15	C-15, 0-3'	96	99	
880-28880-16	C-16, 4.1'	95	99	
880-28880-17	C-17, 0-4.1'	91	94	
LCS 880-54508/1-A	Lab Control Sample	95	111	
LCSD 880-54508/2-A	Lab Control Sample Dup	98	96	
MB 880-54508/5-A	Method Blank	85	104	
MB 880-54587/5-A	Method Blank	86	109	

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 Limi
		1CO1	OTPH1	
_ab Sample ID	Client Sample ID	(70-130)	(70-130)	
380-28880-1	C-1, 2'	136 S1+	106	
380-28880-2	C-2, 2'	132 S1+	104	
880-28880-3	C-3, 2'	134 S1+	105	
380-28880-4	C-4, 2'	135 S1+	107	
380-28880-5	C-5, 2'	136 S1+	107	
380-28880-6	C-6, 2'	132 S1+	103	
380-28880-7	C-7, 2'	129	102	
380-28880-8	C-8, 0-2'	137 S1+	106	
80-28880-9	C-9 0-2'	149 S1+	117	
380-28880-9 MS	C-9 0-2'	146 S1+	105	
380-28880-9 MSD	C-9 0-2'	146 S1+	105	
80-28880-10	C-10 0-2'	145 S1+	111	
380-28880-11	C-11 3'	146 S1+	113	
380-28880-12	C-12, 4.1'	152 S1+	119	
880-28880-13	C-13, 4.1'	150 S1+	117	
380-28880-14	C-14, 0-3'	149 S1+	113	

## **Surrogate Summary**

Client: Larson & Associates, Inc. Job ID: 880-28880-1 Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

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)	
880-28880-15	C-15, 0-3'	148 S1+	114	
880-28880-16	C-16, 4.1'	144 S1+	112	
880-28880-17	C-17, 0-4.1'	144 S1+	108	
LCS 880-54429/2-A	Lab Control Sample	114	89	
LCS 880-54453/2-A	Lab Control Sample	107	84	
LCSD 880-54429/3-A	Lab Control Sample Dup	122	95	
LCSD 880-54453/3-A	Lab Control Sample Dup	122	93	
MB 880-54429/1-A	Method Blank	148 S1+	117	
MB 880-54453/1-A	Method Blank	170 S1+	133 S1+	

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

### **QC Sample Results**

Client: Larson & Associates, Inc. Job ID: 880-28880-1 SDG: 21-0100-20 Project/Site: Saldo Draw 13 SWD

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

Lab Sample ID: MB 880-54508/5-A

Analysis Batch: 54640

**Matrix: Solid** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54508

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 14:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 14:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 14:45	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		05/31/23 13:45	06/03/23 14:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/31/23 13:45	06/03/23 14:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/31/23 13:45	06/03/23 14:45	1

мв мв

MD MD

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85	70 - 130	05/31/23 13:45	06/03/23 14:45	1
1,4-Difluorobenzene (Surr)	104	70 - 130	05/31/23 13:45	06/03/23 14:45	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-54508/1-A

Matrix: Solid

Analysis Batch: 54640

Prep Type: Total/NA

Prep Batch: 54508

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1234		mg/Kg		123	70 - 130	
Toluene	0.100	0.1152		mg/Kg		115	70 - 130	
Ethylbenzene	0.100	0.09410		mg/Kg		94	70 - 130	
m,p-Xylenes	0.200	0.1704		mg/Kg		85	70 - 130	
o-Xylene	0.100	0.08628		mg/Kg		86	70 - 130	
I and the second								

LCS LCS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	95		70 - 130		
1,4-Difluorobenzene (Surr)	111		70 - 130		

Lab Sample ID: LCSD 880-54508/2-A

**Matrix: Solid** 

Analysis Batch: 54640

Prep Type: Total/NA

Prep Batch: 54508

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1217		mg/Kg		122	70 - 130	1	35	
Toluene	0.100	0.1031		mg/Kg		103	70 - 130	11	35	
Ethylbenzene	0.100	0.09601		mg/Kg		96	70 - 130	2	35	
m,p-Xylenes	0.200	0.1759		mg/Kg		88	70 - 130	3	35	
o-Xylene	0.100	0.08910		mg/Kg		89	70 - 130	3	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1.4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-28880-1 MS

Matrix: Solid

Analysis Batch: 54640

Client Sample ID: C-1, 2' Prep Type: Total/NA

Prep Batch: 54508

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.1105		mg/Kg	_	111	70 - 130	
Toluene	<0.00200	U	0.0998	0.09914		mg/Kg		99	70 - 130	

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Client Sample ID: C-1, 2'

Prep Type: Total/NA

Prep Batch: 54508

## QC Sample Results

Job ID: 880-28880-1 Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

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

Lab Sample ID: 880-28880-1 MS

**Analysis Batch: 54640** 

**Matrix: Solid** 

п											
		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Ethylbenzene	<0.00200	U	0.0998	0.09553		mg/Kg		96	70 - 130	
İ	m,p-Xylenes	<0.00399	U	0.200	0.1696		mg/Kg		85	70 - 130	
	o-Xylene	<0.00200	U	0.0998	0.08182		mg/Kg		82	70 - 130	
-1											

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-28880-1 MSD

**Matrix: Solid** 

Analysis Batch: 54640

Client Sample ID: C-1, 2' Prep Type: Total/NA Prep Batch: 54508 Sample Sample Spike MSD MSD

Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.0990 Benzene <0.00200 U 0.1185 mg/Kg 120 70 - 130 7 35 Toluene <0.00200 U 0.0990 107 70 - 130 0.1064 mg/Kg 35 Ethylbenzene <0.00200 U 0.0990 0.1059 mg/Kg 107 70 - 130 10 35 <0.00399 U 0.198 0.1882 70 - 130 35 m,p-Xylenes mg/Kg 95 10 0.0990 o-Xylene <0.00200 U 0.08712 88 70 - 130 mg/Kg 6

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: MB 880-54587/5-A

**Matrix: Solid** 

Analysis Batch: 54640

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 54587

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/01/23 13:10	06/03/23 02:51	1

MB MB

MB MB

Surrogate	%Recovery Qualit	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86	70 - 130	06/01/23 13:10	06/03/23 02:51	1
1,4-Difluorobenzene (Surr)	109	70 - 130	06/01/23 13:10	06/03/23 02:51	1

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

Lab Sample ID: MB 880-54429/1-A

**Matrix: Solid** 

Analysis Batch: 54329

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 54429

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/30/23 17:37	1
(GRO)-C6-C10								

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

SDG: 21-0100-20

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

Lab Sample ID: MB 880-54429/1-A

Matrix: Solid

Analysis Batch: 54329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54429

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/30/23 17:37	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/30/23 16:07	05/30/23 17:37	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	148	S1+	70 - 130			05/30/23 16:07	05/30/23 17:37	1
o-Ternhenyl (Surr)	117		70 130			05/30/23 16:07	05/30/23 17:37	1

Lab Sample ID: LCS 880-54429/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 54329 Prep Batch: 54429 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 936.5 94 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1013 mg/Kg 101 70 - 130 C10-C28) LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane (Surr) 70 - 130 114 o-Terphenyl (Surr) 89 70 - 130

Lab Sample ID: LCSD 880-54429/3-A

Matrix: Solid

Analysis Batch: 54329

Spike LCSD LCSD REPRORMANT Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 54429

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	982.8		mg/Kg		98	70 - 130	5	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1014		mg/Kg		101	70 - 130	0	20
C10-C28)									

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	122		70 - 130
o-Terphenyl (Surr)	95		70 - 130

Lab Sample ID: MB 880-54453/1-A

Matrix: Solid

Analysis Batch: 54532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54453

,	MB	MB					-	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 08:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 08:40	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/31/23 09:15	06/01/23 08:40	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	170	S1+	70 - 130			05/31/23 09:15	06/01/23 08:40	1

Job ID: 880-28880-1 Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

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

Lab Sample ID: MB 880-54453/1-A

**Matrix: Solid** 

Analysis Batch: 54532

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 54453

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac o-Terphenyl (Surr) 133 S1+ 70 - 130 05/31/23 09:15 06/01/23 08:40

Lab Sample ID: LCS 880-54453/2-A

**Matrix: Solid** 

Analysis Batch: 54532

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

Prep Batch: 54453

Spike LCS LCS %Rec Added Result Qualifier Analyte Unit D %Rec Limits Gasoline Range Organics 1000 913.7 mg/Kg 91 70 - 130 (GRO)-C6-C10 1000 Diesel Range Organics (Over 946.1 mg/Kg 95 70 - 130

C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	107	70 - 130
o-Terphenyl (Surr)	84	70 - 130

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-54453/3-A **Matrix: Solid** 

**Analysis Batch: 54532** 

Prep Type: Total/NA

Prep Batch: 54453

Spike LCSD LCSD %Rec RPD Added Result Qualifier RPD Limit Analyte Unit %Rec Limits Gasoline Range Organics 1000 1008 101 70 - 130 10 20 mg/Kg (GRO)-C6-C10 1000 1013 101 Diesel Range Organics (Over mg/Kg 70 - 130 20

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	122		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Lab Sample ID: 880-28880-9 MS

**Matrix: Solid** 

Analysis Batch: 54532

Client Sample ID: C-9 0-2' Prep Type: Total/NA Prep Batch: 54453

Sample Sample Spike MS MS Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits <50.0 U 999 Gasoline Range Organics 1201 mg/Kg 120 70 - 130 (GRO)-C6-C10 999 1124 Diesel Range Organics (Over <50.0 U mg/Kg 113 70 - 130

C10-C28)

MS MS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	146	S1+	70 - 130
o-Terphenvl (Surr)	105		70 - 130

Job ID: 880-28880-1 SDG: 21-0100-20

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: C-5, 2'

**Prep Type: Soluble** 

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

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

Lab Sample ID: 880-28880-9 MSD Client Sample ID: C-9 0-2'

**Matrix: Solid** 

Prep Type: Total/NA Analysis Batch: 54532 Prep Batch: 54453

Sample Sample Spike MSD MSD RPD Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics <50.0 U 997 1191 mg/Kg 119 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 70 - 130 1120 mg/Kg 112 0 20

C10-C28)

MSD MSD

%Recovery Qualifier Limits Surrogate 1-Chlorooctane (Surr) S1+ 70 - 130 146 o-Terphenyl (Surr) 105 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54463/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

**Analysis Batch: 54515** 

MB MB

Result Qualifier RL Unit Analyte Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 05/31/23 18:21

Lab Sample ID: LCS 880-54463/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** 

**Analysis Batch: 54515** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 252.8 90 - 110 mg/Kg 101

Lab Sample ID: LCSD 880-54463/3-A

**Matrix: Solid** 

Analysis Batch: 54515

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	253.7		ma/Ka		101	90 110		20

Lab Sample ID: 880-28880-5 MS Client Sample ID: C-5, 2'

**Matrix: Solid** 

**Analysis Batch: 54515** 

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits 455 F1 Chloride 249 653.1 F1 90 - 110 mg/Kg

Lab Sample ID: 880-28880-5 MSD

Matrix: Solid

Analysis Batch: 54515

Analysis Daten. 34313											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	455	F1	249	653.2	F1	mg/Kg		80	90 - 110		20

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

Client Sample ID: C-15, 0-3'

Client Sample ID: C-15, 0-3'

## **QC Sample Results**

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1

SDG: 21-0100-20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-54461/1-A

Matrix: Solid

Analysis Batch: 54527

мв мв

 Analyte
 Result Chloride
 Qualifier
 RL Unit
 Unit mg/Kg
 D Prepared
 Analyzed O5/31/23 21:27
 Dil Fac O5/31/23 21:27

Lab Sample ID: LCS 880-54461/2-A

Matrix: Solid

Analysis Batch: 54527

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 255.4 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-54461/3-A

Matrix: Solid

Analysis Batch: 54527

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 255.1 90 - 110 mg/Kg 102

Lab Sample ID: 880-28880-15 MS

Matrix: Solid

Analysis Batch: 54527

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1250 Chloride 1570 F1 2680 F1 89 90 - 110 mg/Kg

Lab Sample ID: 880-28880-15 MSD

**Matrix: Solid** 

Analysis Batch: 54527

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1570 F1 1250 2682 F1 mg/Kg 89 90 - 110 0 20

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Client: Larson & Associates, Inc. Job ID: 880-28880-1 Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

### **GC VOA**

#### Prep Batch: 54508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
880-28880-1	C-1, 2'	Total/NA	Solid	5035	
880-28880-2	C-2, 2'	Total/NA	Solid	5035	
880-28880-3	C-3, 2'	Total/NA	Solid	5035	
880-28880-4	C-4, 2'	Total/NA	Solid	5035	
880-28880-5	C-5, 2'	Total/NA	Solid	5035	
880-28880-6	C-6, 2'	Total/NA	Solid	5035	
880-28880-7	C-7, 2'	Total/NA	Solid	5035	
880-28880-8	C-8, 0-2'	Total/NA	Solid	5035	
880-28880-9	C-9 0-2'	Total/NA	Solid	5035	
880-28880-10	C-10 0-2'	Total/NA	Solid	5035	
880-28880-11	C-11 3'	Total/NA	Solid	5035	
880-28880-12	C-12, 4.1'	Total/NA	Solid	5035	
880-28880-13	C-13, 4.1'	Total/NA	Solid	5035	
880-28880-14	C-14, 0-3'	Total/NA	Solid	5035	
880-28880-15	C-15, 0-3'	Total/NA	Solid	5035	
880-28880-16	C-16, 4.1'	Total/NA	Solid	5035	
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	5035	
MB 880-54508/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-54508/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-54508/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-28880-1 MS	C-1, 2'	Total/NA	Solid	5035	
880-28880-1 MSD	C-1, 2'	Total/NA	Solid	5035	

#### Prep Batch: 54587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54587/5-A	Method Blank	Total/NA	Solid	5035	

#### **Analysis Batch: 54640**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Total/NA	Solid	8021B	54508
880-28880-2	C-2, 2'	Total/NA	Solid	8021B	54508
880-28880-3	C-3, 2'	Total/NA	Solid	8021B	54508
880-28880-4	C-4, 2'	Total/NA	Solid	8021B	54508
880-28880-5	C-5, 2'	Total/NA	Solid	8021B	54508
880-28880-6	C-6, 2'	Total/NA	Solid	8021B	54508
880-28880-7	C-7, 2'	Total/NA	Solid	8021B	54508
880-28880-8	C-8, 0-2'	Total/NA	Solid	8021B	54508
880-28880-9	C-9 0-2'	Total/NA	Solid	8021B	54508
880-28880-10	C-10 0-2'	Total/NA	Solid	8021B	54508
880-28880-11	C-11 3'	Total/NA	Solid	8021B	54508
880-28880-12	C-12, 4.1'	Total/NA	Solid	8021B	54508
880-28880-13	C-13, 4.1'	Total/NA	Solid	8021B	54508
880-28880-14	C-14, 0-3'	Total/NA	Solid	8021B	54508
880-28880-15	C-15, 0-3'	Total/NA	Solid	8021B	54508
880-28880-16	C-16, 4.1'	Total/NA	Solid	8021B	54508
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	8021B	54508
MB 880-54508/5-A	Method Blank	Total/NA	Solid	8021B	54508
MB 880-54587/5-A	Method Blank	Total/NA	Solid	8021B	54587
LCS 880-54508/1-A	Lab Control Sample	Total/NA	Solid	8021B	54508
LCSD 880-54508/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54508
880-28880-1 MS	C-1, 2'	Total/NA	Solid	8021B	54508

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1

SDG: 21-0100-20

## **GC VOA (Continued)**

### Analysis Batch: 54640 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1 MSD	C-1, 2'	Total/NA	Solid	8021B	54508

#### Analysis Batch: 54818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Total/NA	Solid	Total BTEX	
880-28880-2	C-2, 2'	Total/NA	Solid	Total BTEX	
880-28880-3	C-3, 2'	Total/NA	Solid	Total BTEX	
880-28880-4	C-4, 2'	Total/NA	Solid	Total BTEX	
880-28880-5	C-5, 2'	Total/NA	Solid	Total BTEX	
880-28880-6	C-6, 2'	Total/NA	Solid	Total BTEX	
880-28880-7	C-7, 2'	Total/NA	Solid	Total BTEX	
880-28880-8	C-8, 0-2'	Total/NA	Solid	Total BTEX	
880-28880-9	C-9 0-2'	Total/NA	Solid	Total BTEX	
880-28880-10	C-10 0-2'	Total/NA	Solid	Total BTEX	
880-28880-11	C-11 3'	Total/NA	Solid	Total BTEX	
880-28880-12	C-12, 4.1'	Total/NA	Solid	Total BTEX	
880-28880-13	C-13, 4.1'	Total/NA	Solid	Total BTEX	
880-28880-14	C-14, 0-3'	Total/NA	Solid	Total BTEX	
880-28880-15	C-15, 0-3'	Total/NA	Solid	Total BTEX	
880-28880-16	C-16, 4.1'	Total/NA	Solid	Total BTEX	
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

#### Analysis Batch: 54329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Total/NA	Solid	8015B NM	54429
880-28880-2	C-2, 2'	Total/NA	Solid	8015B NM	54429
880-28880-3	C-3, 2'	Total/NA	Solid	8015B NM	54429
880-28880-4	C-4, 2'	Total/NA	Solid	8015B NM	54429
880-28880-5	C-5, 2'	Total/NA	Solid	8015B NM	54429
880-28880-6	C-6, 2'	Total/NA	Solid	8015B NM	54429
880-28880-7	C-7, 2'	Total/NA	Solid	8015B NM	54429
880-28880-8	C-8, 0-2'	Total/NA	Solid	8015B NM	54429
MB 880-54429/1-A	Method Blank	Total/NA	Solid	8015B NM	54429
LCS 880-54429/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54429
LCSD 880-54429/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54429

#### Prep Batch: 54429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Total/NA	Solid	8015NM Prep	
880-28880-2	C-2, 2'	Total/NA	Solid	8015NM Prep	
880-28880-3	C-3, 2'	Total/NA	Solid	8015NM Prep	
880-28880-4	C-4, 2'	Total/NA	Solid	8015NM Prep	
880-28880-5	C-5, 2'	Total/NA	Solid	8015NM Prep	
880-28880-6	C-6, 2'	Total/NA	Solid	8015NM Prep	
880-28880-7	C-7, 2'	Total/NA	Solid	8015NM Prep	
880-28880-8	C-8, 0-2'	Total/NA	Solid	8015NM Prep	
MB 880-54429/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54429/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54429/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Eurofins Midland** 

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Client: Larson & Associates, Inc. Job ID: 880-28880-1 Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

### GC Semi VOA

### Prep Batch: 54453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-9	C-9 0-2'	Total/NA	Solid	8015NM Prep	
880-28880-10	C-10 0-2'	Total/NA	Solid	8015NM Prep	
880-28880-11	C-11 3'	Total/NA	Solid	8015NM Prep	
880-28880-12	C-12, 4.1'	Total/NA	Solid	8015NM Prep	
880-28880-13	C-13, 4.1'	Total/NA	Solid	8015NM Prep	
880-28880-14	C-14, 0-3'	Total/NA	Solid	8015NM Prep	
880-28880-15	C-15, 0-3'	Total/NA	Solid	8015NM Prep	
880-28880-16	C-16, 4.1'	Total/NA	Solid	8015NM Prep	
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	8015NM Prep	
MB 880-54453/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54453/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-28880-9 MS	C-9 0-2'	Total/NA	Solid	8015NM Prep	
880-28880-9 MSD	C-9 0-2'	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 54466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Total/NA	Solid	8015 NM	
880-28880-2	C-2, 2'	Total/NA	Solid	8015 NM	
880-28880-3	C-3, 2'	Total/NA	Solid	8015 NM	
880-28880-4	C-4, 2'	Total/NA	Solid	8015 NM	
880-28880-5	C-5, 2'	Total/NA	Solid	8015 NM	
880-28880-6	C-6, 2'	Total/NA	Solid	8015 NM	
880-28880-7	C-7, 2'	Total/NA	Solid	8015 NM	
880-28880-8	C-8, 0-2'	Total/NA	Solid	8015 NM	
880-28880-9	C-9 0-2'	Total/NA	Solid	8015 NM	
880-28880-10	C-10 0-2'	Total/NA	Solid	8015 NM	
880-28880-11	C-11 3'	Total/NA	Solid	8015 NM	
880-28880-12	C-12, 4.1'	Total/NA	Solid	8015 NM	
880-28880-13	C-13, 4.1'	Total/NA	Solid	8015 NM	
880-28880-14	C-14, 0-3'	Total/NA	Solid	8015 NM	
880-28880-15	C-15, 0-3'	Total/NA	Solid	8015 NM	
880-28880-16	C-16, 4.1'	Total/NA	Solid	8015 NM	
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	8015 NM	

#### Analysis Batch: 54532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-9	C-9 0-2'	Total/NA	Solid	8015B NM	54453
880-28880-10	C-10 0-2'	Total/NA	Solid	8015B NM	54453
880-28880-11	C-11 3'	Total/NA	Solid	8015B NM	54453
880-28880-12	C-12, 4.1'	Total/NA	Solid	8015B NM	54453
880-28880-13	C-13, 4.1'	Total/NA	Solid	8015B NM	54453
880-28880-14	C-14, 0-3'	Total/NA	Solid	8015B NM	54453
880-28880-15	C-15, 0-3'	Total/NA	Solid	8015B NM	54453
880-28880-16	C-16, 4.1'	Total/NA	Solid	8015B NM	54453
880-28880-17	C-17, 0-4.1'	Total/NA	Solid	8015B NM	54453
MB 880-54453/1-A	Method Blank	Total/NA	Solid	8015B NM	54453
LCS 880-54453/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54453
LCSD 880-54453/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54453
880-28880-9 MS	C-9 0-2'	Total/NA	Solid	8015B NM	54453
880-28880-9 MSD	C-9 0-2'	Total/NA	Solid	8015B NM	54453

**Eurofins Midland** 

6/5/2023

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1

SDG: 21-0100-20

### HPLC/IC

#### Leach Batch: 54461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-15	C-15, 0-3'	Soluble	Solid	DI Leach	
880-28880-16	C-16, 4.1'	Soluble	Solid	DI Leach	
880-28880-17	C-17, 0-4.1'	Soluble	Solid	DI Leach	
MB 880-54461/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54461/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54461/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28880-15 MS	C-15, 0-3'	Soluble	Solid	DI Leach	
880-28880-15 MSD	C-15, 0-3'	Soluble	Solid	DI Leach	

#### Leach Batch: 54463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
880-28880-1	C-1, 2'	Soluble	Solid	DI Leach	
880-28880-2	C-2, 2'	Soluble	Solid	DI Leach	
880-28880-3	C-3, 2'	Soluble	Solid	DI Leach	
880-28880-4	C-4, 2'	Soluble	Solid	DI Leach	
880-28880-5	C-5, 2'	Soluble	Solid	DI Leach	
880-28880-6	C-6, 2'	Soluble	Solid	DI Leach	
880-28880-7	C-7, 2'	Soluble	Solid	DI Leach	
880-28880-8	C-8, 0-2'	Soluble	Solid	DI Leach	
880-28880-9	C-9 0-2'	Soluble	Solid	DI Leach	
880-28880-10	C-10 0-2'	Soluble	Solid	DI Leach	
880-28880-11	C-11 3'	Soluble	Solid	DI Leach	
880-28880-12	C-12, 4.1'	Soluble	Solid	DI Leach	
880-28880-13	C-13, 4.1'	Soluble	Solid	DI Leach	
880-28880-14	C-14, 0-3'	Soluble	Solid	DI Leach	
MB 880-54463/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54463/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54463/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28880-5 MS	C-5, 2'	Soluble	Solid	DI Leach	
880-28880-5 MSD	C-5, 2'	Soluble	Solid	DI Leach	

#### **Analysis Batch: 54515**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-1	C-1, 2'	Soluble	Solid	300.0	54463
880-28880-2	C-2, 2'	Soluble	Solid	300.0	54463
880-28880-3	C-3, 2'	Soluble	Solid	300.0	54463
880-28880-4	C-4, 2'	Soluble	Solid	300.0	54463
880-28880-5	C-5, 2'	Soluble	Solid	300.0	54463
880-28880-6	C-6, 2'	Soluble	Solid	300.0	54463
880-28880-7	C-7, 2'	Soluble	Solid	300.0	54463
880-28880-8	C-8, 0-2'	Soluble	Solid	300.0	54463
880-28880-9	C-9 0-2'	Soluble	Solid	300.0	54463
880-28880-10	C-10 0-2'	Soluble	Solid	300.0	54463
880-28880-11	C-11 3'	Soluble	Solid	300.0	54463
880-28880-12	C-12, 4.1'	Soluble	Solid	300.0	54463
880-28880-13	C-13, 4.1'	Soluble	Solid	300.0	54463
880-28880-14	C-14, 0-3'	Soluble	Solid	300.0	54463
MB 880-54463/1-A	Method Blank	Soluble	Solid	300.0	54463
LCS 880-54463/2-A	Lab Control Sample	Soluble	Solid	300.0	54463
LCSD 880-54463/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54463
880-28880-5 MS	C-5, 2'	Soluble	Solid	300.0	54463

**Eurofins Midland** 

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Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

SDG: 21-0100-20

## **HPLC/IC** (Continued)

### Analysis Batch: 54515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-5 MSD	C-5, 2'	Soluble	Solid	300.0	54463

#### Analysis Batch: 54527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-28880-15	C-15, 0-3'	Soluble	Solid	300.0	54461
880-28880-16	C-16, 4.1'	Soluble	Solid	300.0	54461
880-28880-17	C-17, 0-4.1'	Soluble	Solid	300.0	54461
MB 880-54461/1-A	Method Blank	Soluble	Solid	300.0	54461
LCS 880-54461/2-A	Lab Control Sample	Soluble	Solid	300.0	54461
LCSD 880-54461/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54461
880-28880-15 MS	C-15, 0-3'	Soluble	Solid	300.0	54461
880-28880-15 MSD	C-15, 0-3'	Soluble	Solid	300.0	54461

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SDG: 21-0100-20

Client Sample ID: C-1, 2' Date Collected: 05/24/23 08:00 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 15:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 00:08	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 19:30	CH	EET MID

Lab Sample ID: 880-28880-2

**Matrix: Solid** 

Date Collected: 05/24/23 08:10 Date Received: 05/30/23 08:51

Client Sample ID: C-2, 2'

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.96 g 5 mL 54508 05/31/23 13:45 MNR EET MID Total/NA 8021B 5 mL **EET MID** Analysis 1 5 mL 54640 06/03/23 15:35 ΑJ Total/NA Total BTEX 54818 06/05/23 16:54 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 54466 05/31/23 09:49 SM **EET MID** Total/NA 54429 Prep 8015NM Prep 10.03 g 10 mL 05/30/23 16:07 A.I **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 54329 05/31/23 00:30 SM **EET MID** Soluble Leach DI Leach 5.05 g 50 mL 54463 05/31/23 09:40 KS **EET MID** Soluble Analysis 300.0 50 mL 50 mL 54515 05/31/23 19:35 СН **EET MID** 

Client Sample ID: C-3, 2'

Date Collected: 05/24/23 08:20 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-3

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 15:55	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 00:51	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 19:41	CH	EET MID

Client Sample ID: C-4, 2'

Date Collected: 05/24/23 08:30 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-4

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 16:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID

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#### Lab Chronicle

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD Job ID: 880-28880-1 SDG: 21-0100-20

Lab Sample ID: 880-28880-4

Matrix: Solid

Client Sample ID: C-4, 2'

Date Collected: 05/24/23 08:30 Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 01:13	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 19:46	CH	EET MID

Client Sample ID: C-5, 2' Lab Sample ID: 880-28880-5 Date Collected: 05/24/23 08:40 **Matrix: Solid** 

Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 16:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 01:35	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 19:51	CH	EET MID

Client Sample ID: C-6, 2' Lab Sample ID: 880-28880-6 Date Collected: 05/24/23 08:50 **Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 16:56	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 01:56	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 20:07	CH	EET MID

Client Sample ID: C-7, 2' Lab Sample ID: 880-28880-7 Date Collected: 05/24/23 09:00 **Matrix: Solid** 

Date Received: 05/30/23 08:51

Date Received: 05/30/23 08:51

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 17:17	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 02:18	SM	EET MID

**Eurofins Midland** 

Page 33 of 43

Job ID: 880-28880-1 SDG: 21-0100-20

Client Sample ID: C-7, 2'

Client: Larson & Associates, Inc.

Project/Site: Saldo Draw 13 SWD

Date Collected: 05/24/23 09:00 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54515	05/31/23 20:12	CH	EET MID

Client Sample ID: C-8, 0-2' Lab Sample ID: 880-28880-8

Date Collected: 05/24/23 09:10 **Matrix: Solid** 

Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 17:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	05/31/23 09:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54429	05/30/23 16:07	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54329	05/31/23 02:39	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 20:29	CH	EET MID

Client Sample ID: C-9 0-2' Lab Sample ID: 880-28880-9

Date Collected: 05/24/23 09:20 Date Received: 05/30/23 08:51

**Matrix: Solid** 

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 17:58	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 11:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54515	05/31/23 20:34	CH	EET MID

Client Sample ID: C-10 0-2' Lab Sample ID: 880-28880-10

Date Collected: 05/24/23 09:30 Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 18:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 12:26	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 20:39	CH	EET MID

Client Sample ID: C-11 3'

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

Date Collected: 05/24/23 10:00 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-11

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 20:09	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MIC
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 12:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54463	05/31/23 09:40	KS	EET MIC
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 20:45	CH	EET MID

Client Sample ID: C-12, 4.1' Lab Sample ID: 880-28880-12

Date Collected: 05/24/23 10:10

Date Received: 05/30/23 08:51

**Matrix: Solid** 

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.05 g 5 mL 54508 05/31/23 13:45 MNR EET MID Total/NA 8021B 5 mL 06/03/23 20:29 **EET MID** Analysis 1 5 mL 54640 ΑJ Total/NA Total BTEX 54818 06/05/23 16:54 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 54466 06/02/23 09:38 SM **EET MID** Total/NA 54453 Prep 8015NM Prep 10.02 g 10 mL 05/31/23 09:15 AM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 54532 06/01/23 13:10 SM **EET MID** 05/31/23 09:40 Soluble Leach DI Leach 4.99 g 50 mL 54463 KS **EET MID** Soluble Analysis 300.0 50 mL 50 mL 54515 05/31/23 20:50 СН **EET MID** 

Client Sample ID: C-13, 4.1'

Date Collected: 05/24/23 10:20

Date Received: 05/30/23 08:51

Lab Sample	ID: 880-28880-13
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**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 20:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 13:31	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 20:55	CH	EET MID

Client Sample ID: C-14, 0-3'

Date Collected: 05/24/23 10:30

Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-14

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 21:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID

Job ID: 880-28880-1

SDG: 21-0100-20

Project/Site: Saldo Draw 13 SWD Client Sample ID: C-14, 0-3'

Client: Larson & Associates, Inc.

Date Collected: 05/24/23 10:30 Date Received: 05/30/23 08:51

Lab Sample ID: 880-28880-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 13:53	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54463	05/31/23 09:40	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54515	05/31/23 21:01	CH	EET MID

Lab Sample ID: 880-28880-15

Client Sample ID: C-15, 0-3' Date Collected: 05/24/23 10:40 **Matrix: Solid** 

Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 21:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 14:15	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54461	05/31/23 09:37	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54527	05/31/23 21:43	CH	EET MID

Client Sample ID: C-16, 4.1' Lab Sample ID: 880-28880-16 Date Collected: 05/24/23 10:50 **Matrix: Solid** 

Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 21:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54453	05/31/23 09:15	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54532	06/01/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54461	05/31/23 09:37	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54527	05/31/23 21:59	CH	EET MID

Client Sample ID: C-17, 0-4.1' Lab Sample ID: 880-28880-17

Date Collected: 05/24/23 11:00 Date Received: 05/30/23 08:51

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	54508	05/31/23 13:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 22:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54818	06/05/23 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54466	06/02/23 09:38	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	54453 54532	05/31/23 09:15 06/01/23 14:58	AM SM	EET MID EET MID

**Eurofins Midland** 

**Matrix: Solid** 

### **Lab Chronicle**

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD

Job ID: 880-28880-1 SDG: 21-0100-20

Client Sample ID: C-17, 0-4.1'

Lab Sample ID: 880-28880-17

Date Collected: 05/24/23 11:00 Date Received: 05/30/23 08:51

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	54461	05/31/23 09:37	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54527	05/31/23 22:05	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. Job ID: 880-28880-1 Project/Site: Saldo Draw 13 SWD SDG: 21-0100-20

#### **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority Texas		ogram	Identification Number	<b>Expiration Date</b>
		ELAP	T104704400-22-25	06-30-23
The following analytes	are included in this report hi	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for a
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## **Method Summary**

Client: Larson & Associates, Inc. Project/Site: Saldo Draw 13 SWD Job ID: 880-28880-1

SDG: 21-0100-20

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
3015NM 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: Saldo Draw 13 SWD

880-28880-17

C-17, 0-4.1'

Job ID: 880-28880-1 SDG: 21-0100-20

00-20	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-28880-1	C-1, 2'	Solid	05/24/23 08:00	05/30/23 08:51
880-28880-2	C-2, 2'	Solid	05/24/23 08:10	05/30/23 08:51
880-28880-3	C-3, 2'	Solid	05/24/23 08:20	05/30/23 08:51
880-28880-4	C-4, 2'	Solid	05/24/23 08:30	05/30/23 08:51
880-28880-5	C-5, 2'	Solid	05/24/23 08:40	05/30/23 08:51
880-28880-6	C-6, 2'	Solid	05/24/23 08:50	05/30/23 08:51
880-28880-7	C-7, 2'	Solid	05/24/23 09:00	05/30/23 08:51
880-28880-8	C-8, 0-2'	Solid	05/24/23 09:10	05/30/23 08:51
880-28880-9	C-9 0-2'	Solid	05/24/23 09:20	05/30/23 08:51
880-28880-10	C-10 0-2'	Solid	05/24/23 09:30	05/30/23 08:51
880-28880-11	C-11 3'	Solid	05/24/23 10:00	05/30/23 08:51
880-28880-12	C-12, 4.1'	Solid	05/24/23 10:10	05/30/23 08:51
880-28880-13	C-13, 4.1'	Solid	05/24/23 10:20	05/30/23 08:51
880-28880-14	C-14, 0-3'	Solid	05/24/23 10:30	05/30/23 08:51
880-28880-15	C-15, 0-3'	Solid	05/24/23 10:40	05/30/23 08:51
880-28880-16	C-16, 4.1'	Solid	05/24/23 10:50	05/30/23 08:51

Solid

05/30/23 08:51

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	No. 3076
	CHA USTODY
SSOCiates, Inc.  Environmental Consultants  Midland, TX 79701  PRO	LAB WORK ORDER#  DJECT LOCATION OR NAME  PROJECT # 21-0100 - 20 COLLECTOR KG
TRRP report?  Yes  Yes  Yes  OT=OTHER  S=SOIL  P=PAINT  W=WATER  SL=SLUDGE  A=AIR  OT=OTHER	
Field Sample I D Lab # Date Time Matrix # DH P ON T B D D D D D D D D D D D D D D D D D D	### ##################################
C-16, 4.1' 5-24-23 1050 S 1 X X XX C-17,0-4.1' 1 1100 1 1 X X X	
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TOTAL  RELINATION DATE/TIME RECEIVED BY (Signature)	
REZINQUISHED BY (Signature)  S(50)23 OFS  DATE/TIME RECEIVED BY (Signature)	TURN AROUND TIME LABORATORY USE ONLY:  NORMAL RECEIVING TEMP THERM#
RELINQUISHED BY (Signature)  DATE/TIME RECEIVED BY (Signature)	CUSTODY SEALS - □ BROKEN □ INTACT □ NOT USED
LABORATORY XCLCO	OTHER

## **Login Sample Receipt Checklist**

Job Number: 880-28880-1 Client: Larson & Associates, Inc. SDG Number: 21-0100-20

Login Number: 28880 **List Source: Eurofins Midland** 

List Number: 1

Creator: Rodriguez, Leticia

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

**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Mr. Mark J Larson Larson & Associates, Inc. 507 N Marienfeld Suite 202 Midland, Texas 79701

Generated 6/22/2023 11:09:18 AM

# **JOB DESCRIPTION**

SD-13 SWD SDG NUMBER 21-0100-20

## **JOB NUMBER**

880-29624-1

Eurofins Midland 1211 W. Florida Ave Midland TX 79701

# **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 6/22/2023 11:09:18 AM

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

Released to Imaging: 5/13/2024 12:25:55 PM

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

Laboratory Job ID: 880-29624-1 SDG: 21-0100-20

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### **Definitions/Glossary**

Job ID: 880-29624-1 Client: Larson & Associates, Inc. Project/Site: SD-13 SWD SDG: 21-0100-20

#### **Qualifiers**

#### **GC VOA**

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

#### **GC Semi VOA**

#### Qualifier **Qualifier Description**

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

#### **HPLC/IC**

Qualifier **Qualifier Description** 

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 MLMinimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

Not Calculated NC

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

#### **Case Narrative**

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

Job ID: 880-29624-1 SDG: 21-0100-20

Job ID: 880-29624-1

**Laboratory: Eurofins Midland** 

Narrative

Job Narrative 880-29624-1

#### Receipt

The samples were received on 6/15/2023 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: C-18, 2' (880-29624-1) and C-19, 0-2' (880-29624-2).

#### GC VOA

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

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-55662 and analytical batch 880-55746 was outside the upper control limits.

Method 8015MOD NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-55662/2-A) and (LCSD 880-55662/3-A). Evidence of matrix interferences is not obvious.

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

#### HPLC/IC

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

Job ID: 880-29624-1

SDG: 21-0100-20

Client Sample ID: C-18, 2'

Project/Site: SD-13 SWD

Client: Larson & Associates, Inc.

Date Collected: 06/14/23 12:00 Date Received: 06/15/23 16:00 Lab Sample ID: 880-29624-1

Matrix: Solid

	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
o-Xylene	< 0.00201	U	0.00201	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/21/23 14:05	06/22/23 03:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130			06/21/23 14:05	06/22/23 03:18	1
1,4-Difluorobenzene (Surr)	100		70 - 130			06/21/23 14:05	06/22/23 03:18	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			06/22/23 11:40	1
Allalyte	resuit	Qualifier						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzod	
<u> </u>	<50.0	U	50.0	mg/Kg	_ <del>-</del>		Analyzed 06/19/23 12:48	Dil Fac
Total TPH			50.0		_ =			
Total TPH  Method: SW846 8015B NM - Die	sel Range Orga	nics (DRO)	50.0 (GC)	mg/Kg		<u> </u>	06/19/23 12:48	1
Total TPH  Method: SW846 8015B NM - Die Analyte	sel Range Orga Result	nics (DRO) Qualifier	50.0 (GC)	mg/Kg	<u>D</u>	Prepared	06/19/23 12:48  Analyzed	Dil Fac
<u> </u>	sel Range Orga	nics (DRO) Qualifier	50.0 (GC)	mg/Kg		<u> </u>	06/19/23 12:48	Dil Fac
Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics	sel Range Orga Result	nics (DRO) Qualifier	50.0 (GC)	mg/Kg		Prepared	06/19/23 12:48  Analyzed	Dil Fac
Total TPH  Method: SW846 8015B NM - Die: Analyte  Gasoline Range Organics (GRO)-C6-C10	sel Range Orga Result <50.0	nics (DRO) Qualifier	50.0 (GC)  RL  50.0  50.0	mg/Kg  Unit  mg/Kg		Prepared 06/16/23 09:44	06/19/23 12:48  Analyzed  06/17/23 18:21	Dil Fac
Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result <50.0	nics (DRO) Qualifier U	(GC) RL 50.0	mg/Kg  Unit  mg/Kg		Prepared 06/16/23 09:44	06/19/23 12:48  Analyzed  06/17/23 18:21	Dil Fac
Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <50.0	nics (DRO) Qualifier U	50.0 (GC)  RL  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 06/16/23 09:44 06/16/23 09:44	06/19/23 12:48  Analyzed  06/17/23 18:21  06/17/23 18:21	Dil Fac
Total TPH  Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Orga Result <50.0 <50.0 <50.0	nics (DRO) Qualifier U	50.0  (GC)  RL  50.0  50.0  50.0	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 06/16/23 09:44 06/16/23 09:44	06/19/23 12:48  Analyzed 06/17/23 18:21 06/17/23 18:21	Dil Fac
Total TPH  Method: SW846 8015B NM - Diesel Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Sel Range Orga   Result   <50.0   <50.0   <50.0   <50.0	nics (DRO) Qualifier U	50.0  (GC)  RL  50.0  50.0  50.0  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 06/16/23 09:44 06/16/23 09:44 06/16/23 09:44 Prepared	Analyzed 06/17/23 18:21 06/17/23 18:21 06/17/23 18:21 Analyzed	Dil Fac
Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	sel Range Orga           Result         <50.0	U  Qualifier  U  Qualifier	50.0  (GC)  RL  50.0  50.0  50.0  Limits  70 - 130  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 06/16/23 09:44 06/16/23 09:44 06/16/23 09:44  Prepared 06/16/23 09:44	06/19/23 12:48  Analyzed 06/17/23 18:21  06/17/23 18:21  Analyzed  06/17/23 18:21	Dil Fac
Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	Sel Range Orga   Result	U  Qualifier  U  Qualifier	50.0  (GC)  RL  50.0  50.0  50.0  Limits  70 - 130  70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 06/16/23 09:44 06/16/23 09:44 06/16/23 09:44  Prepared 06/16/23 09:44	06/19/23 12:48  Analyzed 06/17/23 18:21  06/17/23 18:21  Analyzed  06/17/23 18:21	

Client Sample ID: C-19, 0-2' Lab Sample ID: 880-29624-2 Date Collected: 06/14/23 12:05 **Matrix: Solid** 

Date Received: 06/15/23 16:00

Method: SW846 8021B - Volati	ethod: SW846 8021B - Volatile Organic Compounds (GC)										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Benzene	<0.00202	U	0.00202	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
Toluene	<0.00202	U	0.00202	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/21/23 14:05	06/22/23 03:39	1			
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	85		70 - 130			06/21/23 14:05	06/22/23 03:39	1			
1,4-Difluorobenzene (Surr)	102		70 - 130			06/21/23 14:05	06/22/23 03:39	1			

## **Client Sample Results**

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

Job ID: 880-29624-1

SDG: 21-0100-20

Client Sample ID: C-19, 0-2'

Lab Sample ID: 880-29624-2

Matrix: Solid

Date Collected: 0	6/14/23 12:05
Date Received: 0	6/15/23 16:00

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			06/22/23 11:40	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			06/19/23 12:48	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		06/16/23 09:44	06/17/23 18:45	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		06/16/23 09:44	06/17/23 18:45	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/16/23 09:44	06/17/23 18:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130			06/16/23 09:44	06/17/23 18:45	1
o-Terphenyl (Surr)	103		70 - 130			06/16/23 09:44	06/17/23 18:45	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2160		25.0	mg/Kg			06/16/23 15:47	5

## **Surrogate Summary**

Client: Larson & Associates, Inc.

Project/Site: SD-13 SWD

Job ID: 880-29624-1

SDG: 21-0100-20

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)	
880-29624-1	C-18, 2'	85	100	
880-29624-2	C-19, 0-2'	85	102	
LCS 880-56022/1-A	Lab Control Sample	94	95	
LCSD 880-56022/2-A	Lab Control Sample Dup	97	87	
MB 880-55972/5-A	Method Blank	88	95	
MB 880-56022/5-A	Method Blank	96	107	
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (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)	
880-29624-1	C-18, 2'	127	116	
880-29624-2	C-19, 0-2'	118	103	
LCS 880-55662/2-A	Lab Control Sample	145 S1+	132 S1+	
LCSD 880-55662/3-A	Lab Control Sample Dup	146 S1+	131 S1+	
MB 880-55662/1-A	Method Blank	149 S1+	139 S1+	

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

**Eurofins Midland** 

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Client: Larson & Associates, Inc. Job ID: 880-29624-1 Project/Site: SD-13 SWD SDG: 21-0100-20

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-55972/5-A

**Matrix: Solid** 

Analysis Batch: 55963

Client	Sample	ID:	Method	Blanl	k

**Prep Type: Total/NA** 

Prep Batch: 55972

Prep Batch: 56022

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/23 09:51	06/21/23 14:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/23 09:51	06/21/23 14:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/23 09:51	06/21/23 14:28	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/21/23 09:51	06/21/23 14:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/23 09:51	06/21/23 14:28	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/23 09:51	06/21/23 14:28	1

мв мв

MD MD

Surrogate	%Recovery Qualifier	Limits	Pre	pared Analy	yzed Dil Fa
4-Bromofluorobenzene (Surr)	88	70 - 130	06/21/	23 09:51 06/21/23	3 14:28
1,4-Difluorobenzene (Surr)	95	70 - 130	06/21/	/23 09:51       06/21/23	3 14:28

Lab Sample ID: MB 880-56022/5-A Client Sample ID: Method Blank Matrix: Solid Prep Type: Total/NA

Analysis Batch: 55963

	INID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/23 14:05	06/22/23 02:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/23 14:05	06/22/23 02:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/23 14:05	06/22/23 02:29	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		06/21/23 14:05	06/22/23 02:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/23 14:05	06/22/23 02:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/23 14:05	06/22/23 02:29	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/21/23 14:05	06/22/23 02:29	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/21/23 14:05	06/22/23 02:29	1

Lab Sample ID: LCS 880-56022/1-A

**Matrix: Solid** 

Analysis Batch: 55963

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 56022

		Spike	LCS	LCS				%Rec	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	0.100	0.1147		mg/Kg		115	70 - 130	
	Toluene	0.100	0.1112		mg/Kg		111	70 - 130	
	Ethylbenzene	0.100	0.08671		mg/Kg		87	70 - 130	
İ	m,p-Xylenes	0.200	0.1762		mg/Kg		88	70 - 130	
	o-Xylene	0.100	0.08673		mg/Kg		87	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	94	70 _ 130
1.4-Difluorobenzene (Surr)	95	70 - 130

Lab Sample ID: LCSD 880-56022/2-A

Matrix: Solid							Prep 7	Гуре: То	tal/NA
Analysis Batch: 55963								Batch:	56022
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1187		mg/Kg		119	70 - 130	3	35

Job ID: 880-29624-1

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

SDG: 21-0100-20

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

Lab Sample ID: LCSD 880-56022/2-A

**Matrix: Solid** 

Analysis Batch: 55963

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 56022

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1259		mg/Kg		126	70 - 130	12	35
Ethylbenzene	0.100	0.1006		mg/Kg		101	70 - 130	15	35
m,p-Xylenes	0.200	0.2012		mg/Kg		101	70 - 130	13	35
o-Xylene	0.100	0.09855		mg/Kg		99	70 - 130	13	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-55662/1-A

**Matrix: Solid** 

Analysis Batch: 55746

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 55662

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/16/23 09:44	06/17/23 09:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/16/23 09:44	06/17/23 09:14	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/16/23 09:44	06/17/23 09:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	149	S1+	70 - 130	06/16/23 09:44	06/17/23 09:14	1
o-Terphenyl (Surr)	139	S1+	70 - 130	06/16/23 09:44	06/17/23 09:14	1

Lab Sample ID: LCS 880-55662/2-A

**Matrix: Solid** 

Analysis Batch: 55746

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 55662

	Opike	LOS	LUU				/01 <b>\C</b> C		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	976.9	-	mg/Kg		98	70 - 130	 	
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1168		mg/Kg		117	70 - 130		
C10-C28)									

Snike

LCS LCS

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane (Surr)	145	S1+	70 - 130
o-Terphenyl (Surr)	132	S1+	70 - 130

Lab Sample ID: LCSD 880-55662/3-A

**Matrix: Solid** 

Analysis Batch: 55746

Client Sample	ID:	Lab (	Control	Samp	le C	)up
---------------	-----	-------	---------	------	------	-----

Prep Type: Total/NA

Prep Batch: 55662

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1014		mg/Kg		101	70 - 130	4	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1189		mg/Kg		119	70 - 130	2	20
C10-C28)									

## QC Sample Results

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

Job ID: 880-29624-1

SDG: 21-0100-20

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

Lab Sample ID: LCSD 880-55662/3-A

**Matrix: Solid** 

Analysis Batch: 55746

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 55662

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Client Sample ID: Method Blank

Analyzed

06/16/23 14:28

LCSD LCSD

Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 146 S1+ 70 - 130 o-Terphenyl (Surr) 131 S1+ 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-55675/1-A

**Matrix: Solid** 

**Analysis Batch: 55703** 

Analyte

Chloride <5.00 U

Lab Sample ID: LCS 880-55675/2-A

**Matrix: Solid** 

Analysis Batch: 55703

Chloride

Lab Sample ID: LCSD 880-55675/3-A

**Matrix: Solid** 

Analyte

**Analysis Batch: 55703** 

Spike Analyte Chloride

MB MB

Result Qualifier RL

5.00

Spike

Added

250

247.2

LCS LCS Result Qualifier

Unit

mg/Kg

Unit mg/Kg

%Rec 99

Prepared

Limits 90 - 110

**Client Sample ID: Lab Control Sample** 

%Rec

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** 

LCSD LCSD RPD %Rec Added Result Qualifier Unit %Rec Limits RPD Limit 250 254.8 102 90 - 110 20 mg/Kg

Dil Fac

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

Job ID: 880-29624-1 SDG: 21-0100-20

# **GC VOA**

## Analysis Batch: 55963

Lab Sample ID	Client Sample ID	Prep Type	Prep Type Matrix		Prep Batch
880-29624-1	C-18, 2'	Total/NA	Solid	8021B	56022
880-29624-2	C-19, 0-2'	Total/NA	Solid	8021B	56022
MB 880-55972/5-A	Method Blank	Total/NA	Solid	8021B	55972
MB 880-56022/5-A	Method Blank	Total/NA	Solid	8021B	56022
LCS 880-56022/1-A	Lab Control Sample	Total/NA	Solid	8021B	56022
LCSD 880-56022/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	56022

## Prep Batch: 55972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-55972/5-A	Method Blank	Total/NA	Solid	5035	_

# Prep Batch: 56022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
880-29624-1	C-18, 2'	Total/NA	Solid	5035	<u> </u>
880-29624-2	C-19, 0-2'	Total/NA	Solid	5035	
MB 880-56022/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-56022/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-56022/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 56066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Total/NA	Solid	Total BTEX	
880-29624-2	C-19, 0-2'	Total/NA	Solid	Total BTEX	

#### **GC Semi VOA**

## Prep Batch: 55662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Total/NA	Solid	8015NM Prep	
880-29624-2	C-19, 0-2'	Total/NA	Solid	8015NM Prep	
MB 880-55662/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-55662/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-55662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 55746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Total/NA	Solid	8015B NM	55662
880-29624-2	C-19, 0-2'	Total/NA	Solid	8015B NM	55662
MB 880-55662/1-A	Method Blank	Total/NA	Solid	8015B NM	55662
LCS 880-55662/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	55662
LCSD 880-55662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	55662

#### Analysis Batch: 55831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Total/NA	Solid	8015 NM	
880-29624-2	C-19, 0-2'	Total/NA	Solid	8015 NM	

## HPLC/IC

#### Leach Batch: 55675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Soluble	Solid	DI Leach	

Client: Larson & Associates, Inc. Job ID: 880-29624-1 Project/Site: SD-13 SWD SDG: 21-0100-20

# **HPLC/IC** (Continued)

# Leach Batch: 55675 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-2	C-19, 0-2'	Soluble	Solid	DI Leach	
MB 880-55675/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-55675/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-55675/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 55703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29624-1	C-18, 2'	Soluble	Solid	300.0	55675
880-29624-2	C-19, 0-2'	Soluble	Solid	300.0	55675
MB 880-55675/1-A	Method Blank	Soluble	Solid	300.0	55675
LCS 880-55675/2-A	Lab Control Sample	Soluble	Solid	300.0	55675
LCSD 880-55675/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	55675

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

Job ID: 880-29624-1 SDG: 21-0100-20

Lab Sample ID: 880-29624-1

Matrix: Solid

Client Sample ID: C-18, 2' Date Collected: 06/14/23 12:00 Date Received: 06/15/23 16:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	56022	06/21/23 14:05	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55963	06/22/23 03:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56066	06/22/23 11:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55831	06/19/23 12:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	55662	06/16/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55746	06/17/23 18:21	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	55675	06/16/23 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	55703	06/16/23 15:41	CH	EET MID

Client Sample ID: C-19, 0-2'

Date Collected: 06/14/23 12:05

Date Received: 06/15/23 16:00

Lab Sample ID: 880-29624-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	56022	06/21/23 14:05	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55963	06/22/23 03:39	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			56066	06/22/23 11:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55831	06/19/23 12:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	55662	06/16/23 09:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55746	06/17/23 18:45	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55675	06/16/23 10:22	SMC	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	55703	06/16/23 15:47	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: SD-13 SWD

Job ID: 880-29624-1

SDG: 21-0100-20

# **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority		ogram	Identification Number	<b>Expiration Date</b>
Texas		ELAP	T104704400-22-25	
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for y
the agency does not of	fer certification.	•	, , ,	.,
the agency does not of Analysis Method	fer certification.  Prep Method	Matrix	Analyte	.,
0 ,		Matrix Solid	, , ,	

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# **Method Summary**

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

Job ID: 880-29624-1

SDG: 21-0100-20

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

**Eurofins Midland** 

Released to Imaging: 5/13/2024 12:25:55 PM

# **Sample Summary**

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

Job ID: 880-29624-1 SDG: 21-0100-20

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-29624-1	C-18, 2'	Solid	06/14/23 12:00	06/15/23 16:00
880-29624-2	C-19, 0-2'	Solid	06/14/23 12:05	06/15/23 16:00

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Received by OCD: 4/15/2024 9:41:00 AM

- 0 m 4 m 0 r 8 0 5 5 5 5	7 7		2965 29624 No. 3084 CHAIN-OF-CUSTODY
			CHAIN-OF-CUSTODY <sup>®</sup> No. 1
Agrson & 507 N. Marienf	eld, Ste. 202 DATE	6-15-23	PAGE OF   ©
Associates, Inc. Midland, T	X 79701 PO#	ECT LOCATION OR NA	LAB WORK ORDER#
Environmental Consultants 432-687  Data Reported to		roject# 21-0\00	
TRRP report?  Yes  No  TIME ZONE  S=SOIL P=PAINT W=WATER SL=SLUDGE A=AIR OT=OTHER  PRESE	RVATION		
Time zone/State  MS+/NM  Field  Field  Sample I D. J.	H <sub>2</sub> SO <sub>4</sub> © NaOH C ICE UNPRESSERVED	\\$\\\$\\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\\$\\\\$\\\$\\\$\\\$\\\$\\\$\\\$\\\\\\\\\\\\\\
Field Sample I D Lab # Date Time Matrix # 1 ON I	H <sub>2</sub> SO <sub>4</sub> NNPRE UNPRE		FIELD NOTES
C-18,21 6-1423 1266 5	X X X	X	X Cor
C-140-2 6-14-23 1205 3 1		<del>y</del>	
			of 19
			<u>0</u> -
			Page
			++++++
			- Obein of Gustody
			880-29624 Chain of Custody
TOTAL  RELINQUISHED BY (Signature)  DATE/TIME OF RECEIVED BY	(Signature)		
RELINQUISHED BY (Signature)  RELINQUISHED BY (Signature)  DATE/TIME RECEIVED BY  RELINQUISHED BY (Signature)		NORMAL NORMAL 1 DAY	LABORATORY USE ONLY:  RECEIVING TEMP 4946 THERM# 58 - 36  CUSTODY SEALS - BROKEN SINTACT NOT USED  CARRIER BILL #
RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY	(Signature)	2 DAY 🔲	CUSTODY SEALS - ☐ BROKEN MINTACT ☐ NOT USED ☐ CARRIER BILL#
LABORATORY JONCO			HAND DELIVERED

# **Login Sample Receipt Checklist**

Client: Larson & Associates, Inc.

Job Number: 880-29624-1

SDG Number: 21-0100-20

Login Number: 29624 List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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

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**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Mr. Mark J Larson Larson & Associates, Inc. 507 N Marienfeld Suite 202 Midland, Texas 79701

Generated 1/2/2024 9:18:13 AM

# **JOB DESCRIPTION**

Salado Draw 13 CWD 23-0102-04

# **JOB NUMBER**

880-37326-1

Eurofins Midland 1211 W. Florida Ave Midland TX 79701

# **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 1/2/2024 9:18:13 AM

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

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Laboratory Job ID: 880-37326-1

SDG: 23-0102-04

# **Table of Contents**

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# Definitions/Glossary

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

Qualifiers

**GC VOA** 

Qualifier Description

U Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier Qualifier Description

LCS and/or LCSD is outside acceptance limits, low biased.

F1 MS and/or MSD recovery exceeds control limits.

S1- Surrogate recovery exceeds control limits, low biased.

S1+ Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

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.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present
PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Midland** 

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#### **Case Narrative**

Client: Larson & Associates, Inc. Project: Salado Draw 13 CWD

Job ID: 880-37326-1

**Eurofins Midland** Job ID: 880-37326-1

#### Job Narrative 880-37326-1

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
- 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 12/28/2023 8:37 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

#### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: C-6 4.1' (880-37326-1), C-7 4.1' (880-37326-2), C-8A 0-4.1' (880-37326-3), C-11 4.1' (880-37326-4), C-15A 0-3' (880-37326-5), C-17A 0-4.1 (880-37326-6) and C-19A 0-21 (880-37326-7).

#### **GC VOA**

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

#### GC Semi VOA

Method 8015MOD NM: The laboratory control sample (LCS) associated with preparation batch 880-69859 and analytical batch 880-69866 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-69859/2-A) and (MB 880-69859/1-A). Evidence of matrix interferences is not obvious.

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

#### HPLC/IC

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

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

Client Sample ID: C-6 4.1'

Lab Sample ID: 880-37326-1

Matrix: Solid

Date Collected: 12/18/23 12:00 Date Received: 12/28/23 08:37

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/28/23 10:18	12/29/23 14:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			12/28/23 10:18	12/29/23 14:03	
1,4-Difluorobenzene (Surr)	105		70 - 130			12/28/23 10:18	12/29/23 14:03	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/29/23 14:03	1
Method: SW846 8015 NM - Dies			GC)					
Analyte	Result	Qualifier	RL	Unit mal/s	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	•	<mark>Unit</mark> mg/Kg	D	Prepared	Analyzed 12/28/23 14:43	Dil Fac
Analyte Total TPH	Result   <50.2	Qualifier U	RL 50.2		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die	Result  <50.2 sel Range Organia	Qualifier U	RL 50.2		D_	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Die Analyte	Result <50.2 sel Range Orga	Qualifier Unics (DRO)	RL 50.2	mg/Kg			12/28/23 14:43	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.2 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 50.2 (GC)	mg/Kg		Prepared	12/28/23 14:43  Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.2 sel Range Orga	Qualifier U  nics (DRO) Qualifier U *- F1	RL 50.2 (GC)	mg/Kg		Prepared	12/28/23 14:43  Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.2  Result <50.2  Result <50.2  <50.2	Qualifier U  nics (DRO) Qualifier U *- F1	RL 50.2 (GC) RL 50.2 50.2	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22	12/28/23 14:43  Analyzed 12/28/23 14:43 12/28/23 14:43	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.2  Result <50.2  Result <50.2	Qualifier U  nics (DRO) Qualifier U *- F1	RL 50.2 (GC) RL 50.2	mg/Kg  Unit  mg/Kg		Prepared 12/28/23 09:22	12/28/23 14:43  Analyzed  12/28/23 14:43	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.2  Result <50.2  Result <50.2  <50.2	Qualifier U  nics (DRO) Qualifier U *- F1 U	RL 50.2 (GC) RL 50.2 50.2	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22	12/28/23 14:43  Analyzed 12/28/23 14:43 12/28/23 14:43	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U *- F1 U	RL 50.2 (GC) RL 50.2 50.2	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22 12/28/23 09:22	Analyzed 12/28/23 14:43 12/28/23 14:43 12/28/23 14:43	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	Result	Qualifier U  nics (DRO) Qualifier U *- F1 U	RL 50.2  (GC)  RL 50.2  50.2  50.2  Limits	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22 12/28/23 09:22 Prepared	Analyzed 12/28/23 14:43  Analyzed 12/28/23 14:43 12/28/23 14:43 Analyzed	Dil Fac
Analyte Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)	Result	Qualifier U  nics (DRO) Qualifier U *- F1 U  Qualifier	RL 50.2 (GC) RL 50.2 50.2 50.2 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22 12/28/23 09:22 Prepared 12/28/23 09:22	Analyzed 12/28/23 14:43  12/28/23 14:43  12/28/23 14:43  12/28/23 14:43  Analyzed  12/28/23 14:43	Dil Fac
Total TPH  Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate	Result	Qualifier U  nics (DRO) Qualifier U *- F1 U  Qualifier	RL 50.2 (GC) RL 50.2 50.2 50.2 Limits 70 - 130 70 - 130	mg/Kg  Unit  mg/Kg  mg/Kg		Prepared 12/28/23 09:22 12/28/23 09:22 12/28/23 09:22 Prepared 12/28/23 09:22	Analyzed 12/28/23 14:43  12/28/23 14:43  12/28/23 14:43  12/28/23 14:43  Analyzed  12/28/23 14:43	Dil Fac

Client Sample ID: C-7 4.1' Lab Sample ID: 880-37326-2 Date Collected: 12/18/23 12:15 **Matrix: Solid** 

Date Received: 12/28/23 08:37

Method: SW846 8021B - Volati	•							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
Toluene	<0.00198	U	0.00198	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
m,p-Xylenes	<0.00397	U	0.00397	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		12/28/23 10:18	12/29/23 16:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			12/28/23 10:18	12/29/23 16:47	1
1,4-Difluorobenzene (Surr)	102		70 - 130			12/28/23 10:18	12/29/23 16:47	1

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

Lab Sample ID: 880-37326-2

Lab Sample ID: 880-37326-3

**Matrix: Solid** 

Matrix: Solid

Client Sample ID: C-7 4.1'

Date Collected: 12/18/23 12:15 Date Received: 12/28/23 08:37

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			12/29/23 16:47	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			12/28/23 15:47	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.1	U *-	50.1	mg/Kg		12/28/23 09:22	12/28/23 15:47	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.1	U	50.1	mg/Kg		12/28/23 09:22	12/28/23 15:47	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		12/28/23 09:22	12/28/23 15:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130			12/28/23 09:22	12/28/23 15:47	1
o-Terphenyl (Surr)	102		70 - 130			12/28/23 09:22	12/28/23 15:47	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	412		5.00	mg/Kg			12/28/23 12:05	

Client Sample ID: C-8A 0-4.1'

Date Collected: 12/18/23 12:30

Date Received: 12/28/23 08:37

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/28/23 10:18	12/29/23 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			12/28/23 10:18	12/29/23 17:07	1
1,4-Difluorobenzene (Surr) : Method: TAL SOP Total BTEX	- Total BTEX Cald	culation	70 - 130			12/28/23 10:18	12/29/23 17:07	1
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald	Qualifier	RL	Unit	<u>D</u>	12/28/23 10:18 Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)  Method: TAL SOP Total BTEX Analyte  Total BTEX	- Total BTEX Cald	Qualifier		Unit mg/Kg	<u>D</u>			
Method: TAL SOP Total BTEX Analyte Total BTEX	- Total BTEX Calc Result <0.00402	<b>Qualifier</b> U	RL 0.00402		<u>D</u>		Analyzed	
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die	- Total BTEX Cald Result <0.00402 esel Range Organ	<b>Qualifier</b> U	RL 0.00402		<u>D</u>		Analyzed	
Method: TAL SOP Total BTEX Analyte	- Total BTEX Cald Result <0.00402 esel Range Organ	Qualifier U ics (DRO) ( Qualifier	RL 0.00402	mg/Kg		Prepared	Analyzed 12/29/23 17:07	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.5	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.5	mg/Kg		Prepared	Analyzed 12/29/23 17:07 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.5 iesel Range Orga	Qualifier U ics (DRO) ( Qualifier U	RL 0.00402  GC)  RL 50.5	mg/Kg		Prepared	Analyzed 12/29/23 17:07 Analyzed	Dil Fac
Method: TAL SOP Total BTEX Analyte Total BTEX  Method: SW846 8015 NM - Die Analyte Total TPH  Method: SW846 8015B NM - D	- Total BTEX Calc Result <0.00402 esel Range Organ Result <50.5 iesel Range Orga	Qualifier U ics (DRO) ( Qualifier U nics (DRO) Qualifier	RL 0.00402  GC)  RL 50.5	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 12/29/23 17:07  Analyzed 12/28/23 16:09	Dil Fac  Dil Fac

Job ID: 880-37326-1

SDG: 23-0102-04

Project/Site: Salado Draw 13 CWD

Lab Sample ID: 880-37326-3

Matrix: Solid

Client Sample ID: C-8A 0-4	<b>4.1</b> '
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Date Collected: 12/18/23 12:30 Date Received: 12/28/23 08:37

Client: Larson & Associates, Inc.

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		12/28/23 09:22	12/28/23 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130			12/28/23 09:22	12/28/23 16:09	1
o-Terphenyl (Surr)	103		70 - 130			12/28/23 09:22	12/28/23 16:09	1

Method: EPA 300.0 - Anions, ion C	nromatograpny - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.4	5.04	mg/Kg			12/28/23 12:20	1

Client Sample ID: C-11 4.1'

Lab Sample ID: 880-37326-4

Date Collected: 12/18/23 14:00	Matrix: Solid
Date Received: 12/28/23 08:37	
- Г., ., . , ., ., .,	
Method: SW846 8021B - Volatile Organic Compounds (GC)	

Method: SW846 8021B - Volati	le Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/28/23 10:18	12/29/23 17:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			12/28/23 10:18	12/29/23 17:28	1
1,4-Difluorobenzene (Surr)	108		70 - 130			12/28/23 10:18	12/29/23 17:28	1

Method: TAL SOP Total BTEX - Tot	al BTEX Calc	ulation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00398	U	0.00398	ma/Ka			12/29/23 17:28	1	

Method: SW846 8015 NM - Diesel Rar	nge Organ	ics (DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			12/28/23 16:33	1
Method: SW846 8015B NM - Diesel Ra	ange Orga	nics (DRO) (G	C)					
Δnalvto	Result	Qualifier	RI	Unit	D	Prenared	Analyzed	Dil Fac

Method. 544040 00 13D 14M - Dies	er italige Orga	illics (DICO)	(00)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.7	U *-	49.7	mg/Kg		12/28/23 09:22	12/28/23 16:33	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.7	U	49.7	mg/Kg		12/28/23 09:22	12/28/23 16:33	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		12/28/23 09:22	12/28/23 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130			12/28/23 09:22	12/28/23 16:33	1
o-Terphenyl (Surr)	95		70 - 130			12/28/23 09:22	12/28/23 16:33	1
_								

Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Soluble	•					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		4.99	mg/Kg			12/28/23 12:25	1

Job ID: 880-37326-1 SDG: 23-0102-04

Project/Site: Salado Draw 13 CWD Client Sample ID: C-15A 0-3'

Lab Sample ID: 880-37326-5

Date Collected: 12/18/23 14:15 Date Received: 12/28/23 08:37

Client: Larson & Associates, Inc.

Matrix: Solid

	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
m,p-Xylenes	<0.00399	U	0.00399	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/28/23 10:18	12/30/23 11:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			12/28/23 10:18	12/30/23 11:12	1
1,4-Difluorobenzene (Surr)	101		70 - 130			12/28/23 10:18	12/30/23 11:12	1
Method: TAL SOP Total BTEX - 1	Total BTFX Cald	culation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/30/23 11:12	1
Method: SW846 8015 NM - Diese Analyte		ics (DRO) ( Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			12/28/23 16:57	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *-	49.9	mg/Kg		12/28/23 09:22	12/28/23 16:57	1
(GRO)-C6-C10								
•								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		12/28/23 09:22	12/28/23 16:57	1
•	<49.9 <49.9		49.9 49.9	mg/Kg mg/Kg		12/28/23 09:22 12/28/23 09:22	12/28/23 16:57 12/28/23 16:57	1
Diesel Range Organics (Over C10-C28)								•
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9			12/28/23 09:22	12/28/23 16:57	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <i>%Recovery</i>	U	49.9			12/28/23 09:22  Prepared	12/28/23 16:57  Analyzed	1 Dil Fac
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane (Surr)	<49.9 <b>%Recovery</b> 99 104	U <b>Qualifier</b>	49.9  Limits  70 - 130  70 - 130			12/28/23 09:22  Prepared  12/28/23 09:22	12/28/23 16:57  Analyzed  12/28/23 16:57	1 <b>Dil Fac</b>

Client Sample ID: C-17A 0-4.1 Lab Sample ID: 880-37326-6 Date Collected: 12/18/23 14:30

4.98

mg/Kg

172

Date Received: 12/28/23 08:37

Chloride

**Matrix: Solid** 

12/28/23 12:46

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
Toluene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		12/28/23 10:18	12/30/23 11:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			12/28/23 10:18	12/30/23 11:33	1
1,4-Difluorobenzene (Surr)	103		70 - 130			12/28/23 10:18	12/30/23 11:33	1

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD Job ID: 880-37326-1

SDG: 23-0102-04

Lab Sample ID: 880-37326-6

Matrix: Solid

Client Sample ID: C-17A 0-4.1

Date Collected: 12/18/23 14:30 Date Received: 12/28/23 08:37

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			12/30/23 11:33	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			12/28/23 17:23	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.7	U *-	49.7	mg/Kg		12/28/23 09:22	12/28/23 17:23	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.7	U	49.7	mg/Kg		12/28/23 09:22	12/28/23 17:23	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		12/28/23 09:22	12/28/23 17:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130			12/28/23 09:22	12/28/23 17:23	1
o-Terphenyl (Surr)	91		70 - 130			12/28/23 09:22	12/28/23 17:23	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		5.01	mg/Kg			12/28/23 12:51	

Client Sample ID: C-19A 0-21 Lab Sample ID: 880-37326-7 Date Collected: 12/19/23 12:40 **Matrix: Solid** 

Date Received: 12/28/23 08:37

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:53	
Toluene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:53	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:53	
m,p-Xylenes	<0.00401	U	0.00401	mg/Kg		12/28/23 10:18	12/30/23 11:53	
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/30/23 11:53	
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/28/23 10:18	12/30/23 11:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			12/28/23 10:18	12/30/23 11:53	1
Method: TAL SOP Total BTEX -			70 - 130		_	12/28/23 10:18	12/30/23 11:53	
Method: TAL SOP Total BTEX - Analyte	- Total BTEX Cald	Qualifier	RL	Unit	<u>D</u>	12/28/23 10:18 Prepared	Analyzed	
Analyte Total BTEX	- Total BTEX Calc Result <0.00401	<b>Qualifier</b> U	RL 0.00401	<mark>Unit</mark> mg/Kg	<u> </u>			Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies	- Total BTEX Calc Result <0.00401 sel Range Organ	<b>Qualifier</b> U	RL 0.00401		<u>D</u>		Analyzed	
Method: TAL SOP Total BTEX -	- Total BTEX Calc Result <0.00401 sel Range Organ	Qualifier U ics (DRO) (Qualifier	RL 0.00401	mg/Kg	<u> </u>	Prepared	Analyzed 12/30/23 11:53	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte	rotal BTEX Calc Result <0.00401  sel Range Organ Result <50.1	Qualifier U ics (DRO) ( Qualifier U	RL 0.00401  GC)  RL 50.1	mg/Kg	<u> </u>	Prepared	Analyzed 12/30/23 11:53 Analyzed	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte Total TPH  Method: SW846 8015B NM - Di	- Total BTEX Calc Result <0.00401 sel Range Organ Result <50.1 esel Range Orga	Qualifier U ics (DRO) ( Qualifier U	RL 0.00401  GC)  RL 50.1	mg/Kg	<u> </u>	Prepared	Analyzed 12/30/23 11:53 Analyzed	Dil Fac
Method: TAL SOP Total BTEX - Analyte Total BTEX  Method: SW846 8015 NM - Dies Analyte Total TPH	- Total BTEX Calc Result <0.00401 sel Range Organ Result <50.1 esel Range Orga	Qualifier U ics (DRO) ( Qualifier U nics (DRO)	RL 0.00401  GC)  RL 50.1	mg/Kg  Unit  mg/Kg	<u>D</u>	Prepared Prepared	Analyzed 12/30/23 11:53  Analyzed 12/28/23 17:47	Dil Fac

# **Client Sample Results**

Client: Larson & Associates, Inc. Job ID: 880-37326-1 Project/Site: Salado Draw 13 CWD

98

SDG: 23-0102-04

Client Sample ID: C-19A 0-21 Date Collected: 12/19/23 12:40

Lab Sample ID: 880-37326-7

Date Received: 12/28/23 08:37

o-Terphenyl (Surr)

Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued) Result Qualifier Unit D Prepared Analyzed Dil Fac Oll Range Organics (Over C28-C36) <50.1 U 50.1 12/28/23 09:22 12/28/23 17:47 mg/Kg Surrogate %Recovery Qualifier Limits Prepared Analyzed 70 - 130 1-Chlorooctane (Surr) 95

Dil Fac 12/28/23 09:22 12/28/23 17:47 12/28/23 09:22 12/28/23 17:47

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride 5.02 12/28/23 12:56 93.1 mg/Kg

70 - 130

# **Surrogate Summary**

Client: Larson & Associates, Inc. Job ID: 880-37326-1 Project/Site: Salado Draw 13 CWD SDG: 23-0102-04

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
380-37326-1	C-6 4.1'	105	105	
880-37326-2	C-7 4.1'	90	102	
880-37326-3	C-8A 0-4.1'	115	111	
880-37326-4	C-11 4.1'	113	108	
880-37326-5	C-15A 0-3'	98	101	
880-37326-6	C-17A 0-4.1	111	103	
880-37326-7	C-19A 0-21	119	112	
LCS 880-69890/1-A	Lab Control Sample	100	104	
LCSD 880-69890/2-A	Lab Control Sample Dup	109	105	
MB 880-69890/5-A	Method Blank	110	114	

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)	
880-37326-1	C-6 4.1'	98	104	
880-37326-1 MS	C-6 4.1'	95	87	
880-37326-1 MSD	C-6 4.1'	97	87	
880-37326-2	C-7 4.1'	96	102	
880-37326-3	C-8A 0-4.1'	96	103	
880-37326-4	C-11 4.1'	85	95	
880-37326-5	C-15A 0-3'	99	104	
880-37326-6	C-17A 0-4.1	85	91	
880-37326-7	C-19A 0-21	95	98	
LCS 880-69859/2-A	Lab Control Sample	123	141 S1+	
LCSD 880-69859/3-A	Lab Control Sample Dup	101	110	
MB 880-69859/1-A	Method Blank	43 S1-	54 S1-	

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1 SDG: 23-0102-04

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-69890/5-A

**Matrix: Solid** 

Analysis Batch: 69938

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 69890

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 11:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 11:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 11:11	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		12/28/23 10:18	12/29/23 11:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/28/23 10:18	12/29/23 11:11	1
Xvlenes, Total	< 0.00400	U	0.00400	ma/Ka		12/28/23 10:18	12/29/23 11:11	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	12	2/28/23 10:18	12/29/23 11:11	1
1,4-Difluorobenzene (Surr)	114		70 - 130	12	2/28/23 10:18	12/29/23 11:11	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 69890

Analysis Batch: 69938

**Matrix: Solid** 

Lab Sample ID: LCS 880-69890/1-A

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08884 mg/Kg 89 Toluene 0.100 0.08167 mg/Kg 82

70 - 130 70 - 130 0.100 0.08108 Ethylbenzene mg/Kg 81 70 - 130 0.200 0.1626 81 70 - 130 m,p-Xylenes mg/Kg 0.100 0.08895 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery Qua	lifier Limits	Qualifier
4-Bromofluorobenzene (Surr)	100	70 - 130	
1,4-Difluorobenzene (Surr)	104	70 - 130	

**Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

Analysis Batch: 69938

Lab Sample ID: LCSD 880-69890/2-A

Prep Type: Total/NA Prep Batch: 69890

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09108		mg/Kg		91	70 - 130	2	35
Toluene	0.100	0.08826		mg/Kg		88	70 - 130	8	35
Ethylbenzene	0.100	0.08320		mg/Kg		83	70 - 130	3	35
m,p-Xylenes	0.200	0.1607		mg/Kg		80	70 - 130	1	35
o-Xylene	0.100	0.09966		mg/Kg		100	70 - 130	11	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1 SDG: 23-0102-04

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

Lab Sample ID: MB 880-69859/1-A

Lab Sample ID: LCS 880-69859/2-A

Lab Sample ID: LCSD 880-69859/3-A

**Matrix: Solid** 

**Matrix: Solid** 

Analysis Batch: 69866

**Matrix: Solid** 

Analysis Batch: 69866

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 69859

ı		MB	MB						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0	mg/Kg		12/28/23 09:22	12/28/23 12:09	1
	(GRO)-C6-C10								
	Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		12/28/23 09:22	12/28/23 12:09	1
l	C10-C28)								
	OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/23 09:22	12/28/23 12:09	1
ı		MB	MB						

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	43	S1-	70 - 130	12/28/23 09:22	12/28/23 12:09	1
o-Terphenyl (Surr)	54	S1-	70 - 130	12/28/23 09:22	12/28/23 12:09	1

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 69859

LCS LCS Spike Added Result Qualifier Analyte Unit D %Rec Limits 1000 783.4 78 Gasoline Range Organics mg/Kg 70 - 130 (GRO)-C6-C10 1000 1020 Diesel Range Organics (Over mg/Kg 102 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery Qu	alifier Limits
1-Chlorooctane (Surr)	123	70 - 130
o-Terphenyl (Surr)	141 S1	+ 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analysis Batch: 69866 Prep Batch: 69859

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	645.4	*_	mg/Kg		65	70 - 130	19	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	851.6		mg/Kg		85	70 - 130	18	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane (Surr)	101	70 - 130
o-Terphenyl (Surr)	110	70 - 130

Lab Sample ID: 880-37326-1 MS Client Sample ID: C-6 4.1'

**Matrix: Solid** Analysis Batch: 69866

Prep Type: Total/NA

Prep Batch: 69859

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<50.2	U *- F1	995	715.2		mg/Kg		70	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.2	U	995	732.7		mg/Kg		74	70 - 130	
C10-C28)										

Spike

Added

995

995

Limits

70 - 130

70 - 130

Spike

Added

250

Spike

Added

Spike

250

RL

5.00

MSD MSD

Qualifier

Unit

LCS LCS

LCSD LCSD

Result Qualifier

Qualifier

Result

234.5

235.3

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

D

D

D

Prepared

%Rec

%Rec

94

94

Unit

mg/Kg

mg/Kg

D

%Rec

72

76

Result

730.2

751.8

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD

Sample Sample

Result Qualifier

<50.2 U \*- F1

MSD MSD

мв мв

<5.00 U

Result Qualifier

<50.2 U

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

Job ID: 880-37326-1 SDG: 23-0102-04

Prep Type: Total/NA

Prep Batch: 69859

Client Sample ID: C-6 4.1'

Client Sample ID: C-6 4.1'

%Rec

Limits

70 - 130

70 - 130

Client Sample ID: Method Blank

Analyzed

12/28/23 10:37

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

Limits

90 - 110

Prep Type: Total/NA

Prep Batch: 69859

RPD

2

3

RPD

Limit

20

20

**Prep Type: Soluble** 

Dil Fac

**Prep Type: Soluble** 

Client Sample ID: Lab Control Sample Dup

**Prep Type: Soluble** %Rec RPD

RPD

Limit

20

Client Sample ID: C-7 4.1'

**Prep Type: Soluble** 

%Rec

Limits 90 - 110

Lab Sample ID: 880-37326-1 MS **Matrix: Solid** Analysis Batch: 69866

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane (Surr) 95 70 - 130 o-Terphenyl (Surr) 87 70 - 130

Lab Sample ID: 880-37326-1 MSD

**Matrix: Solid** Analysis Batch: 69866

Analyte

Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)

Surrogate 1-Chlorooctane (Surr) o-Terphenyl (Surr)

%Recovery Qualifier 97 87

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-69849/1-A

**Matrix: Solid** 

Chloride

**Analysis Batch: 69902** 

Analyte

Lab Sample ID: LCS 880-69849/2-A **Matrix: Solid** 

Analysis Batch: 69902

Analyte Chloride

Lab Sample ID: LCSD 880-69849/3-A

**Matrix: Solid Analysis Batch: 69902** 

Analyte

Lab Sample ID: 880-37326-2 MS **Matrix: Solid** 

Chloride

**Analysis Batch: 69902** 

Analyte

Chloride 412

Result

Qualifier

Sample Sample

Added 250

651.2

Result Qualifier

MS MS

Unit mg/Kg

%Rec

# **QC Sample Results**

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

SDG: 23-0102-04

# Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-37326-2 MSD

Matrix: Solid

Client Sample ID: C-7 4.1'

Prep Type: Soluble

Analysis Batch: 69902

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	412		250	650.5		mg/Kg		95	90 - 110	0	20

5

6

0

10

4.0

13

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

SDG: 23-0102-04

# **GC VOA**

# Prep Batch: 69890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	5035	
880-37326-2	C-7 4.1'	Total/NA	Solid	5035	
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	5035	
880-37326-4	C-11 4.1'	Total/NA	Solid	5035	
880-37326-5	C-15A 0-3'	Total/NA	Solid	5035	
880-37326-6	C-17A 0-4.1	Total/NA	Solid	5035	
880-37326-7	C-19A 0-21	Total/NA	Solid	5035	
MB 880-69890/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-69890/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-69890/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## **Analysis Batch: 69938**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	8021B	69890
880-37326-2	C-7 4.1'	Total/NA	Solid	8021B	69890
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	8021B	69890
880-37326-4	C-11 4.1'	Total/NA	Solid	8021B	69890
880-37326-5	C-15A 0-3'	Total/NA	Solid	8021B	69890
880-37326-6	C-17A 0-4.1	Total/NA	Solid	8021B	69890
880-37326-7	C-19A 0-21	Total/NA	Solid	8021B	69890
MB 880-69890/5-A	Method Blank	Total/NA	Solid	8021B	69890
LCS 880-69890/1-A	Lab Control Sample	Total/NA	Solid	8021B	69890
LCSD 880-69890/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	69890

## Analysis Batch: 69994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	Total BTEX	
880-37326-2	C-7 4.1'	Total/NA	Solid	Total BTEX	
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	Total BTEX	
880-37326-4	C-11 4.1'	Total/NA	Solid	Total BTEX	
880-37326-5	C-15A 0-3'	Total/NA	Solid	Total BTEX	
880-37326-6	C-17A 0-4.1	Total/NA	Solid	Total BTEX	
880-37326-7	C-19A 0-21	Total/NA	Solid	Total BTEX	

## **GC Semi VOA**

## Prep Batch: 69859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	8015NM Prep	
880-37326-2	C-7 4.1'	Total/NA	Solid	8015NM Prep	
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	8015NM Prep	
880-37326-4	C-11 4.1'	Total/NA	Solid	8015NM Prep	
880-37326-5	C-15A 0-3'	Total/NA	Solid	8015NM Prep	
880-37326-6	C-17A 0-4.1	Total/NA	Solid	8015NM Prep	
880-37326-7	C-19A 0-21	Total/NA	Solid	8015NM Prep	
MB 880-69859/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-69859/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-69859/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-37326-1 MS	C-6 4.1'	Total/NA	Solid	8015NM Prep	
880-37326-1 MSD	C-6 4.1'	Total/NA	Solid	8015NM Prep	

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9

2

4

6

8

11

14

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Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

# GC Semi VOA

## Analysis Batch: 69866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	8015B NM	69859
880-37326-2	C-7 4.1'	Total/NA	Solid	8015B NM	69859
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	8015B NM	69859
880-37326-4	C-11 4.1'	Total/NA	Solid	8015B NM	69859
880-37326-5	C-15A 0-3'	Total/NA	Solid	8015B NM	69859
880-37326-6	C-17A 0-4.1	Total/NA	Solid	8015B NM	69859
880-37326-7	C-19A 0-21	Total/NA	Solid	8015B NM	69859
MB 880-69859/1-A	Method Blank	Total/NA	Solid	8015B NM	69859
LCS 880-69859/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	69859
LCSD 880-69859/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	69859
880-37326-1 MS	C-6 4.1'	Total/NA	Solid	8015B NM	69859
880-37326-1 MSD	C-6 4.1'	Total/NA	Solid	8015B NM	69859

## Analysis Batch: 69973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Total/NA	Solid	8015 NM	
880-37326-2	C-7 4.1'	Total/NA	Solid	8015 NM	
880-37326-3	C-8A 0-4.1'	Total/NA	Solid	8015 NM	
880-37326-4	C-11 4.1'	Total/NA	Solid	8015 NM	
880-37326-5	C-15A 0-3'	Total/NA	Solid	8015 NM	
880-37326-6	C-17A 0-4.1	Total/NA	Solid	8015 NM	
880-37326-7	C-19A 0-21	Total/NA	Solid	8015 NM	

## **HPLC/IC**

#### Leach Batch: 69849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Soluble	Solid	DI Leach	
880-37326-2	C-7 4.1'	Soluble	Solid	DI Leach	
880-37326-3	C-8A 0-4.1'	Soluble	Solid	DI Leach	
880-37326-4	C-11 4.1'	Soluble	Solid	DI Leach	
880-37326-5	C-15A 0-3'	Soluble	Solid	DI Leach	
880-37326-6	C-17A 0-4.1	Soluble	Solid	DI Leach	
880-37326-7	C-19A 0-21	Soluble	Solid	DI Leach	
MB 880-69849/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-69849/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-69849/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-37326-2 MS	C-7 4.1'	Soluble	Solid	DI Leach	
880-37326-2 MSD	C-7 4.1'	Soluble	Solid	DI Leach	

#### Analysis Batch: 69902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-37326-1	C-6 4.1'	Soluble	Solid	300.0	69849
880-37326-2	C-7 4.1'	Soluble	Solid	300.0	69849
880-37326-3	C-8A 0-4.1'	Soluble	Solid	300.0	69849
880-37326-4	C-11 4.1'	Soluble	Solid	300.0	69849
880-37326-5	C-15A 0-3'	Soluble	Solid	300.0	69849
880-37326-6	C-17A 0-4.1	Soluble	Solid	300.0	69849
880-37326-7	C-19A 0-21	Soluble	Solid	300.0	69849
MB 880-69849/1-A	Method Blank	Soluble	Solid	300.0	69849
LCS 880-69849/2-A	Lab Control Sample	Soluble	Solid	300.0	69849

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Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

**HPLC/IC** (Continued)

**Analysis Batch: 69902 (Continued)** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-69849/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	69849
880-37326-2 MS	C-7 4.1'	Soluble	Solid	300.0	69849
880-37326-2 MSD	C-7 4.1'	Soluble	Solid	300.0	69849

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Client Sample ID: C-6 4.1'

Client: Larson & Associates, Inc.

Project/Site: Salado Draw 13 CWD

Date Collected: 12/18/23 12:00 Date Received: 12/28/23 08:37

Lab Sample ID: 880-37326-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/29/23 14:03	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/29/23 14:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 14:43	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 14:43	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	69849	12/28/23 09:30	СН	EET MID
Soluble	Analysis	300.0		5			69902	12/28/23 11:59	CH	EET MID

Client Sample ID: C-7 4.1' Lab Sample ID: 880-37326-2

Date Collected: 12/18/23 12:15

Date Received: 12/28/23 08:37

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/29/23 16:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/29/23 16:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 15:47	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 15:47	AJ	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	69849	12/28/23 09:30	СН	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:05	CH	EET MID

Client Sample ID: C-8A 0-4.1'

Date Collected: 12/18/23 12:30

Date Received: 12/28/23 08:37

Lab Sample ID: 880-37326-3

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/29/23 17:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/29/23 17:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 16:09	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 16:09	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	69849	12/28/23 09:30	CH	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:20	CH	EET MID

Client Sample ID: C-11 4.1'

Date Collected: 12/18/23 14:00

Date Received: 12/28/23 08:37

Lab Sample ID: 880-37326-4 **Matrix: Solid** 

Dil Batch Batch Initial Final Batch Prepared or Analyzed Method Amount Amount Number Prep Type Туре Run Factor Analyst Lab Total/NA Prep 5035 69890 12/28/23 10:18 EL EET MID 5.02 g 5 mL Total/NA Analysis 8021B 1 5 mL 5 mL 69938 12/29/23 17:28 SM **EET MID** Total/NA Total BTEX 69994 EET MID Analysis 1 12/29/23 17:28 SM

Job ID: 880-37326-1 SDG: 23-0102-04

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD

Lab Sample ID: 880-37326-4

Matrix: Solid

Client Sample ID: C-11 4.1'

Date Collected: 12/18/23 14:00 Date Received: 12/28/23 08:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			69973	12/28/23 16:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 16:33	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	69849	12/28/23 09:30	СН	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:25	CH	EET MID

Client Sample ID: C-15A 0-3'

Date Collected: 12/18/23 14:15

Lab Sample ID: 880-37326-5

Matrix: Solid

Date Received: 12/28/23 08:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/30/23 11:12	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/30/23 11:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 16:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 16:57	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	69849	12/28/23 09:30	СН	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:46	CH	EET MID

Client Sample ID: C-17A 0-4.1

Date Collected: 12/18/23 14:30

Lab Sample ID: 880-37326-6

Matrix: Solid

Date Received: 12/28/23 08:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/30/23 11:33	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/30/23 11:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 17:23	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	69859	12/28/23 09:22	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	69866	12/28/23 17:23	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	69849	12/28/23 09:30	CH	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:51	CH	EET MID

Client Sample ID: C-19A 0-21 Lab Sample ID: 880-37326-7

Date Collected: 12/19/23 12:40 Date Received: 12/28/23 08:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	69890	12/28/23 10:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	69938	12/30/23 11:53	SM	EET MID
Total/NA	Analysis	Total BTEX		1			69994	12/30/23 11:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			69973	12/28/23 17:47	AJ	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	9.98 g 1 uL	10 mL 1 uL	69859 69866	12/28/23 09:22 12/28/23 17:47	TKC AJ	EET MID EET MID

**Eurofins Midland** 

**Matrix: Solid** 

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# **Lab Chronicle**

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD Job ID: 880-37326-1 SDG: 23-0102-04

Client Sample ID: C-19A 0-21 Lab Sample ID: 880-37326-7 Date Collected: 12/19/23 12:40

Matrix: Solid

Date Received: 12/28/23 08:37

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	69849	12/28/23 09:30	CH	EET MID
Soluble	Analysis	300.0		1			69902	12/28/23 12:56	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: Salado Draw 13 CWD

Job ID: 880-37326-1

SDG: 23-0102-04

# **Laboratory: Eurofins Midland**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Progra	am	Identification Number	Expiration Date
Texas	NELA	Р	T104704400-23-26	06-30-24
,	are included in this report, but ses not offer certification.	ut the laboratory is not certif	fied by the governing authority. This lis	t may include analytes
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

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# **Method Summary**

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD Job ID: 880-37326-1

SDG: 23-0102-04

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

**Eurofins Midland** 

Released to Imaging: 5/13/2024 12:25:55 PM

# **Sample Summary**

Client: Larson & Associates, Inc. Project/Site: Salado Draw 13 CWD Job ID: 880-37326-1 SDG: 23-0102-04

mple ID	Client Sample ID	Matrix	Collected	Received
326-1	C-6 4.1'	Solid	12/18/23 12:00	12/28/23 08:37
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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-37326-1	C-6 4.1'	Solid	12/18/23 12:00	12/28/23 08:37
880-37326-2	C-7 4.1'	Solid	12/18/23 12:15	12/28/23 08:37
880-37326-3	C-8A 0-4.1'	Solid	12/18/23 12:30	12/28/23 08:37
880-37326-4	C-11 4.1'	Solid	12/18/23 14:00	12/28/23 08:37
880-37326-5	C-15A 0-3'	Solid	12/18/23 14:15	12/28/23 08:37
880-37326-6	C-17A 0-4.1	Solid	12/18/23 14:30	12/28/23 08:37
880-37326-7	C-19A 0-21	Solid	12/19/23 12:40	12/28/23 08:37

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1/2/2024

# **Login Sample Receipt Checklist**

Client: Larson & Associates, Inc.

Job Number: 880-37326-1 SDG Number: 23-0102-04

List Source: Eurofins Midland

Login Number: 37326 List Number: 1

Creator: Rodriguez, Leticia

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

# Appendix F Photographic Documentation



Chloride precipate related to the release on the pad near the SWD, viewing to the southwest.



Standing water from the release inside of the lined SWD containment, viewing to the northwest.

Page 1 of 24

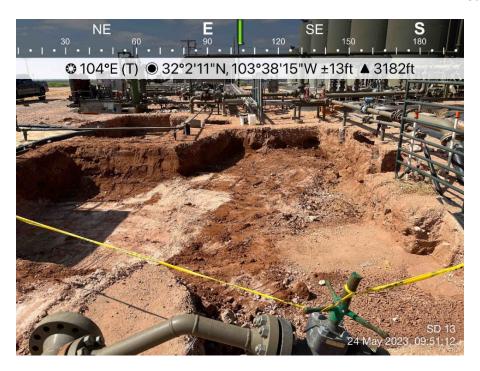


Chloride precipitate is related to the release on the pad near the SWD, viewing to the south.



Excavated area on the pad, viewing to the southeast.

Page 2 of 24



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the north.



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the south.



Excavated area on the pad, viewing to the west.



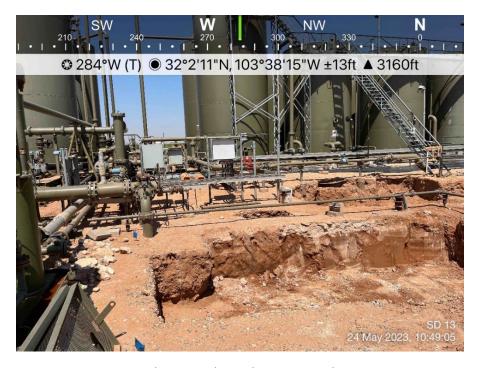
Excavated area on the pad, viewing to the northwest.



Excavated area on the pad, viewing to the northwest.



Excavated area on the pad, viewing to the northwest.



Excavated area on the pad, viewing to the west.



Excavated area on the pad, viewing to the north.



Excavated area on the pad, viewing to the northeast.



Excavated area on the pad, viewing to the northeast.



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the south.



Excavated area on the pad, viewing to the southwest.



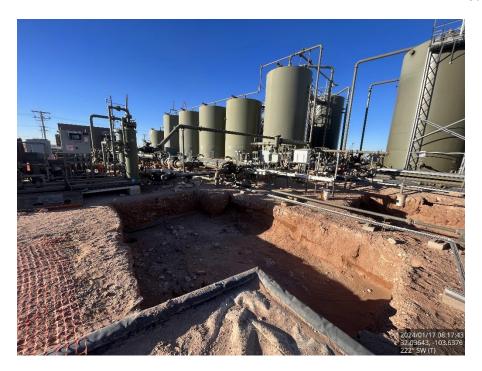
Excavated area on the pad, viewing to the south.



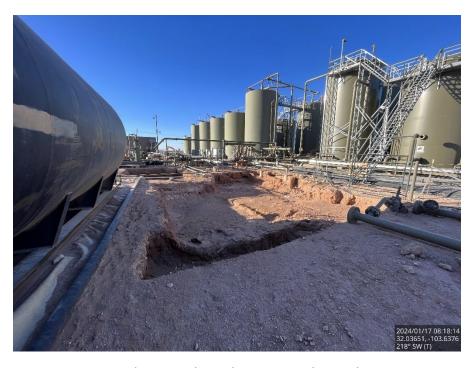
Excavated area on the pad, viewing to the west.



Excavated area on the pad, viewing to the southwest.



Excavated area on the pad, viewing to the southwest.



Excavated area on the pad, viewing to the southwest.



Excavated area on the pad, viewing to the southwest.



Excavated area on the pad, viewing to the north.



Excavated area on the pad, viewing to the south.



Excavated area on the pad, viewing to the south.



Excavated area on the pad, viewing to the east.



Excavated area on the pad, viewing to the north.

Page 16 of 24



Backfilled excavation, viewing to the northwest.



Backfilled excavation, viewing to the southwest.



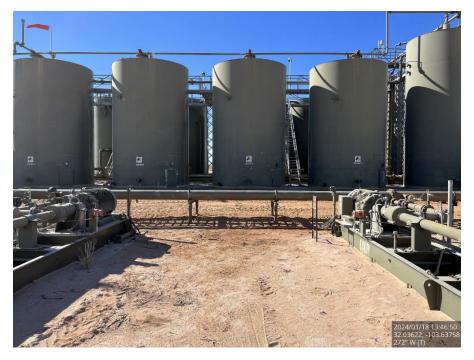
Backfilled excavation, viewing to the south.



Backfilled excavation, viewing to the south.



Backfilled excavation, viewing to the west.



Backfilled excavation, viewing to the west.



Backfilled excavation, viewing to the west.



Backfilled excavation, viewing to the east.



Backfilled excavation, viewing to the north.



Backfilled excavation, viewing to the north.



Backfilled excavation, viewing to the east.



Backfilled excavation, viewing to the north.



Backfilled excavation, viewing to the east.



Backfilled excavation, viewing to the northeast.



Backfilled excavation, viewing to the south.

<u>District I</u> 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

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 333188

## **QUESTIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2109651124
Incident Name	NAPP2109651124 SALADO DRAW 13 SWD @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SALADO DRAW 13 SWD
Date Release Discovered	03/25/2021
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water 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	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion   Pump   Produced Water   Released: 6 BBL   Recovered: 6 BBL   Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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)	Not answered.

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

1220 S. St Francis Dr., Santa Fe, NM 87505

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

QUESTIONS, Page 2

Action 333188

Phone:(505) 476-3470 Fax:(505) 476-3462		
QUESTIONS (continued)		
Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	
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	No	
Reasons why this would be considered a submission for a notification of a major release	Unavailable.	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	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 s	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.	
	iation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of evaluation in the follow-up C-141 submission.	
to report and/or file certain release notifications and perform corrective actions for releate the OCD does not relieve the operator of liability should their operations have failed to	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or	
Lhereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist	

Email: ABarnhill@chevron.com

Date: 04/15/2024

I hereby agree and sign off to the above statement

District I
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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 333188

### **QUESTIONS** (continued)

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### 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 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release are	nd the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (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	Greater than 5 (mi.)
A wetland	Between 1 and 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	Medium
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

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 conta	amination 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)	2380	
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	50	
GRO+DRO (EPA SW-846 Method 8015M)	50	
BTEX (EPA SW-846 Method 8021B or 8260B)	0	
Benzene (EPA SW-846 Method 8021B or 8260B)	0	
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	05/24/2023	
On what date will (or did) the final sampling or liner inspection occur	12/18/2023	
On what date will (or was) the remediation complete(d)	01/18/2024	
What is the estimated surface area (in square feet) that will be reclaimed	0	
What is the estimated volume (in cubic yards) that will be reclaimed	0	
What is the estimated surface area (in square feet) that will be remediated	2241	
What is the estimated volume (in cubic yards) that will be remediated	323	
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 adju	usted 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

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# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 4

Action 333188

**QUESTIONS** (continued)

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### 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.)	Yes
Which OCD approved facility will be used for off-site disposal	MILESTONE WASTE TREATMENT AND INJECTION FACILITY [fDHR1918357813]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	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.)	Not answered.
(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: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com

Date: 04/15/2024

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 III

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 5

Action 333188

QUESTIONS (continued)

QUESTI		
Operator: CHEVRON U S A INC	OGRID: 4323	
6301 Deauville Blvd	Action Number:	
Midland, TX 79706	333188	
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	
QUESTIONS		
Deferral Requests Only		
Only answer the questions in this group if seeking a deferral upon approval this submission. Each o	f 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	Yes	
Have the lateral and vertical extents of contamination been fully delineated	Yes	
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes	
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	The locations are in close proximity to flowlines, electrical lines, concrete support structures, production and automation equipment, and lined containments. Remediation of these areas would require major facility deconstruction and do not pose an imminent risk to human health or the environment. Figure 6 presents an aerial image with the deferral area.	
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	756	
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	114	
	liately under or around production equipment such as production tanks, wellheads and pipelines where n may be deferred with division written approval until the equipment is removed during other operations, or when	
Enter the facility ID (f#) on which this deferral should be granted	SALADO DRAW SWD 13 ROTF FACILITY [fSL2003151750]	
Enter the well API (30-) on which this deferral should be granted	Not answered.	
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True	
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed el which includes the anticipated timelines for beginning and completing the remediation.	fforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC	
to report and/or file certain release notifications and perform corrective actions for releate OCD does not relieve the operator of liability should their operations have failed to	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface t does not relieve the operator of responsibility for compliance with any other federal, state, or	
Lhereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist	

Email: ABarnhill@chevron.com

Date: 04/15/2024

I hereby agree and sign off to the above statement

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# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 6

Action 333188

### **QUESTIONS** (continued)

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

#### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	293468
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	12/18/2023
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	1600

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all re	emediation steps have been completed.
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	2241
What was the total volume (cubic yards) remediated	323
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	2241
What was the total volume (in cubic yards) reclaimed	323
Summarize any additional remediation activities not included by answers (above)	N/A

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

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

Name: Amy Barnhill
Title: Waste & Water Specialist
Email: ABarnhill@chevron.com
Date: 04/15/2024

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS, Page 7

Action 333188

**QUESTIONS** (continued)

Operator:	OGRID:
. CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 333188

## **CONDITIONS**

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	333188
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### CONDITIONS

Created	Condition	Condition
Ву		Date
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	5/13/2024