State of New Mexico
Oil Conservation Division

Incident ID	nRM2009064906
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	125 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nRM2009064906
District RP	
Facility ID	
Application ID	

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

Printed Name: Amy Barnhill Title: Waste and Water Specialist

Signature: Date: 8-17-2020

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

OCD Only

Received by: Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nRM2009064906
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Amy Barnhill Title: Waste and Water Specialist

Signature: Date: 8-17-2020

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

OCD Only

Received by: Date:

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

Signature: Date:

Tracking Number: nRM2009064906
Delineation Report and Remediation Plan
Salado Draw 29 26 33 Federal Com #003H
Crude Oil and Produced Water Release
Eddy County, New Mexico

Latitude: N 32.0211056°
Longitude: W -103.59851944°

LAI Project No. 20-0107-08

August 14, 2020

Prepared for:
Chevron USA Inc.
6301 Deauville Blvd.
Midland, Texas 79706

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 202
Midland, Texas 79701

Mark J. Larson, P.G.
Certified Professional Geologist #10490

Robert Nelson
Sr. Geoscientist

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Figure 2 Aerial Map Showing Sample Locations
Figure 3 Aerial Map Showing Proposed Excavation Areas

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Appendix A Chevron Spill Calculation
Appendix B Laboratory Reports
Appendix C Photographs

1.0 INTRODUCTION

Larson & Associates, Inc. (LAI), has prepared this delineation report and remediation plan on behalf of Chevron USA Inc. (Chevron) for submittal to the New Mexico Oil Conservation Division (OCD) District 2 for a crude oil and produced water release at Salado Draw 29 26 33Federal Com #003H (Site) located in Unit F (NE/4, NW/4), Section 29, Township 26 South, Range 33 East in Lea County, New Mexico. The geodetic position is North 32.0211056° and West -103.59851944°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The release was discovered on March 1, 2020, due to equipment failure. Chevron reported that approximately 11.13 barrels (bbls) of crude oil and 23.65 bbls of produced water were released. Approximately 1.5 bbls of crude oil and 3.5 bbls of produced water were recovered. The affected area measures approximately 4,680 square feet. Appendix A presents initial Chevron spill documentation. The initial C-141 was assigned an incident number of nRM2009064906.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,220 feet above mean sea level (msl).
- The surface topography gradually decreases to the southwest.
- There are no karst or surface water features within 1,000 feet of the Site.
- The soils are designated as “Pyote soil and dune land”, consisting of 0 to 30 inches of fine sand, underlain by 30 to 60 inches of fine sandy loam.
- The geology consists of the Quaternary age- sand and silt in sheets and locally includes cover sand (USGS).
- Groundwater was reported at approximately 125 feet below ground surface (bgs) in 1992;
- According to the New Mexico Office of the State Engineer (OSE) the nearest freshwater well is located in Section 27, Township 26 South, Range 33, East approximately 2.29 miles or 12,092 feet east of the site.

1.3 Remediation Action Levels

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

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

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

2.0 DELINEATION

On April 1, April 21, and May 29, 2020, LAI personnel used a stainless steel hand auger to collect soil samples from twelve (12) locations inside of the spill area and in each cardinal direction of the spill (SP-1 through SP-12). The samples were collected between approximately 1 and 5 feet bgs depending on subsurface conditions. The soil samples were delivered under chain of custody and preservation to Xenco Laboratories (Xenco) in Midland, Texas. The laboratory analyzed the samples for benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH), including gasoline range organics (C6-C12), diesel range organics (>C12-C28) and oil range organics (>C28-C35), and chloride by EPA SW-846 Methods 8021B and 8015M, and M300, respectively. Figure 2 presents an aerial map showing the sample locations.

Benzene was below the OCD remediation action level (19.15.29 NMAC Table 1) of 10 milligrams per kilogram (mg/Kg). Total BTEX exceeded the OCD remediation action level of 50 mg/Kg in sample S-7, 0 to 0.5 feet (70.3 mg/Kg). TPH exceeded the OCD surface restoration level (19.15.29.13 NMAC) of 100 mg/Kg in the upper four (4) feet in the following soil samples:

Sample	Depth (Feet)	TPH (mg/Kg)
S-4	0.5	20,300
	1	661
S-6	0.5	2,180
	1	358
S-7	0.5	21,400
	1	643
S-11	0.5	4,310

Chloride exceeded the OCD surface restoration (19.15.29.13 NMAC) limit of 600 mg/Kg in the following samples:

Sample	Depth, Feet	Chloride, mg/Kg
S-2	1	3,650
S-4	1	3,520
	3	1,330
S-5	0.5	832
	1	1,800
S-6	0.5	1,680
	1	4,810
S-7	0.5	5,440
	1	3,500
	3	1,650
S-8	0.5	1,190
	1	2,400
	3	3,730

3.0 REMEDIATION Plan

Chevron proposes the following remedial actions:

- Excavate soil from an area measuring approximately 3,161 square feet, encompassing S-2, S-5, S-6 and S-11 to approximately 2 feet bgs.
- Excavate soil from an area measuring approximately 3,412 square feet, encompassing S-4, S-7 and S-8 to 4 feet bgs.
- Collect five (5) point composite bottom and sidewall confirmation soil samples every 200 square feet of excavation and analyze for BTEX, TPH and chloride.
- Backfill excavations with clean caliche on the pad assuming achievement of OCD remediation levels; and
- Prepare report with photographs for submittal to OCD District 2.

Figure 3 presents the proposed excavation areas.

Tables

Table 1
Soil Sample Analytical Data Summary
Salado Draw 29 26 33
Eddy County, New Mexico
North 32°01'15.53" , West 103°35'53.79"

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100 / 2,500**	**600 / 10,000**
S-1	0 - 0.5	4/1/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	20.0
	0.5 - 1	4/1/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	8.12
S-2	0 - 0.5	4/1/2020	In-Situ	<0.00200	<0.00200	<49.9	72.6	<49.9	72.6	444
	1	4/21/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	**3,650**
	3	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	182
	5	4/21/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	77.7
S-3	0 - 0.5	4/1/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	8.79
	1	4/21/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	46.2
	3	4/21/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	39.7
	5	4/21/2020	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	74.6
S-4	0 - 0.5	4/1/2020	In-Situ	0.0462	3.13000	397	17700	2160	**20,300**	99.3
	1	4/21/2020	In-Situ	<0.00199	<0.00199	<50.0	600	61.3	**661**	**3,520**
	3	4/21/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	**1,330**
	5	4/21/2020	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	74.8
S-5	0 - 0.5	4/1/2020	In-Situ	<0.00198	<0.00198	<50.0	82.9	<50.0	82.9	**832**
	1	4/21/2020	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	**1,800**
	3	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	66.8
	5	4/21/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	63.9
S-6	0 - 0.5	4/1/2020	In-Situ	<0.0201	0.620	140	1,820	218	**2,180**	**1,680**
	1	4/21/2020	In-Situ	<0.00198	<0.00198	<49.9	358	<49.9	**358**	**4,810**

Table 1
Soil Sample Analytical Data Summary
Salado Draw 29 26 33
Eddy County, New Mexico
North 32°01'15.53" , West 103°35'53.79"

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100 / 2,500**	**600 / 10,000**
	3	4/21/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	35.6
	5	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	10.3
S-7	0 - 0.5	4/1/2020	In-Situ	0.119	**70.3**	2050	17,400	1990	**21,400**	**5,440**
	1	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	567	75.9	**643**	**3,500**
	3	4/21/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	**1,650**
	5	4/21/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	28.5
S-8	0 - 0.5	4/1/2020	In-Situ	<0.00201	<0.00201	<50.0	95	<50.0	95	**1,190**
	1	4/21/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	**2,400**
	3	4/21/2020	In-Situ	<0.00198	<0.00198	99.4	<49.8	<49.8	99.4	**3,730**
	5	4/21/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	13.3
S-9	0 - 0.5	4/21/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	454
	0.5 - 1	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	385
S-10	0 - 0.5	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	35.7
	0.5 - 1	4/21/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	23.2
S-11	1	4/21/2020	In-Situ	0.0342	0.577	117	3,730	464	**4,310**	**1,800**
	3	4/21/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	75.2
	5	4/21/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	11.6
S-12	0.5	5/29/2020	In-Situ	<0.00119	<0.00119	<50.0	<50.0	<50.0	<50.0	10.9
	1	5/29/2020	In-Situ	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	9.90

Table 1

Soil Sample Analytical Data Summary

Salado Draw 29 26 33

Eddy County, New Mexico

North 32°01'15.53" , West 103°35'53.79"

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				**10**	**50**				**100 / 2,500**	**600 / 10,000**

Notes: Analysis performed by Xenco Laboratories

Depth in feet below ground surface (bgs)

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

<: denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation action limits

Figures

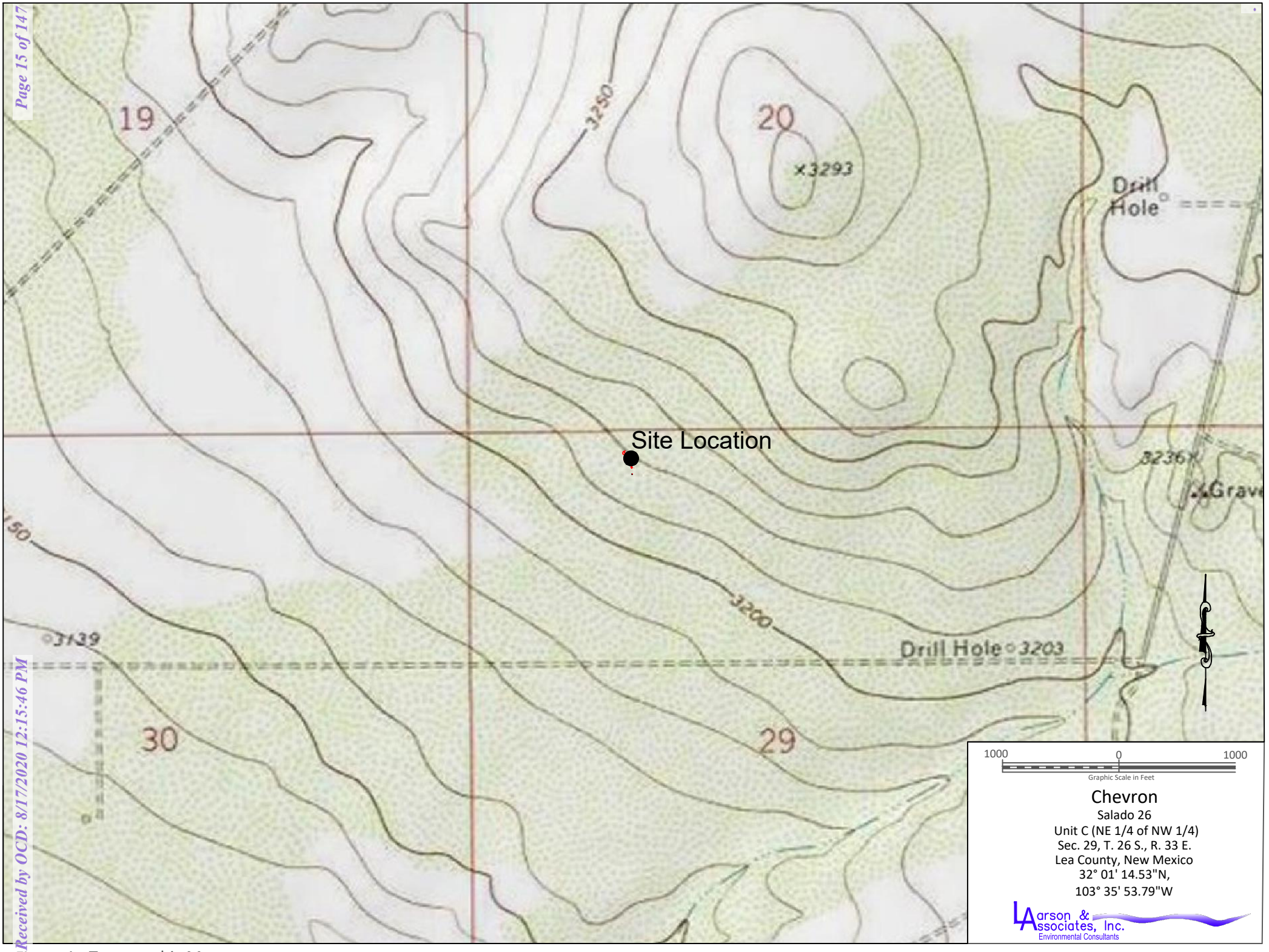

Figure 1 - Topographic Map

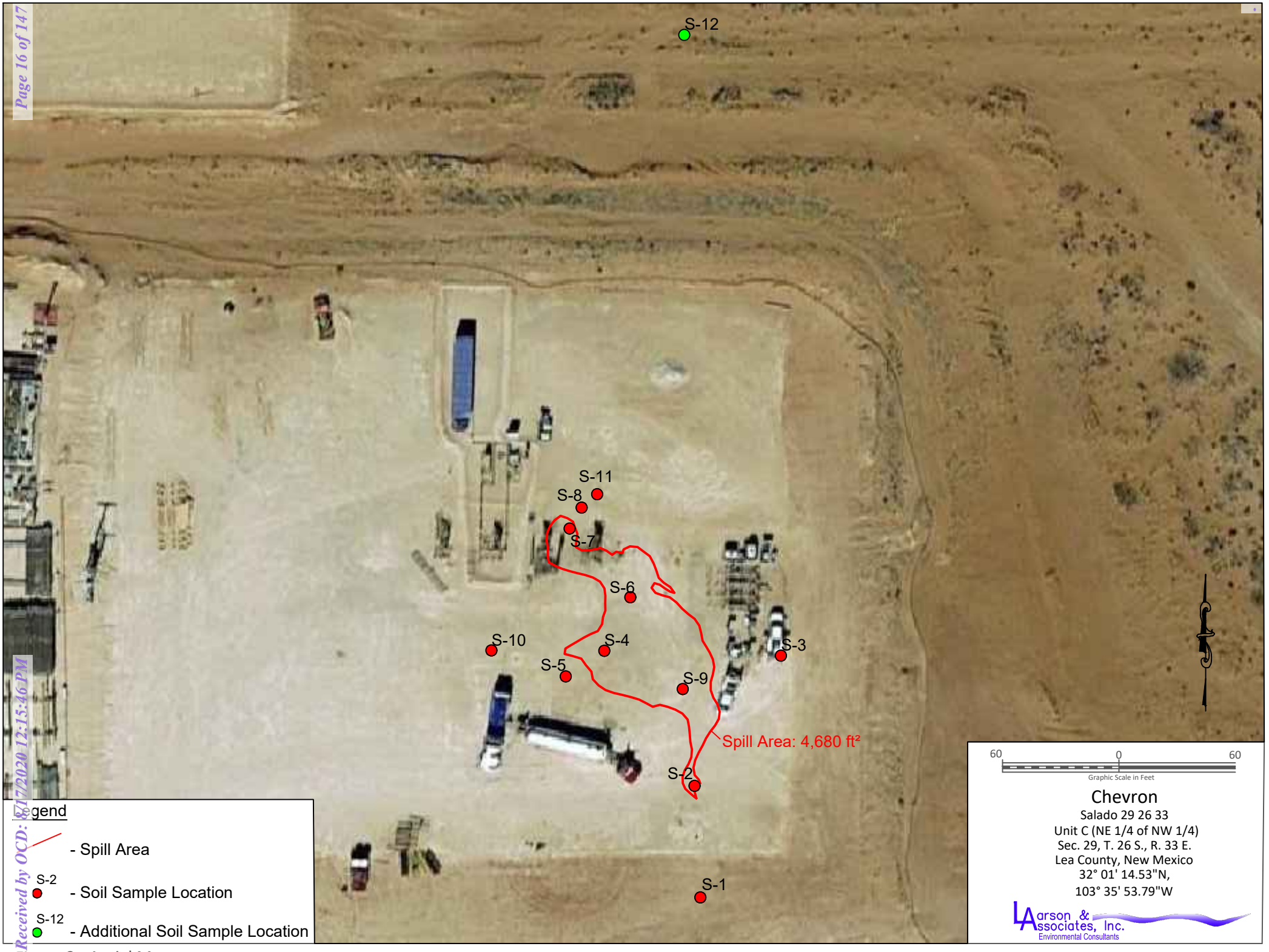

Figure 2 - Aerial Map

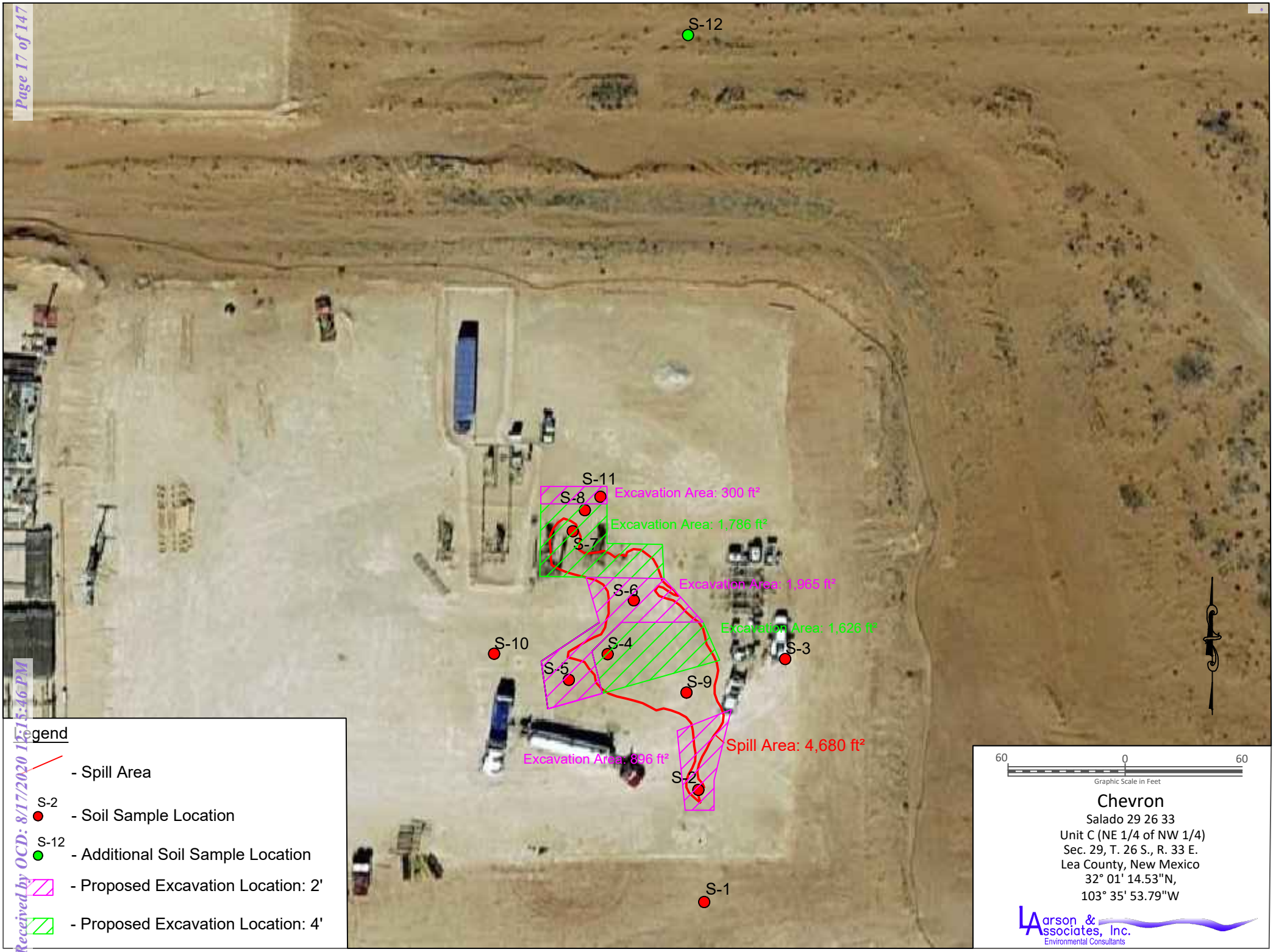

Figure 3 - Aerial Map Showing Proposed Excavation Locations

Appendix A

Chevron Spill Calculation

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Incident Time			Start Time	End Time	
			12:30 PM	3:00AM	
Location			Salado Draw PAD		
Area	Standing Liquid	In Soil	size	Oil Volume	Water Volume
1			125x25x3/4"	11.13	23.65
2					
3					
4					
5					
				Total Fluid	11.13	23.65
			Fluid Recovered	Oil Volume	Water Volume
				1.5	3.5

Appendix B

Laboratory Reports

Certificate of Analysis Summary 657840

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Fri 04.03.2020 10:28
Report Date: 04.14.2020 17:27
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	657840-001		657840-002		657840-003		657840-004		657840-005		657840-006	
	Field Id:	S-1 (0-0.5')		S-1 (0.5-1')		S-2 (0-0.5')		S-3 (0-0.5')		S-4 (0-0.5')		S-5 (0-0.5')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.01.2020 13:00		04.01.2020 13:02		04.01.2020 13:05		04.01.2020 13:06		04.01.2020 13:08		04.01.2020 13:10	
BTEX by EPA 8021B	***Extracted:***	04.11.2020 08:00		04.11.2020 08:00		04.11.2020 08:00		04.11.2020 08:00		04.13.2020 16:00		04.11.2020 08:00	
	Analyzed:	04.11.2020 19:43		04.11.2020 20:03		04.11.2020 20:23		04.11.2020 20:43		04.14.2020 00:46		04.11.2020 19:23	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	0.0462	0.0402	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	0.0693	0.0402	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	0.313	0.0402	<0.00198	0.00198
m,p-Xylenes		<0.00399	0.00399	<0.00397	0.00397	<0.00400	0.00400	<0.00398	0.00398	0.189	0.0803	<0.00397	0.00397
o-Xylene		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	2.51	0.0402	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	2.70	0.0402	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200	<0.00199	0.00199	3.13	0.0402	<0.00198	0.00198
TPH by SW8015 Mod	***Extracted:***	04.06.2020 12:00		04.06.2020 13:00		04.06.2020 13:00		04.06.2020 13:00		04.06.2020 13:00		04.06.2020 13:00	
	Analyzed:	04.06.2020 12:02		04.06.2020 13:08		04.06.2020 13:29		04.06.2020 13:51		04.06.2020 14:13		04.06.2020 14:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	397	250	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0	72.6	49.9	<49.8	49.8	17700	250	82.9	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.8	49.8	2160	250	<50.0	50.0
Total TPH		<50.0	50.0	<50.0	50.0	72.6	49.9	<49.8	49.8	20300	250	82.9	50.0

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 657840

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Fri 04.03.2020 10:28
Report Date: 04.14.2020 17:27
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Analysis Requested													
	Lab Id:	657840-001		657840-002		657840-003		657840-004		657840-005		657840-006	
	Field Id:	S-1 (0-0.5')		S-1 (0.5-1')		S-2 (0-0.5')		S-3 (0-0.5')		S-4 (0-0.5')		S-5 (0-0.5')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.01.2020 13:00		04.01.2020 13:02		04.01.2020 13:05		04.01.2020 13:06		04.01.2020 13:08		04.01.2020 13:10	
Chloride by EPA 300	***Extracted:***	04.03.2020 15:00		04.03.2020 15:00		04.03.2020 15:00		04.03.2020 15:00		04.03.2020 15:00		04.03.2020 15:00	
	Analyzed:	04.03.2020 16:22		04.03.2020 17:15		04.03.2020 17:20		04.03.2020 17:25		04.03.2020 17:31		04.03.2020 17:36	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		20.0	5.05	8.12	4.96	444	5.03	8.79	4.99	99.3	5.00	832 X	5.00

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 657840

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Fri 04.03.2020 10:28
Report Date: 04.14.2020 17:27
Project Manager: Holly Taylor

Analysis Requested									
	Lab Id:	657840-007		657840-008		657840-009				
	Field Id:	S-6 (0-0.5')		S-7 (0-0.5')		S-8 (0-0.5')				
	Depth:									
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	04.01.2020 13:12		04.01.2020 13:14		04.01.2020 13:16				
BTEX by EPA 8021B	***Extracted:***	04.13.2020 16:00		04.13.2020 16:00		04.13.2020 16:00				
	Analyzed:	04.14.2020 00:26		04.14.2020 04:31		04.14.2020 00:05				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Benzene		<0.0201	0.0201	0.119	0.0998	<0.00201	0.00201			
Toluene		0.0517	0.0201	12.4	0.0998	<0.00201	0.00201			
Ethylbenzene		0.0775	0.0201	12.4	0.0998	<0.00201	0.00201			
m,p-Xylenes		0.111	0.0402	31.7	0.200	<0.00402	0.00402			
o-Xylene		0.380	0.0201	13.7	0.0998	<0.00201	0.00201			
Total Xylenes		0.491	0.0201	45.4	0.0998	<0.00201	0.00201			
Total BTEX		0.620	0.0201	70.3	0.0998	<0.00201	0.00201			
TPH by SW8015 Mod	***Extracted:***	04.06.2020 13:00		04.06.2020 13:00		04.06.2020 13:00				
	Analyzed:	04.06.2020 14:56		04.06.2020 15:18		04.06.2020 15:40				
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Gasoline Range Hydrocarbons (GRO)		140	49.9	2050	250	<50.0	50.0			
Diesel Range Organics (DRO)		1820	49.9	17400	250	95.4	50.0			
Motor Oil Range Hydrocarbons (MRO)		218	49.9	1990	250	<50.0	50.0			
Total TPH		2180	49.9	21400	250	95.4	50.0			

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Holly Taylor
Project Manager

Certificate of Analysis Summary 657840

Larson and Associates, Inc., Midland, TX

Project Name: Salado Draw 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Fri 04.03.2020 10:28
Report Date: 04.14.2020 17:27
Project Manager: Holly Taylor

Analysis Requested											
	Lab Id:	657840-007		657840-008		657840-009					
	Field Id:	S-6 (0-0.5')		S-7 (0-0.5')		S-8 (0-0.5')					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	04.01.2020 13:12		04.01.2020 13:14		04.01.2020 13:16					
Chloride by EPA 300	***Extracted:***	04.03.2020 15:00		04.03.2020 15:00		04.03.2020 15:00					
	Analyzed:	04.03.2020 17:52		04.03.2020 17:57		04.03.2020 18:13					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1680	25.1	5440	99.6	1190	25.0				

Holly Taylor
Project Manager

Analytical Report 657840

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado Draw 29 26 33

20-0107-08

04.14.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

04.14.2020

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

Reference: XENCO Report No(s): **657840**
Salado Draw 29 26 33
Project Address:

Mark Larson :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 657840. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 657840 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Holly Taylor

Holly Taylor
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 (0-0.5')	S	04.01.2020 13:00		657840-001
S-1 (0.5-1')	S	04.01.2020 13:02		657840-002
S-2 (0-0.5')	S	04.01.2020 13:05		657840-003
S-3 (0-0.5')	S	04.01.2020 13:06		657840-004
S-4 (0-0.5')	S	04.01.2020 13:08		657840-005
S-5 (0-0.5')	S	04.01.2020 13:10		657840-006
S-6 (0-0.5')	S	04.01.2020 13:12		657840-007
S-7 (0-0.5')	S	04.01.2020 13:14		657840-008
S-8 (0-0.5')	S	04.01.2020 13:16		657840-009

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado Draw 29 26 33

Project ID: *20-0107-08*
Work Order Number(s): *657840*

Report Date: *04.14.2020*
Date Received: *04.03.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121971 Chloride by EPA 300

Lab Sample ID 657840-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 657840-001, -002, -003, -004, -005, -006, -007, -008, -009.

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

Batch: LBA-3122849 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Samples affected are: 7701175-1-BKS,7701175-1-BSD,657840-006 S,657840-006 SD,657840-006,657840-002,657840-003.

Continuing calibration verifications failed high for benzene indicating a possible high bias for benzene. Since samples were non-detect they were reported.

Batch: LBA-3122909 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

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

Samples affected are: 657840-007,657840-008,657840-005.

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id: **S-1 (0-0.5')** Matrix: Soil Date Received:04.03.2020 10:28

Lab Sample Id: 657840-001 Date Collected: 04.01.2020 13:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.03.2020 15:00 Basis: Wet Weight

Seq Number: 3121971

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**20.0**	5.05	mg/kg	04.03.2020 16:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.06.2020 12:00 Basis: Wet Weight

Seq Number: 3122172

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.06.2020 12:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.06.2020 12:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.06.2020 12:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.06.2020 12:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	04.06.2020 12:02	
o-Terphenyl	84-15-1	98	%	70-130	04.06.2020 12:02	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-1 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-001	Date Collected:	04.01.2020 13:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.11.2020 08:00	Basis:	Wet Weight
Seq Number:	3122849				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.11.2020 19:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.11.2020 19:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.11.2020 19:43	
4-Bromofluorobenzene	460-00-4	113	%	70-130	04.11.2020 19:43	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-1 (0.5-1')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-002	Date Collected:	04.01.2020 13:02		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.12**	4.96	mg/kg	04.03.2020 17:15		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.06.2020 13:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.06.2020 13:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.06.2020 13:08	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.06.2020 13:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	04.06.2020 13:08	
o-Terphenyl	84-15-1	101	%	70-130	04.06.2020 13:08	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-1 (0.5-1')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-002	Date Collected:	04.01.2020 13:02		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.11.2020 08:00	Basis:	Wet Weight
Seq Number:	3122849				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.11.2020 20:03	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.11.2020 20:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.11.2020 20:03	
4-Bromofluorobenzene	460-00-4	137	%	70-130	04.11.2020 20:03	**

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-2 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-003	Date Collected:	04.01.2020 13:05		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**444**	5.03	mg/kg	04.03.2020 17:20		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.06.2020 13:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	**72.6**	49.9	mg/kg	04.06.2020 13:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.06.2020 13:29	U	1
Total TPH	PHC635	**72.6**	49.9	mg/kg	04.06.2020 13:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	04.06.2020 13:29	
o-Terphenyl	84-15-1	117	%	70-130	04.06.2020 13:29	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-2 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-003	Date Collected:	04.01.2020 13:05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.11.2020 08:00	Basis:	Wet Weight
Seq Number:	3122849				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.11.2020 20:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.11.2020 20:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.11.2020 20:23	
4-Bromofluorobenzene	460-00-4	146	%	70-130	04.11.2020 20:23	**

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id: **S-3 (0-0.5')** Matrix: Soil Date Received:04.03.2020 10:28

Lab Sample Id: 657840-004 Date Collected: 04.01.2020 13:06

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.03.2020 15:00 Basis: Wet Weight

Seq Number: 3121971

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.79**	4.99	mg/kg	04.03.2020 17:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.06.2020 13:00 Basis: Wet Weight

Seq Number: 3122172

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.06.2020 13:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.06.2020 13:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.06.2020 13:51	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.06.2020 13:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	04.06.2020 13:51	
o-Terphenyl	84-15-1	101	%	70-130	04.06.2020 13:51	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-3 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-004	Date Collected:	04.01.2020 13:06		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.11.2020 08:00	Basis:	Wet Weight
Seq Number:	3122849				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.11.2020 20:43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.11.2020 20:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	04.11.2020 20:43	
1,4-Difluorobenzene	540-36-3	104	%	70-130	04.11.2020 20:43	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-4 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-005	Date Collected:	04.01.2020 13:08		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**99.3**	5.00	mg/kg	04.03.2020 17:31		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**397**	250	mg/kg	04.06.2020 14:13		5
Diesel Range Organics (DRO)	C10C28DRO	**17700**	250	mg/kg	04.06.2020 14:13		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**2160**	250	mg/kg	04.06.2020 14:13		5
Total TPH	PHC635	**20300**	250	mg/kg	04.06.2020 14:13		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	04.06.2020 14:13	
o-Terphenyl	84-15-1	90	%	70-130	04.06.2020 14:13	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-4 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-005	Date Collected:	04.01.2020 13:08		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.13.2020 16:00	Basis:	Wet Weight
Seq Number:	3122909				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0462**	0.0402	mg/kg	04.14.2020 00:46		20
Toluene	108-88-3	**0.0693**	0.0402	mg/kg	04.14.2020 00:46		20
Ethylbenzene	100-41-4	**0.313**	0.0402	mg/kg	04.14.2020 00:46		20
m,p-Xylenes	179601-23-1	**0.189**	0.0803	mg/kg	04.14.2020 00:46		20
o-Xylene	95-47-6	**2.51**	0.0402	mg/kg	04.14.2020 00:46		20
Total Xylenes	1330-20-7	**2.70**	0.0402	mg/kg	04.14.2020 00:46		20
Total BTEX		**3.13**	0.0402	mg/kg	04.14.2020 00:46		20

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	145	%	70-130	04.14.2020 00:46	**
1,4-Difluorobenzene	540-36-3	103	%	70-130	04.14.2020 00:46	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-5 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-006	Date Collected:	04.01.2020 13:10		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**832**	5.00	mg/kg	04.03.2020 17:36	X	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.06.2020 14:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	**82.9**	50.0	mg/kg	04.06.2020 14:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.06.2020 14:35	U	1
Total TPH	PHC635	**82.9**	50.0	mg/kg	04.06.2020 14:35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	04.06.2020 14:35	
o-Terphenyl	84-15-1	100	%	70-130	04.06.2020 14:35	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-5 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-006	Date Collected:	04.01.2020 13:10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.11.2020 08:00	Basis:	Wet Weight
Seq Number:	3122849				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.11.2020 19:23	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.11.2020 19:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.11.2020 19:23	
4-Bromofluorobenzene	460-00-4	140	%	70-130	04.11.2020 19:23	**

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-6 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-007	Date Collected:	04.01.2020 13:12		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1680**	25.1	mg/kg	04.03.2020 17:52		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**140**	49.9	mg/kg	04.06.2020 14:56		1
Diesel Range Organics (DRO)	C10C28DRO	**1820**	49.9	mg/kg	04.06.2020 14:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**218**	49.9	mg/kg	04.06.2020 14:56		1
Total TPH	PHC635	**2180**	49.9	mg/kg	04.06.2020 14:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	04.06.2020 14:56	
o-Terphenyl	84-15-1	111	%	70-130	04.06.2020 14:56	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-6 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-007	Date Collected:	04.01.2020 13:12		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.13.2020 16:00	Basis:	Wet Weight
Seq Number:	3122909				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0201	0.0201	mg/kg	04.14.2020 00:26	U	10
Toluene	108-88-3	**0.0517**	0.0201	mg/kg	04.14.2020 00:26		10
Ethylbenzene	100-41-4	**0.0775**	0.0201	mg/kg	04.14.2020 00:26		10
m,p-Xylenes	179601-23-1	**0.111**	0.0402	mg/kg	04.14.2020 00:26		10
o-Xylene	95-47-6	**0.380**	0.0201	mg/kg	04.14.2020 00:26		10
Total Xylenes	1330-20-7	**0.491**	0.0201	mg/kg	04.14.2020 00:26		10
Total BTEX		**0.620**	0.0201	mg/kg	04.14.2020 00:26		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.14.2020 00:26	
4-Bromofluorobenzene	460-00-4	151	%	70-130	04.14.2020 00:26	**

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-7 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-008	Date Collected:	04.01.2020 13:14		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.03.2020 15:00	Basis:	Wet Weight
Seq Number:	3121971				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5440**	99.6	mg/kg	04.03.2020 17:57		20

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.06.2020 13:00	Basis:	Wet Weight
Seq Number:	3122172				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**2050**	250	mg/kg	04.06.2020 15:18		5
Diesel Range Organics (DRO)	C10C28DRO	**17400**	250	mg/kg	04.06.2020 15:18		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**1990**	250	mg/kg	04.06.2020 15:18		5
Total TPH	PHC635	**21400**	250	mg/kg	04.06.2020 15:18		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	04.06.2020 15:18	
o-Terphenyl	84-15-1	101	%	70-130	04.06.2020 15:18	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-7 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-008	Date Collected:	04.01.2020 13:14		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.13.2020 16:00	Basis:	Wet Weight
Seq Number:	3122909				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.119**	0.0998	mg/kg	04.14.2020 04:31		50
Toluene	108-88-3	**12.4**	0.0998	mg/kg	04.14.2020 04:31		50
Ethylbenzene	100-41-4	**12.4**	0.0998	mg/kg	04.14.2020 04:31		50
m,p-Xylenes	179601-23-1	**31.7**	0.200	mg/kg	04.14.2020 04:31		50
o-Xylene	95-47-6	**13.7**	0.0998	mg/kg	04.14.2020 04:31		50
Total Xylenes	1330-20-7	**45.4**	0.0998	mg/kg	04.14.2020 04:31		50
Total BTEX		**70.3**	0.0998	mg/kg	04.14.2020 04:31		50

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	04.14.2020 04:31	
4-Bromofluorobenzene	460-00-4	211	%	70-130	04.14.2020 04:31	**

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id: **S-8 (0-0.5')** Matrix: Soil Date Received:04.03.2020 10:28

Lab Sample Id: 657840-009 Date Collected: 04.01.2020 13:16

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.03.2020 15:00 Basis: Wet Weight

Seq Number: 3121971

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1190**	25.0	mg/kg	04.03.2020 18:13		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.06.2020 13:00 Basis: Wet Weight

Seq Number: 3122172

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.06.2020 15:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	**95.4**	50.0	mg/kg	04.06.2020 15:40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.06.2020 15:40	U	1
Total TPH	PHC635	**95.4**	50.0	mg/kg	04.06.2020 15:40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	04.06.2020 15:40	
o-Terphenyl	84-15-1	99	%	70-130	04.06.2020 15:40	

Certificate of Analytical Results 657840

Larson and Associates, Inc., Midland, TX

Salado Draw 29 26 33

Sample Id:	**S-8 (0-0.5')**	Matrix:	Soil	Date Received:	04.03.2020 10:28
Lab Sample Id:	657840-009	Date Collected:	04.01.2020 13:16		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.13.2020 16:00	Basis:	Wet Weight
Seq Number:	3122909				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.14.2020 00:05	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.14.2020 00:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.14.2020 00:05	
4-Bromofluorobenzene	460-00-4	126	%	70-130	04.14.2020 00:05	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 657840

Larson and Associates, Inc.

Salado Draw 29 26 33

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121971 — Matrix: Solid — Date Prep: 04.03.2020
MB Sample Id: 7700500-1-BLK — LCS Sample Id: 7700500-1-BKS — LCSD Sample Id: 7700500-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	248	99	243	97	90-110	2	20	mg/kg	04.03.2020 16:11	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121971 — Matrix: Soil — Date Prep: 04.03.2020
Parent Sample Id: 657840-001 — MS Sample Id: 657840-001 S — MSD Sample Id: 657840-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	20.0	253	278	102	279	102	90-110	0	20	mg/kg	04.03.2020 16:27	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3121971 — Matrix: Soil — Date Prep: 04.03.2020
Parent Sample Id: 657840-006 — MS Sample Id: 657840-006 S — MSD Sample Id: 657840-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	832	250	1050	87	1050	87	90-110	0	20	mg/kg	04.03.2020 17:41	X

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122172 — Matrix: Solid — Date Prep: 04.06.2020
MB Sample Id: 7700671-1-BLK — LCS Sample Id: 7700671-1-BKS — LCSD Sample Id: 7700671-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	878	88	884	88	70-130	1	20	mg/kg	04.06.2020 11:19	
Diesel Range Organics (DRO)	<50.0	1000	956	96	944	94	70-130	1	20	mg/kg	04.06.2020 11:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		95		95		70-130	%	04.06.2020 11:19
o-Terphenyl	104		103		105		70-130	%	04.06.2020 11:19

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3122172 — Matrix: Solid — Date Prep: 04.06.2020
MB Sample Id: 7700671-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.06.2020 10:57	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 657840

Larson and Associates, Inc.

Salado Draw 29 26 33

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3122172 Matrix: Soil Date Prep: 04.06.2020
Parent Sample Id: 657840-001 MS Sample Id: 657840-001 S MSD Sample Id: 657840-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	932	93	931	93	70-130	0	20	mg/kg	04.06.2020 12:24	
Diesel Range Organics (DRO)	<49.9	997	980	98	1000	100	70-130	2	20	mg/kg	04.06.2020 12:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		96		70-130	%	04.06.2020 12:24
o-Terphenyl	101		103		70-130	%	04.06.2020 12:24

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122849 Matrix: Solid Date Prep: 04.11.2020
MB Sample Id: 7701175-1-BLK LCS Sample Id: 7701175-1-BKS LCSD Sample Id: 7701175-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.122	122	0.109	109	70-130	11	35	mg/kg	04.11.2020 17:04	
Toluene	<0.00200	0.100	0.112	112	0.101	101	70-130	10	35	mg/kg	04.11.2020 17:04	
Ethylbenzene	<0.00200	0.100	0.106	106	0.0971	97	70-130	9	35	mg/kg	04.11.2020 17:04	
m,p-Xylenes	<0.00400	0.200	0.228	114	0.211	106	70-130	8	35	mg/kg	04.11.2020 17:04	
o-Xylene	<0.00200	0.100	0.118	118	0.109	109	70-130	8	35	mg/kg	04.11.2020 17:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		110		105		70-130	%	04.11.2020 17:04
4-Bromofluorobenzene	123		159	**	149	**	70-130	%	04.11.2020 17:04

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122909 Matrix: Solid Date Prep: 04.13.2020
MB Sample Id: 7701209-1-BLK LCS Sample Id: 7701209-1-BKS LCSD Sample Id: 7701209-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0962	96	0.0877	88	70-130	9	35	mg/kg	04.14.2020 06:14	
Toluene	<0.00200	0.100	0.102	102	0.103	103	70-130	1	35	mg/kg	04.14.2020 06:14	
Ethylbenzene	<0.00200	0.100	0.100	100	0.105	105	70-130	5	35	mg/kg	04.14.2020 06:14	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.215	108	70-130	6	35	mg/kg	04.14.2020 06:14	
o-Xylene	<0.00200	0.100	0.103	103	0.108	108	70-130	5	35	mg/kg	04.14.2020 06:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		106		100		70-130	%	04.14.2020 06:14
4-Bromofluorobenzene	112		107		111		70-130	%	04.14.2020 06:14

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

QC Summary 657840

Larson and Associates, Inc.

Salado Draw 29 26 33

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122849 Matrix: Soil Date Prep: 04.11.2020
Parent Sample Id: 657840-006 MS Sample Id: 657840-006 S MSD Sample Id: 657840-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.110	111	0.116	115	70-130	5	35	mg/kg	04.11.2020 17:44	
Toluene	<0.00198	0.0992	0.0918	93	0.0953	94	70-130	4	35	mg/kg	04.11.2020 17:44	
Ethylbenzene	<0.00198	0.0992	0.0850	86	0.0894	89	70-130	5	35	mg/kg	04.11.2020 17:44	
m,p-Xylenes	<0.00397	0.198	0.158	80	0.170	85	70-130	7	35	mg/kg	04.11.2020 17:44	
o-Xylene	<0.00198	0.0992	0.103	104	0.108	107	70-130	5	35	mg/kg	04.11.2020 17:44	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		119		70-130	%	04.11.2020 17:44
4-Bromofluorobenzene	152	**	168	**	70-130	%	04.11.2020 17:44

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3122909 Matrix: Soil Date Prep: 04.13.2020
Parent Sample Id: 658650-001 MS Sample Id: 658650-001 S MSD Sample Id: 658650-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0690	69	0.0734	74	70-130	6	35	mg/kg	04.13.2020 20:01	X
Toluene	<0.00200	0.0998	0.0684	69	0.0729	73	70-130	6	35	mg/kg	04.13.2020 20:01	X
Ethylbenzene	<0.00200	0.0998	0.0589	59	0.0618	62	70-130	5	35	mg/kg	04.13.2020 20:01	X
m,p-Xylenes	<0.00399	0.200	0.120	60	0.124	62	70-130	3	35	mg/kg	04.13.2020 20:01	X
o-Xylene	<0.00200	0.0998	0.0580	58	0.0616	62	70-130	6	35	mg/kg	04.13.2020 20:01	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	04.13.2020 20:01
4-Bromofluorobenzene	105		106		70-130	%	04.13.2020 20:01

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

№ 1133

CHAIN-OF-CUSTODY

057840

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to:

DATE: 4/3/2020 PAGE 1 OF 1
PO#: LAB WORK ORDER#:
PROJECT LOCATION OR NAME: Salado Draw 29 2633
LAI PROJECT #: 20-0107-08 COLLECTOR: EC/DS

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

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

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	ICE	BTEX	GASOLINE MOD 8015	DIESEL MOD 8015	OIL MOD 8015	CHLORIDE	FIELD NOTES
S-1 (0-0.5')		4/1/20	1300	S	1	X	X	X	X	X	X	
S-1 (0.5-1')			1302									
S-2 (0-0.5')			1305									
S-3 (0-0.5')			1306									
S-4 (0-0.5')			1308									
S-5 (0-0.5')			1310									
S-6 (0-0.5')			1312									
S-7 (0-0.5')			1314									
S-8 (0-0.5')			1316									

TOTAL 9

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 4-3-20 / 1028 RECEIVED BY: (Signature) [signature]
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☐
1 DAY ☐
2 DAY ☐
OTHER ☒ 5 days

LABORATORY USE ONLY:
RECEIVING TEMP: 0.6/0.3 THERM#: R9
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 04.03.2020 10.28.00 AM

Work Order #: 657840

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 04.03.2020

Brianna Teel

Checklist reviewed by: Holly Taylor Date: 04.06.2020

Holly Taylor

Certificate of Analysis Summary 659619

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 04.23.2020 10:20
Report Date: 05.06.2020 16:18
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	659619-001		659619-002		659619-003		659619-004		659619-005		659619-006	
	Field Id:	S-10 (0-0.5')		S-10 (0.5-1')		S-9 (0-0.5')		S-9 (0.5-1')		S-2 (1')		S-2 (3')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.21.2020 12:36		04.21.2020 12:40		04.21.2020 13:05		04.21.2020 13:09		04.21.2020 14:30		04.21.2020 14:37	
BTEX by EPA 8021B	***Extracted:***	04.30.2020 08:00		04.30.2020 08:00		04.30.2020 08:00		04.30.2020 08:00		04.30.2020 08:00		04.30.2020 08:00	
	Analyzed:	04.30.2020 12:55		04.30.2020 13:15		04.30.2020 13:35		04.30.2020 13:55		04.30.2020 14:16		04.30.2020 14:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
m,p-Xylenes		<0.00399	0.00399	<0.00401	0.00401	<0.00398	0.00398	<0.00399	0.00399	<0.00396	0.00396	<0.00400	0.00400
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	04.23.2020 16:30		04.23.2020 16:30		04.23.2020 16:30		04.23.2020 16:30		04.23.2020 16:30		04.23.2020 16:30	
	Analyzed:	04.24.2020 11:29		04.24.2020 11:34		04.24.2020 11:39		04.24.2020 11:45		04.24.2020 11:50		04.24.2020 11:55	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		35.7	5.03	23.2	5.01	454	4.98	385	4.96	3650	49.5	182	4.95
TPH by SW8015 Mod	***Extracted:***	04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00	
	Analyzed:	04.23.2020 21:17		04.23.2020 22:20		04.23.2020 22:41		04.23.2020 23:02		04.23.2020 23:23		04.23.2020 23:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<50.0	50.0
Total TPH		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<50.0	50.0

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Holly Taylor
Project Manager

Certificate of Analysis Summary 659619

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 04.23.2020 10:20
Report Date: 05.06.2020 16:18
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	659619-007		659619-009		659619-010		659619-011		659619-013		659619-014	
	Field Id:	S-2 (5')		S-3 (1')		S-3 (3')		S-3 (5')		S-4 (1')		S-4 (3')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.21.2020 14:40		04.22.2020 10:20		04.22.2020 10:21		04.22.2020 11:07		04.22.2020 11:42		04.22.2020 11:43	
BTEX by EPA 8021B	***Extracted:***	05.01.2020 10:00		05.01.2020 10:00		05.01.2020 10:00		05.01.2020 10:00		05.01.2020 10:00		05.01.2020 10:00	
	Analyzed:	05.01.2020 11:41		05.01.2020 12:42		05.01.2020 13:02		05.01.2020 13:43		05.01.2020 14:04		05.01.2020 14:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00400	0.00400	<0.00398	0.00398	<0.00399	0.00399	<0.00400	0.00400	<0.00398	0.00398	<0.00396	0.00396
o-Xylene		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	04.23.2020 16:30		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00	
	Analyzed:	04.24.2020 12:00		04.24.2020 12:43		04.24.2020 12:58		04.24.2020 13:04		04.24.2020 13:09		04.24.2020 13:14	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		77.7	5.00	46.2	5.05	39.7	5.01	74.6	4.99	3520	24.8	1330	24.8
TPH by SW8015 Mod	***Extracted:***	04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00	
	Analyzed:	04.24.2020 00:05		04.24.2020 00:47		04.24.2020 01:08		04.24.2020 01:50		04.24.2020 02:11		04.24.2020 02:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<50.0	50.0
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8	600	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8	61.3	50.0	<50.0	50.0
Total TPH		<49.9	49.9	<50.0	50.0	<49.9	49.9	<49.8	49.8	661	50.0	<50.0	50.0

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Holly Taylor
Project Manager

Certificate of Analysis Summary 659619

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 04.23.2020 10:20
Report Date: 05.06.2020 16:18
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	659619-015		659619-017		659619-018		659619-019		659619-021		659619-022	
	Field Id:	S-4 (5')		S-5 (1')		S-5 (3')		S-5 (5")		S-6 (1')		S-6 (3')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.22.2020 11:48		04.22.2020 11:55		04.22.2020 11:56		04.22.2020 12:01		04.22.2020 11:15		04.22.2020 11:16	
BTEX by EPA 8021B	***Extracted:***	05.01.2020 10:00		05.02.2020 10:00		05.02.2020 10:00		05.02.2020 10:00		04.30.2020 09:00		04.30.2020 09:00	
	Analyzed:	05.01.2020 14:44		05.03.2020 12:01		05.03.2020 12:21		05.03.2020 12:41		04.30.2020 14:00		04.30.2020 14:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
Toluene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
Ethylbenzene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
m,p-Xylenes		<0.00398	0.00398	<0.00404	0.00404	<0.00399	0.00399	<0.00396	0.00396	<0.00397	0.00397	<0.00398	0.00398
o-Xylene		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
Total Xylenes		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
Total BTEX		<0.00199	0.00199	<0.00202	0.00202	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00199	0.00199
Chloride by EPA 300	***Extracted:***	04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00	
	Analyzed:	04.24.2020 13:30		04.24.2020 13:35		04.24.2020 13:41		04.24.2020 13:46		04.24.2020 13:51		04.24.2020 13:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		74.8	5.04	1800	25.0	66.8	5.00	63.9	4.98	4810	49.6	35.6	5.05
TPH by SW8015 Mod	***Extracted:***	04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00		04.23.2020 16:00	
	Analyzed:	04.24.2020 02:53		04.24.2020 03:14		04.24.2020 03:35		04.24.2020 03:56		04.24.2020 04:17		04.24.2020 04:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9	358	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<50.0	50.0
Total TPH		<49.9	49.9	<50.0	50.0	<50.0	50.0	<49.9	49.9	358	49.9	<50.0	50.0

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Holly Taylor
Project Manager

Certificate of Analysis Summary 659619

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 04.23.2020 10:20
Report Date: 05.06.2020 16:18
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	659619-023		659619-025		659619-026		659619-027		659619-029		659619-030	
	Field Id:	S-6 (5')		S-7 (1')		S-7 (3')		S-7 (5')		S-8 (1')		S-8 (3')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	04.22.2020 11:17		04.22.2020 11:20		04.22.2020 11:21		04.22.2020 11:28		04.22.2020 12:10		04.22.2020 12:11	
BTEX by EPA 8021B	***Extracted:***	04.30.2020 09:00		05.02.2020 10:00		05.02.2020 10:00		05.02.2020 10:00		05.04.2020 17:00		05.02.2020 08:00	
	Analyzed:	04.30.2020 14:41		05.03.2020 13:02		05.03.2020 13:22		05.03.2020 13:42		05.04.2020 18:51		05.03.2020 12:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00401	0.00401	<0.00399	0.00399	<0.00398	0.00398	<0.00398	0.00398	<0.00400	0.00400	<0.00396	0.00396
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00	
	Analyzed:	04.24.2020 14:12		04.24.2020 14:17		04.24.2020 14:33		04.24.2020 14:39		04.24.2020 14:44		04.24.2020 14:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		10.3	4.99	3500	24.9	1650	25.2	28.5	5.02	2400	25.0	3730	24.8
TPH by SW8015 Mod	***Extracted:***	04.23.2020 16:00		04.24.2020 11:00		04.24.2020 11:00		04.24.2020 11:00		04.24.2020 11:00		04.24.2020 11:00	
	Analyzed:	04.24.2020 04:59		04.24.2020 16:30		04.24.2020 16:52		04.24.2020 17:34		04.24.2020 17:55		04.24.2020 18:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9	99.4	49.8
Diesel Range Organics (DRO)		<50.0	50.0	567	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	75.9	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9	<49.8	49.8
Total TPH		<50.0	50.0	643	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9	99.4	49.8

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 659619

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29 26 33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 04.23.2020 10:20
Report Date: 05.06.2020 16:18
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	659619-031		659619-033		659619-034		659619-035					
	Field Id:	S-8 (5')		S-11 (1')		S-11 (3')		S-11 (5')					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	04.22.2020 12:16		04.22.2020 10:05		04.22.2020 10:06		04.22.2020 10:10					
BTEX by EPA 8021B	***Extracted:***	05.02.2020 08:00		05.04.2020 17:00		04.30.2020 09:00		05.02.2020 08:00					
	Analyzed:	05.03.2020 12:30		05.04.2020 20:13		04.30.2020 11:37		05.03.2020 11:49					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00198	0.00198	0.0342	0.0199	<0.00198	0.00198	<0.00200	0.00200				
Toluene		<0.00198	0.00198	0.0209	0.0199	<0.00198	0.00198	<0.00200	0.00200				
Ethylbenzene		<0.00198	0.00198	0.397	0.0199	<0.00198	0.00198	<0.00200	0.00200				
m,p-Xylenes		<0.00396	0.00396	<0.0398	0.0398	<0.00397	0.00397	<0.00401	0.00401				
o-Xylene		<0.00198	0.00198	0.125	0.0199	<0.00198	0.00198	<0.00200	0.00200				
Total Xylenes		<0.00198	0.00198	0.125	0.0199	<0.00198	0.00198	<0.00200	0.00200				
Total BTEX		<0.00198	0.00198	0.577	0.0199	<0.00198	0.00198	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:00		04.23.2020 17:15					
	Analyzed:	04.24.2020 14:54		04.24.2020 15:00		04.24.2020 15:05		04.24.2020 16:09					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		13.3	5.03	1800	25.0	75.2	4.98	11.6 X	4.96				
TPH by SW8015 Mod	***Extracted:***	04.23.2020 10:30		04.23.2020 10:30		04.23.2020 10:30		04.23.2020 10:30					
	Analyzed:	04.23.2020 18:26		04.23.2020 18:47		04.23.2020 19:09		04.23.2020 19:30					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	117	50.0	<49.9	49.9	<50.0	50.0				
Diesel Range Organics (DRO)		<49.8	49.8	3730	50.0	<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	464	50.0	<49.9	49.9	<50.0	50.0				
Total TPH		<49.8	49.8	4310	50.0	<49.9	49.9	<50.0	50.0				

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Holly Taylor
Project Manager

Analytical Report 659619

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado 29 26 33

20-0107-08

05.06.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

05.06.2020

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

Reference: XENCO Report No(s): **659619**
Salado 29 26 33
Project Address:

Mark Larson :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 659619. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 659619 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Holly Taylor

Holly Taylor
Project Manager

A Small Business and Minority Company

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Sample Cross Reference 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-10 (0-0.5')	S	04.21.2020 12:36		659619-001
S-10 (0.5-1')	S	04.21.2020 12:40		659619-002
S-9 (0-0.5')	S	04.21.2020 13:05		659619-003
S-9 (0.5-1')	S	04.21.2020 13:09		659619-004
S-2 (1')	S	04.21.2020 14:30		659619-005
S-2 (3')	S	04.21.2020 14:37		659619-006
S-2 (5')	S	04.21.2020 14:40		659619-007
S-3 (1')	S	04.22.2020 10:20		659619-009
S-3 (3')	S	04.22.2020 10:21		659619-010
S-3 (5')	S	04.22.2020 11:07		659619-011
S-4 (1')	S	04.22.2020 11:42		659619-013
S-4 (3')	S	04.22.2020 11:43		659619-014
S-4 (5')	S	04.22.2020 11:48		659619-015
S-5 (1')	S	04.22.2020 11:55		659619-017
S-5 (3')	S	04.22.2020 11:56		659619-018
S-5 (5")	S	04.22.2020 12:01		659619-019
S-6 (1')	S	04.22.2020 11:15		659619-021
S-6 (3')	S	04.22.2020 11:16		659619-022
S-6 (5')	S	04.22.2020 11:17		659619-023
S-7 (1')	S	04.22.2020 11:20		659619-025
S-7 (3')	S	04.22.2020 11:21		659619-026
S-7 (5')	S	04.22.2020 11:28		659619-027
S-8 (1')	S	04.22.2020 12:10		659619-029
S-8 (3')	S	04.22.2020 12:11		659619-030
S-8 (5')	S	04.22.2020 12:16		659619-031
S-11 (1')	S	04.22.2020 10:05		659619-033
S-11 (3')	S	04.22.2020 10:06		659619-034
S-11 (5')	S	04.22.2020 10:10		659619-035
S-2 (10')	S	04.21.2020 14:48		Not Analyzed
S-3 (10')	S	04.22.2020 11:06		Not Analyzed
S-4 (10')	S	04.22.2020 11:47		Not Analyzed
S-5 (10')	S	04.22.2020 12:00		Not Analyzed
S-6 (10')	S	04.22.2020 11:18		Not Analyzed
S-7 (10')	S	04.21.2020 11:29		Not Analyzed
S-8 (10')	S	04.22.2020 12:15		Not Analyzed
S-11 (10')	S	04.22.2020 10:11		Not Analyzed

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado 29 26 33

Project ID: *20-0107-08*
Work Order Number(s): *659619*

Report Date: *05.06.2020*
Date Received: *04.23.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3124178 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 659619-029.

Batch: LBA-3124214 Chloride by EPA 300

Lab Sample ID 659639-015 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 659619-035.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3124694 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7702436-1-BLK.

Batch: LBA-3124923 BTEX by EPA 8021B

Lab Sample ID 659619-017 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 659619-017, -018, -019, -025, -026, -027.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7702614-1-BLK.

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 659619-017, -018, -019, -025, -026, -027

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-10 (0-0.5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-001	Date Collected:	04.21.2020 12:36		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 16:30	Basis:	Wet Weight
Seq Number:	3124106				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.7**	5.03	mg/kg	04.24.2020 11:29		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.23.2020 21:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.23.2020 21:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.23.2020 21:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.23.2020 21:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	04.23.2020 21:17	
o-Terphenyl	84-15-1	94	%	70-130	04.23.2020 21:17	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-10 (0-0.5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-001	Date Collected:	04.21.2020 12:36		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 12:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.30.2020 12:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	87	%	70-130	04.30.2020 12:55	
1,4-Difluorobenzene	540-36-3	102	%	70-130	04.30.2020 12:55	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-10 (0.5-1')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-002 Date Collected: 04.21.2020 12:40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: CHE Date Prep: 04.23.2020 16:30 Basis: Wet Weight

Seq Number: 3124106

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**23.2**	5.01	mg/kg	04.24.2020 11:34		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.23.2020 22:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.23.2020 22:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.23.2020 22:20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.23.2020 22:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	04.23.2020 22:20	
o-Terphenyl	84-15-1	98	%	70-130	04.23.2020 22:20	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-10 (0.5-1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-002	Date Collected:	04.21.2020 12:40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.30.2020 13:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.30.2020 13:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.30.2020 13:15	
4-Bromofluorobenzene	460-00-4	99	%	70-130	04.30.2020 13:15	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-9 (0-0.5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-003 Date Collected: 04.21.2020 13:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: CHE Date Prep: 04.23.2020 16:30 Basis: Wet Weight

Seq Number: 3124106

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**454**	4.98	mg/kg	04.24.2020 11:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.23.2020 22:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.23.2020 22:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.23.2020 22:41	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.23.2020 22:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	04.23.2020 22:41	
o-Terphenyl	84-15-1	104	%	70-130	04.23.2020 22:41	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-9 (0-0.5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-003	Date Collected:	04.21.2020 13:05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.30.2020 13:35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.30.2020 13:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 13:35	
4-Bromofluorobenzene	460-00-4	108	%	70-130	04.30.2020 13:35	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-9 (0.5-1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-004	Date Collected:	04.21.2020 13:09		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 16:30	Basis:	Wet Weight
Seq Number:	3124106				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**385**	4.96	mg/kg	04.24.2020 11:45		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.23.2020 23:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.23.2020 23:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.23.2020 23:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.23.2020 23:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	04.23.2020 23:02	
o-Terphenyl	84-15-1	104	%	70-130	04.23.2020 23:02	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-9 (0.5-1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-004	Date Collected:	04.21.2020 13:09		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.30.2020 13:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.30.2020 13:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.30.2020 13:55	
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.30.2020 13:55	

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Salado 29 26 33

Sample Id:	**S-2 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-005	Date Collected:	04.21.2020 14:30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 16:30	Basis:	Wet Weight
Seq Number:	3124106				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3650**	49.5	mg/kg	04.24.2020 11:50		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.23.2020 23:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.23.2020 23:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.23.2020 23:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.23.2020 23:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	04.23.2020 23:23	
o-Terphenyl	84-15-1	101	%	70-130	04.23.2020 23:23	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-2 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-005	Date Collected:	04.21.2020 14:30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.30.2020 14:16	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.30.2020 14:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.30.2020 14:16	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.30.2020 14:16	

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Salado 29 26 33

Sample Id:	**S-2 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-006	Date Collected:	04.21.2020 14:37		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 16:30	Basis:	Wet Weight
Seq Number:	3124106				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**182**	4.95	mg/kg	04.24.2020 11:55		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.23.2020 23:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.23.2020 23:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.23.2020 23:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.23.2020 23:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	04.23.2020 23:43	
o-Terphenyl	84-15-1	103	%	70-130	04.23.2020 23:43	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-2 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-006	Date Collected:	04.21.2020 14:37		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 08:00	Basis:	Wet Weight
Seq Number:	3124694				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.30.2020 14:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.30.2020 14:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.30.2020 14:56	
4-Bromofluorobenzene	460-00-4	103	%	70-130	04.30.2020 14:56	

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Salado 29 26 33

Sample Id: **S-2 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-007 Date Collected: 04.21.2020 14:40

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: CHE Date Prep: 04.23.2020 16:30 Basis: Wet Weight

Seq Number: 3124106

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**77.7**	5.00	mg/kg	04.24.2020 12:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 00:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.24.2020 00:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 00:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.24.2020 00:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	04.24.2020 00:05	
o-Terphenyl	84-15-1	107	%	70-130	04.24.2020 00:05	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-2 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-007	Date Collected:	04.21.2020 14:40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.01.2020 11:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.01.2020 11:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	05.01.2020 11:41	
4-Bromofluorobenzene	460-00-4	95	%	70-130	05.01.2020 11:41	

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Salado 29 26 33

Sample Id: **S-3 (1')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-009 Date Collected: 04.22.2020 10:20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**46.2**	5.05	mg/kg	04.24.2020 12:43		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 00:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 00:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 00:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 00:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	04.24.2020 00:47	
o-Terphenyl	84-15-1	103	%	70-130	04.24.2020 00:47	

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Salado 29 26 33

Sample Id:	**S-3 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-009	Date Collected:	04.22.2020 10:20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.01.2020 12:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.01.2020 12:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	05.01.2020 12:42	
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.01.2020 12:42	

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Salado 29 26 33

Sample Id: **S-3 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-010 Date Collected: 04.22.2020 10:21

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**39.7**	5.01	mg/kg	04.24.2020 12:58		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 01:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.24.2020 01:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 01:08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.24.2020 01:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	04.24.2020 01:08	
o-Terphenyl	84-15-1	105	%	70-130	04.24.2020 01:08	

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Salado 29 26 33

Sample Id:	**S-3 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-010	Date Collected:	04.22.2020 10:21		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.01.2020 13:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.01.2020 13:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.01.2020 13:02	
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.01.2020 13:02	

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Salado 29 26 33

Sample Id: **S-3 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-011 Date Collected: 04.22.2020 11:07

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.6**	4.99	mg/kg	04.24.2020 13:04		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.24.2020 01:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.24.2020 01:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.24.2020 01:50	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.24.2020 01:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	04.24.2020 01:50	
o-Terphenyl	84-15-1	109	%	70-130	04.24.2020 01:50	

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Salado 29 26 33

Sample Id:	**S-3 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-011	Date Collected:	04.22.2020 11:07		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.01.2020 13:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.01.2020 13:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	05.01.2020 13:43	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.01.2020 13:43	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-4 (1')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-013 Date Collected: 04.22.2020 11:42

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3520**	24.8	mg/kg	04.24.2020 13:09		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 02:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	**600**	50.0	mg/kg	04.24.2020 02:11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**61.3**	50.0	mg/kg	04.24.2020 02:11		1
Total TPH	PHC635	**661**	50.0	mg/kg	04.24.2020 02:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	04.24.2020 02:11	
o-Terphenyl	84-15-1	111	%	70-130	04.24.2020 02:11	

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Salado 29 26 33

Sample Id:	**S-4 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-013	Date Collected:	04.22.2020 11:42		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.01.2020 14:04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.01.2020 14:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	05.01.2020 14:04	
4-Bromofluorobenzene	460-00-4	108	%	70-130	05.01.2020 14:04	

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Salado 29 26 33

Sample Id:	**S-4 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-014	Date Collected:	04.22.2020 11:43		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 17:00	Basis:	Wet Weight
Seq Number:	3124110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1330**	24.8	mg/kg	04.24.2020 13:14		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 02:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 02:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 02:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 02:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	04.24.2020 02:32	
o-Terphenyl	84-15-1	105	%	70-130	04.24.2020 02:32	

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Salado 29 26 33

Sample Id:	**S-4 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-014	Date Collected:	04.22.2020 11:43		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.01.2020 14:24	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.01.2020 14:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	05.01.2020 14:24	
1,4-Difluorobenzene	540-36-3	110	%	70-130	05.01.2020 14:24	

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Salado 29 26 33

Sample Id:	**S-4 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-015	Date Collected:	04.22.2020 11:48		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 17:00	Basis:	Wet Weight
Seq Number:	3124110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**74.8**	5.04	mg/kg	04.24.2020 13:30		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 02:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.24.2020 02:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 02:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.24.2020 02:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	04.24.2020 02:53	
o-Terphenyl	84-15-1	100	%	70-130	04.24.2020 02:53	

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Salado 29 26 33

Sample Id:	**S-4 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-015	Date Collected:	04.22.2020 11:48		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.01.2020 10:00	Basis:	Wet Weight
Seq Number:	3124797				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.01.2020 14:44	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.01.2020 14:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.01.2020 14:44	
4-Bromofluorobenzene	460-00-4	109	%	70-130	05.01.2020 14:44	

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Salado 29 26 33

Sample Id:	**S-5 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-017	Date Collected:	04.22.2020 11:55		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 17:00	Basis:	Wet Weight
Seq Number:	3124110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1800**	25.0	mg/kg	04.24.2020 13:35		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 03:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 03:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 03:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 03:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	04.24.2020 03:14	
o-Terphenyl	84-15-1	106	%	70-130	04.24.2020 03:14	

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Salado 29 26 33

Sample Id:	**S-5 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-017	Date Collected:	04.22.2020 11:55		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.03.2020 12:01	UXF	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.03.2020 12:01	UXF	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.03.2020 12:01	UXF	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	05.03.2020 12:01	UFX	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.03.2020 12:01	UFX	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.03.2020 12:01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.03.2020 12:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	70-130	05.03.2020 12:01	
1,4-Difluorobenzene	540-36-3	101	%	70-130	05.03.2020 12:01	

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Salado 29 26 33

Sample Id: **S-5 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-018 Date Collected: 04.22.2020 11:56

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**66.8**	5.00	mg/kg	04.24.2020 13:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 03:35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 03:35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 03:35	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 03:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	04.24.2020 03:35	
o-Terphenyl	84-15-1	104	%	70-130	04.24.2020 03:35	

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Salado 29 26 33

Sample Id:	**S-5 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-018	Date Collected:	04.22.2020 11:56		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.03.2020 12:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.03.2020 12:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	05.03.2020 12:21	
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.03.2020 12:21	

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Salado 29 26 33

Sample Id: **S-5 (5'')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-019 Date Collected: 04.22.2020 12:01

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**63.9**	4.98	mg/kg	04.24.2020 13:46		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 03:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.24.2020 03:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 03:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.24.2020 03:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	04.24.2020 03:56	
o-Terphenyl	84-15-1	109	%	70-130	04.24.2020 03:56	

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Salado 29 26 33

Sample Id:	**S-5 (5'')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-019	Date Collected:	04.22.2020 12:01		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.03.2020 12:41	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.03.2020 12:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	05.03.2020 12:41	
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.03.2020 12:41	

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Salado 29 26 33

Sample Id:	**S-6 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-021	Date Collected:	04.22.2020 11:15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 17:00	Basis:	Wet Weight
Seq Number:	3124110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4810**	49.6	mg/kg	04.24.2020 13:51		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3124020				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 04:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**358**	49.9	mg/kg	04.24.2020 04:17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 04:17	U	1
Total TPH	PHC635	**358**	49.9	mg/kg	04.24.2020 04:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	04.24.2020 04:17	
o-Terphenyl	84-15-1	109	%	70-130	04.24.2020 04:17	

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Salado 29 26 33

Sample Id:	**S-6 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-021	Date Collected:	04.22.2020 11:15		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 09:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.30.2020 14:00	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.30.2020 14:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.30.2020 14:00	
4-Bromofluorobenzene	460-00-4	113	%	70-130	04.30.2020 14:00	

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Salado 29 26 33

Sample Id: **S-6 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-022 Date Collected: 04.22.2020 11:16

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.6**	5.05	mg/kg	04.24.2020 13:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 04:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 04:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 04:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 04:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	04.24.2020 04:38	
o-Terphenyl	84-15-1	111	%	70-130	04.24.2020 04:38	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-6 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-022	Date Collected:	04.22.2020 11:16		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 09:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.30.2020 14:20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.30.2020 14:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.30.2020 14:20	
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.30.2020 14:20	

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Salado 29 26 33

Sample Id: **S-6 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-023 Date Collected: 04.22.2020 11:17

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.3**	4.99	mg/kg	04.24.2020 14:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 16:00 Basis: Wet Weight

Seq Number: 3124020

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 04:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 04:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 04:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 04:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	04.24.2020 04:59	
o-Terphenyl	84-15-1	106	%	70-130	04.24.2020 04:59	

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Salado 29 26 33

Sample Id:	**S-6 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-023	Date Collected:	04.22.2020 11:17		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 09:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.30.2020 14:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.30.2020 14:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	116	%	70-130	04.30.2020 14:41	
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.30.2020 14:41	

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Salado 29 26 33

Sample Id: **S-7 (1')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-025 Date Collected: 04.22.2020 11:20

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3500**	24.9	mg/kg	04.24.2020 14:17		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.24.2020 11:00 Basis: Wet Weight

Seq Number: 3124178

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 16:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**567**	50.0	mg/kg	04.24.2020 16:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**75.9**	50.0	mg/kg	04.24.2020 16:30		1
Total TPH	PHC635	**643**	50.0	mg/kg	04.24.2020 16:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	04.24.2020 16:30	
o-Terphenyl	84-15-1	110	%	70-130	04.24.2020 16:30	

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Salado 29 26 33

Sample Id:	**S-7 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-025	Date Collected:	04.22.2020 11:20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.03.2020 13:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.03.2020 13:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	129	%	70-130	05.03.2020 13:02	
1,4-Difluorobenzene	540-36-3	100	%	70-130	05.03.2020 13:02	

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Salado 29 26 33

Sample Id: **S-7 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-026 Date Collected: 04.22.2020 11:21

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1650**	25.2	mg/kg	04.24.2020 14:33		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.24.2020 11:00 Basis: Wet Weight

Seq Number: 3124178

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.24.2020 16:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.24.2020 16:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.24.2020 16:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.24.2020 16:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	04.24.2020 16:52	
o-Terphenyl	84-15-1	105	%	70-130	04.24.2020 16:52	

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Salado 29 26 33

Sample Id:	**S-7 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-026	Date Collected:	04.22.2020 11:21		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.03.2020 13:22	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.03.2020 13:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	70-130	05.03.2020 13:22	
1,4-Difluorobenzene	540-36-3	116	%	70-130	05.03.2020 13:22	

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Salado 29 26 33

Sample Id: **S-7 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-027 Date Collected: 04.22.2020 11:28

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28.5**	5.02	mg/kg	04.24.2020 14:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.24.2020 11:00 Basis: Wet Weight

Seq Number: 3124178

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.24.2020 17:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.24.2020 17:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.24.2020 17:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.24.2020 17:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	04.24.2020 17:34	
o-Terphenyl	84-15-1	103	%	70-130	04.24.2020 17:34	

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Salado 29 26 33

Sample Id:	**S-7 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-027	Date Collected:	04.22.2020 11:28		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 10:00	Basis:	Wet Weight
Seq Number:	3124923				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	05.03.2020 13:42	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1
Total BTEX		<0.00199	0.00199	mg/kg	05.03.2020 13:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	05.03.2020 13:42	
1,4-Difluorobenzene	540-36-3	108	%	70-130	05.03.2020 13:42	

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Salado 29 26 33

Sample Id: **S-8 (1')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-029 Date Collected: 04.22.2020 12:10

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2400**	25.0	mg/kg	04.24.2020 14:44		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.24.2020 11:00 Basis: Wet Weight

Seq Number: 3124178

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.24.2020 17:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.24.2020 17:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.24.2020 17:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.24.2020 17:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-130	04.24.2020 17:55	
o-Terphenyl	84-15-1	131	%	70-130	04.24.2020 17:55	**

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Salado 29 26 33

Sample Id:	**S-8 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-029	Date Collected:	04.22.2020 12:10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.04.2020 17:00	Basis:	Wet Weight
Seq Number:	3124954				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	05.04.2020 18:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.04.2020 18:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	05.04.2020 18:51	
1,4-Difluorobenzene	540-36-3	115	%	70-130	05.04.2020 18:51	

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Salado 29 26 33

Sample Id: **S-8 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-030 Date Collected: 04.22.2020 12:11

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3730**	24.8	mg/kg	04.24.2020 14:49		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.24.2020 11:00 Basis: Wet Weight

Seq Number: 3124178

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**99.4**	49.8	mg/kg	04.24.2020 18:17		1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.24.2020 18:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.24.2020 18:17	U	1
Total TPH	PHC635	**99.4**	49.8	mg/kg	04.24.2020 18:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	04.24.2020 18:17	
o-Terphenyl	84-15-1	95	%	70-130	04.24.2020 18:17	

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Salado 29 26 33

Sample Id:	**S-8 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-030	Date Collected:	04.22.2020 12:11		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 08:00	Basis:	Wet Weight
Seq Number:	3124919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.03.2020 12:10	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.03.2020 12:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	05.03.2020 12:10	
4-Bromofluorobenzene	460-00-4	100	%	70-130	05.03.2020 12:10	

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Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-8 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-031 Date Collected: 04.22.2020 12:16

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.3**	5.03	mg/kg	04.24.2020 14:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 10:30 Basis: Wet Weight

Seq Number: 3124019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.23.2020 18:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.23.2020 18:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.23.2020 18:26	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.23.2020 18:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	04.23.2020 18:26	
o-Terphenyl	84-15-1	96	%	70-130	04.23.2020 18:26	

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Salado 29 26 33

Sample Id:	**S-8 (5')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-031	Date Collected:	04.22.2020 12:16		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.02.2020 08:00	Basis:	Wet Weight
Seq Number:	3124919				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	05.03.2020 12:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	05.03.2020 12:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	05.03.2020 12:30	
4-Bromofluorobenzene	460-00-4	104	%	70-130	05.03.2020 12:30	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-11 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-033	Date Collected:	04.22.2020 10:05		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	04.23.2020 17:00	Basis:	Wet Weight
Seq Number:	3124110				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1800**	25.0	mg/kg	04.24.2020 15:00		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	04.23.2020 10:30	Basis:	Wet Weight
Seq Number:	3124019				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	**117**	50.0	mg/kg	04.23.2020 18:47		1
Diesel Range Organics (DRO)	C10C28DRO	**3730**	50.0	mg/kg	04.23.2020 18:47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**464**	50.0	mg/kg	04.23.2020 18:47		1
Total TPH	PHC635	**4310**	50.0	mg/kg	04.23.2020 18:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	04.23.2020 18:47	
o-Terphenyl	84-15-1	97	%	70-130	04.23.2020 18:47	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-11 (1')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-033	Date Collected:	04.22.2020 10:05		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.04.2020 17:00	Basis:	Wet Weight
Seq Number:	3124954				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	**0.0342**	0.0199	mg/kg	05.04.2020 20:13		10
Toluene	108-88-3	**0.0209**	0.0199	mg/kg	05.04.2020 20:13		10
Ethylbenzene	100-41-4	**0.397**	0.0199	mg/kg	05.04.2020 20:13		10
m,p-Xylenes	179601-23-1	<0.0398	0.0398	mg/kg	05.04.2020 20:13	U	10
o-Xylene	95-47-6	**0.125**	0.0199	mg/kg	05.04.2020 20:13		10
Total Xylenes	1330-20-7	**0.125**	0.0199	mg/kg	05.04.2020 20:13		10
Total BTEX		**0.577**	0.0199	mg/kg	05.04.2020 20:13		10

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.04.2020 20:13	
4-Bromofluorobenzene	460-00-4	102	%	70-130	05.04.2020 20:13	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-11 (3')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-034 Date Collected: 04.22.2020 10:06

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:00 Basis: Wet Weight

Seq Number: 3124110

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**75.2**	4.98	mg/kg	04.24.2020 15:05		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 10:30 Basis: Wet Weight

Seq Number: 3124019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.23.2020 19:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.23.2020 19:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.23.2020 19:09	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.23.2020 19:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	04.23.2020 19:09	
o-Terphenyl	84-15-1	97	%	70-130	04.23.2020 19:09	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id:	**S-11 (3')**	Matrix:	Soil	Date Received:	04.23.2020 10:20
Lab Sample Id:	659619-034	Date Collected:	04.22.2020 10:06		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	04.30.2020 09:00	Basis:	Wet Weight
Seq Number:	3124691				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.30.2020 11:37	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.30.2020 11:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	04.30.2020 11:37	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.30.2020 11:37	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-11 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-035 Date Collected: 04.22.2020 10:10

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: CHE Date Prep: 04.23.2020 17:15 Basis: Wet Weight

Seq Number: 3124214

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.6**	4.96	mg/kg	04.24.2020 16:09	X	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 04.23.2020 10:30 Basis: Wet Weight

Seq Number: 3124019

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.23.2020 19:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.23.2020 19:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.23.2020 19:30	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.23.2020 19:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	04.23.2020 19:30	
o-Terphenyl	84-15-1	96	%	70-130	04.23.2020 19:30	

Certificate of Analytical Results 659619

Larson and Associates, Inc., Midland, TX

Salado 29 26 33

Sample Id: **S-11 (5')** Matrix: Soil Date Received:04.23.2020 10:20

Lab Sample Id: 659619-035 Date Collected: 04.22.2020 10:10

Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A

Tech: KTL % Moisture:

Analyst: KTL Date Prep: 05.02.2020 08:00 Basis: Wet Weight

Seq Number: 3124919

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	05.03.2020 11:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.03.2020 11:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	05.03.2020 11:49	
1,4-Difluorobenzene	540-36-3	109	%	70-130	05.03.2020 11:49	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124106 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701947-1-BLK — LCS Sample Id: 7701947-1-BKS — LCSD Sample Id: 7701947-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	249	100	242	97	90-110	3	20	mg/kg	04.24.2020 09:28	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124110 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701948-1-BLK — LCS Sample Id: 7701948-1-BKS — LCSD Sample Id: 7701948-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	243	97	247	99	90-110	2	20	mg/kg	04.24.2020 12:32	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124214 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701949-1-BLK — LCS Sample Id: 7701949-1-BKS — LCSD Sample Id: 7701949-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	246	98	249	100	90-110	1	20	mg/kg	04.24.2020 15:58	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124106 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659561-003 — MS Sample Id: 659561-003 S — MSD Sample Id: 659561-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	234	250	480	98	479	98	90-110	0	20	mg/kg	04.24.2020 10:57	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124106 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659608-006 — MS Sample Id: 659608-006 S — MSD Sample Id: 659608-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	27.2	250	263	94	268	96	90-110	2	20	mg/kg	04.24.2020 09:43	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124110 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659619-009 — MS Sample Id: 659619-009 S — MSD Sample Id: 659619-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	46.2	253	303	102	295	98	90-110	3	20	mg/kg	04.24.2020 12:48	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124110 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659619-022 — MS Sample Id: 659619-022 S — MSD Sample Id: 659619-022 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.6	253	283	98	293	102	90-110	3	20	mg/kg	04.24.2020 14:02	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124214 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659619-035 — MS Sample Id: 659619-035 S — MSD Sample Id: 659619-035 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.6	248	310	120	307	119	90-110	1	20	mg/kg	04.24.2020 16:14	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3124214 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659639-015 — MS Sample Id: 659639-015 S — MSD Sample Id: 659639-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	292	250	538	98	546	102	90-110	1	20	mg/kg	04.24.2020 17:28	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124019 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701918-1-BLK — LCS Sample Id: 7701918-1-BKS — LCSD Sample Id: 7701918-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	930	93	869	87	70-130	7	20	mg/kg	04.23.2020 11:02	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	972	97	70-130	6	20	mg/kg	04.23.2020 11:02	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		100		92		70-130	%	04.23.2020 11:02
o-Terphenyl	100		105		99		70-130	%	04.23.2020 11:02

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124020 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701926-1-BLK — LCS Sample Id: 7701926-1-BKS — LCSD Sample Id: 7701926-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1080	108	1100	110	70-130	2	20	mg/kg	04.23.2020 20:34	
Diesel Range Organics (DRO)	<50.0	1000	1170	117	1160	116	70-130	1	20	mg/kg	04.23.2020 20:34	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		117		117		70-130	%	04.23.2020 20:34
o-Terphenyl	109		117		114		70-130	%	04.23.2020 20:34

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124178 — Matrix: Solid — Date Prep: 04.24.2020
MB Sample Id: 7702047-1-BLK — LCS Sample Id: 7702047-1-BKS — LCSD Sample Id: 7702047-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1030	103	922	92	70-130	11	20	mg/kg	04.24.2020 12:16	
Diesel Range Organics (DRO)	<50.0	1000	1130	113	1020	102	70-130	10	20	mg/kg	04.24.2020 12:16	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		112		100		70-130	%	04.24.2020 12:16
o-Terphenyl	105		119		107		70-130	%	04.24.2020 12:16

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124019 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701918-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.23.2020 10:41	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124020 — Matrix: Solid — Date Prep: 04.23.2020
MB Sample Id: 7701926-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.23.2020 20:13	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124178 — Matrix: Solid — Date Prep: 04.24.2020
MB Sample Id: 7702047-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.24.2020 11:55	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124019 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659506-001 — MS Sample Id: 659506-001 S — MSD Sample Id: 659506-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	839	84	847	85	70-130	1	20	mg/kg	04.23.2020 12:06	
Diesel Range Organics (DRO)	<49.9	997	975	98	995	100	70-130	2	20	mg/kg	04.23.2020 12:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	83		83		70-130	%	04.23.2020 12:06
o-Terphenyl	88		92		70-130	%	04.23.2020 12:06

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124020 — Matrix: Soil — Date Prep: 04.23.2020
Parent Sample Id: 659619-001 — MS Sample Id: 659619-001 S — MSD Sample Id: 659619-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1020	102	1080	108	70-130	6	20	mg/kg	04.23.2020 21:38	
Diesel Range Organics (DRO)	<49.9	997	1100	110	1220	122	70-130	10	20	mg/kg	04.23.2020 21:38	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		110		70-130	%	04.23.2020 21:38
o-Terphenyl	100		105		70-130	%	04.23.2020 21:38

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3124178 — Matrix: Soil — Date Prep: 04.24.2020
Parent Sample Id: 659639-021 — MS Sample Id: 659639-021 S — MSD Sample Id: 659639-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	1010	101	1030	103	70-130	2	20	mg/kg	04.24.2020 13:19	
Diesel Range Organics (DRO)	20.4	997	1100	108	1110	109	70-130	1	20	mg/kg	04.24.2020 13:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		99		70-130	%	04.24.2020 13:19
o-Terphenyl	104		106		70-130	%	04.24.2020 13:19

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124694 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702436-1-BLK — LCS Sample Id: 7702436-1-BKS — LCSD Sample Id: 7702436-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0881	88	0.0864	86	70-130	2	35	mg/kg	04.30.2020 10:37	
Toluene	<0.00200	0.100	0.0999	100	0.0977	98	70-130	2	35	mg/kg	04.30.2020 10:37	
Ethylbenzene	<0.00200	0.100	0.112	112	0.106	106	70-130	6	35	mg/kg	04.30.2020 10:37	
m,p-Xylenes	<0.00400	0.200	0.230	115	0.218	109	70-130	5	35	mg/kg	04.30.2020 10:37	
o-Xylene	<0.00200	0.100	0.113	113	0.107	107	70-130	5	35	mg/kg	04.30.2020 10:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		115		110		70-130	%	04.30.2020 10:37
4-Bromofluorobenzene	61	**	107		116		70-130	%	04.30.2020 10:37

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124691 — Matrix: Solid — Date Prep: 04.30.2020
MB Sample Id: 7702432-1-BLK — LCS Sample Id: 7702432-1-BKS — LCSD Sample Id: 7702432-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0905	91	0.0982	98	70-130	8	35	mg/kg	04.30.2020 09:12	
Toluene	<0.00200	0.100	0.0858	86	0.0950	95	70-130	10	35	mg/kg	04.30.2020 09:12	
Ethylbenzene	<0.00200	0.100	0.0857	86	0.0965	97	70-130	12	35	mg/kg	04.30.2020 09:12	
m,p-Xylenes	<0.00400	0.200	0.163	82	0.186	93	70-130	13	35	mg/kg	04.30.2020 09:12	
o-Xylene	<0.00200	0.100	0.0835	84	0.0947	95	70-130	13	35	mg/kg	04.30.2020 09:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		101		70-130	%	04.30.2020 09:12
4-Bromofluorobenzene	92		93		100		70-130	%	04.30.2020 09:12

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124797 — Matrix: Solid — Date Prep: 05.01.2020
MB Sample Id: 7702507-1-BLK — LCS Sample Id: 7702507-1-BKS — LCSD Sample Id: 7702507-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0845	85	0.0869	87	70-130	3	35	mg/kg	05.01.2020 09:20	
Toluene	<0.00200	0.100	0.0853	85	0.0882	88	70-130	3	35	mg/kg	05.01.2020 09:20	
Ethylbenzene	<0.00200	0.100	0.0890	89	0.0920	92	70-130	3	35	mg/kg	05.01.2020 09:20	
m,p-Xylenes	<0.00400	0.200	0.173	87	0.178	89	70-130	3	35	mg/kg	05.01.2020 09:20	
o-Xylene	<0.00200	0.100	0.0884	88	0.0915	92	70-130	3	35	mg/kg	05.01.2020 09:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		97		98		70-130	%	05.01.2020 09:20
4-Bromofluorobenzene	89		100		103		70-130	%	05.01.2020 09:20

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124919 — Matrix: Solid — Date Prep: 05.02.2020
MB Sample Id: 7702601-1-BLK — LCS Sample Id: 7702601-1-BKS — LCSD Sample Id: 7702601-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.114	114	0.110	110	70-130	4	35	mg/kg	05.03.2020 09:27	
Toluene	<0.00200	0.100	0.109	109	0.106	106	70-130	3	35	mg/kg	05.03.2020 09:27	
Ethylbenzene	<0.00200	0.100	0.109	109	0.107	107	70-130	2	35	mg/kg	05.03.2020 09:27	
m,p-Xylenes	<0.00400	0.200	0.211	106	0.207	104	70-130	2	35	mg/kg	05.03.2020 09:27	
o-Xylene	<0.00200	0.100	0.107	107	0.104	104	70-130	3	35	mg/kg	05.03.2020 09:27	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		100		70-130	%	05.03.2020 09:27
4-Bromofluorobenzene	89		103		103		70-130	%	05.03.2020 09:27

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659619

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Salado 29 26 33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124923 — Matrix: Solid — Date Prep: 05.02.2020
MB Sample Id: 7702614-1-BLK — LCS Sample Id: 7702614-1-BKS — LCSD Sample Id: 7702614-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.112	112	0.101	101	70-130	10	35	mg/kg	05.02.2020 22:23	
Toluene	<0.00200	0.100	0.110	110	0.105	105	70-130	5	35	mg/kg	05.02.2020 22:23	
Ethylbenzene	<0.00200	0.100	0.111	111	0.109	109	70-130	2	35	mg/kg	05.02.2020 22:23	
m,p-Xylenes	<0.00400	0.200	0.226	113	0.224	112	70-130	1	35	mg/kg	05.02.2020 22:23	
o-Xylene	<0.00200	0.100	0.112	112	0.111	111	70-130	1	35	mg/kg	05.02.2020 22:23	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		112		113		70-130	%	05.02.2020 22:23
4-Bromofluorobenzene	66	**	125		134	**	70-130	%	05.02.2020 22:23

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124954 — Matrix: Solid — Date Prep: 05.04.2020
MB Sample Id: 7702653-1-BLK — LCS Sample Id: 7702653-1-BKS — LCSD Sample Id: 7702653-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.106	106	0.110	110	70-130	4	35	mg/kg	05.04.2020 10:36	
Toluene	<0.00200	0.100	0.0988	99	0.0991	99	70-130	0	35	mg/kg	05.04.2020 10:36	
Ethylbenzene	<0.00200	0.100	0.0981	98	0.0982	98	70-130	0	35	mg/kg	05.04.2020 10:36	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.189	95	70-130	1	35	mg/kg	05.04.2020 10:36	
o-Xylene	<0.00200	0.100	0.0969	97	0.0964	96	70-130	1	35	mg/kg	05.04.2020 10:36	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		103		70-130	%	05.04.2020 10:36
4-Bromofluorobenzene	88		101		99		70-130	%	05.04.2020 10:36

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124694 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 659619-004 — MS Sample Id: 659619-004 S — MSD Sample Id: 659619-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0774	78	0.0942	95	70-130	20	35	mg/kg	04.30.2020 11:17	
Toluene	<0.00200	0.0998	0.0843	84	0.101	102	70-130	18	35	mg/kg	04.30.2020 11:17	
Ethylbenzene	<0.00200	0.0998	0.0857	86	0.103	104	70-130	18	35	mg/kg	04.30.2020 11:17	
m,p-Xylenes	<0.00399	0.200	0.174	87	0.210	106	70-130	19	35	mg/kg	04.30.2020 11:17	
o-Xylene	<0.00200	0.0998	0.0864	87	0.103	104	70-130	18	35	mg/kg	04.30.2020 11:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		116		70-130	%	04.30.2020 11:17
4-Bromofluorobenzene	119		119		70-130	%	04.30.2020 11:17

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124691 — Matrix: Soil — Date Prep: 04.30.2020
Parent Sample Id: 659619-034 — MS Sample Id: 659619-034 S — MSD Sample Id: 659619-034 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0936	95	0.107	108	70-130	13	35	mg/kg	04.30.2020 09:53	
Toluene	<0.00198	0.0990	0.0849	86	0.101	102	70-130	17	35	mg/kg	04.30.2020 09:53	
Ethylbenzene	<0.00198	0.0990	0.0820	83	0.0995	100	70-130	19	35	mg/kg	04.30.2020 09:53	
m,p-Xylenes	<0.00396	0.198	0.156	79	0.192	96	70-130	21	35	mg/kg	04.30.2020 09:53	
o-Xylene	<0.00198	0.0990	0.0816	82	0.0976	98	70-130	18	35	mg/kg	04.30.2020 09:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		102		70-130	%	04.30.2020 09:53
4-Bromofluorobenzene	100		106		70-130	%	04.30.2020 09:53

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124797 — Matrix: Soil — Date Prep: 05.01.2020
Parent Sample Id: 659619-007 — MS Sample Id: 659619-007 S — MSD Sample Id: 659619-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0888	89	0.0788	78	70-130	12	35	mg/kg	05.01.2020 10:00	
Toluene	<0.00200	0.0998	0.0841	84	0.0794	79	70-130	6	35	mg/kg	05.01.2020 10:00	
Ethylbenzene	<0.00200	0.0998	0.0858	86	0.0821	81	70-130	4	35	mg/kg	05.01.2020 10:00	
m,p-Xylenes	<0.00399	0.200	0.165	83	0.160	79	70-130	3	35	mg/kg	05.01.2020 10:00	
o-Xylene	<0.00200	0.0998	0.0844	85	0.0826	82	70-130	2	35	mg/kg	05.01.2020 10:00	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		99		70-130	%	05.01.2020 10:00
4-Bromofluorobenzene	102		104		70-130	%	05.01.2020 10:00

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3124919 — Matrix: Soil — Date Prep: 05.02.2020
Parent Sample Id: 659619-035 — MS Sample Id: 659619-035 S — MSD Sample Id: 659619-035 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0990	0.0895	90	0.0938	94	70-130	5	35	mg/kg	05.03.2020 10:08	
Toluene	<0.00198	0.0990	0.0816	82	0.0798	80	70-130	2	35	mg/kg	05.03.2020 10:08	
Ethylbenzene	<0.00198	0.0990	0.0788	80	0.0736	74	70-130	7	35	mg/kg	05.03.2020 10:08	
m,p-Xylenes	<0.00396	0.198	0.153	77	0.142	71	70-130	7	35	mg/kg	05.03.2020 10:08	
o-Xylene	<0.00198	0.0990	0.0759	77	0.0716	72	70-130	6	35	mg/kg	05.03.2020 10:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	05.03.2020 10:08
4-Bromofluorobenzene	101		99		70-130	%	05.03.2020 10:08

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 659619

Larson and Associates, Inc.

Salado 29 26 33

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124923 Matrix: Soil Date Prep: 05.02.2020
Parent Sample Id: 659619-017 MS Sample Id: 659619-017 S MSD Sample Id: 659619-017 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.00489	5	0.0696	70	70-130	174	35	mg/kg	05.03.2020 10:22	XF
Toluene	<0.00198	0.0992	0.00670	7	0.0758	76	70-130	168	35	mg/kg	05.03.2020 10:22	XF
Ethylbenzene	<0.00198	0.0992	0.00445	4	0.0755	76	70-130	178	35	mg/kg	05.03.2020 10:22	XF
m,p-Xylenes	<0.00397	0.198	0.0133	7	0.151	76	70-130	168	35	mg/kg	05.03.2020 10:22	XF
o-Xylene	<0.00198	0.0992	0.00832	8	0.0732	73	70-130	159	35	mg/kg	05.03.2020 10:22	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		120		70-130	%	05.03.2020 10:22
4-Bromofluorobenzene	155	**	136	**	70-130	%	05.03.2020 10:22

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3124954 Matrix: Soil Date Prep: 05.04.2020
Parent Sample Id: 659785-121 MS Sample Id: 659785-121 S MSD Sample Id: 659785-121 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.102	102	0.110	110	70-130	8	35	mg/kg	05.04.2020 11:17	
Toluene	<0.00200	0.100	0.0918	92	0.101	101	70-130	10	35	mg/kg	05.04.2020 11:17	
Ethylbenzene	<0.00200	0.100	0.0900	90	0.100	100	70-130	11	35	mg/kg	05.04.2020 11:17	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.194	97	70-130	11	35	mg/kg	05.04.2020 11:17	
o-Xylene	<0.00200	0.100	0.0877	88	0.0973	97	70-130	10	35	mg/kg	05.04.2020 11:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		104		70-130	%	05.04.2020 11:17
4-Bromofluorobenzene	98		104		70-130	%	05.04.2020 11:17

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

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

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

№ 1140

USG619

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 4/23/2020 PAGE 1 OF 3

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Salado 29 26 33

LAI PROJECT #: 20-0107-08 COLLECTOR: EC / DS

Data Reported to:

TRRP report? ☐ Yes ☒ No

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

TIME ZONE: Time zone/State: MST

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015	DIESEL - MOD 8015 4	OIL - MOD 8015 4	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
S-10 (0-0.5')		4/21/20	1236	S	1				X		X		X	X	X														X	
S-10 (0.5-1')			1240								X		X	X	X														X	
S-9 (0-0.5')			1305								X		X	X	X														X	
S-9 (0.5-1')			1309								X		X	X	X														X	
S-2 (1')			1430								X		X	X	X														X	
S-2 (3')			1437								X		X	X	X														X	
S-2 (5')			1440								X		X	X	X														X	
S-2 (10')			1448								Hold until further instruction																			
S-3 (1')		4/22/20	1020								X		X	X	X														X	
S-3 (3')			1021								X		X	X	X														X	
S-3 (5')			1107								X		X	X	X														X	
S-3 (10')			1106								Hold until further instruction																			
S-4 (1')			1142								X		X	X	X														X	
S-4 (3')			1143								X		X	X	X														X	
S-4 (5')			1148								X		X	X	X														X	

TOTAL 15

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY:(Signature)
Rachel Owen	4/23/2020	
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)

LABORATORY: Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP: 1.9 / 1.6 THERM#: 89
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

№ 1141

L594619

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 4/23/2020 PAGE 2 OF 3

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Salado 29 26 33

LAI PROJECT #: 20-0107-08 COLLECTOR: EC/DS

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-4 (10')		4/22/20	11:47	S	1				X		Hold until further instruction	
S-5 (1')			1155								X X X X	
S-5 (3')			1156									
S-5 (5')			1201									
S-5 (10')			1200								Hold until further instruction	
S-6 (1')			1115								X X X X	
S-6 (3')			1116									
S-6 (5')			1117									
S-6 (10')			1118								Hold until further instruction	
S-7 (1')			1120								X X X X	
S-7 (3')			1121									
S-7 (5')			1128									
S-7 (10')			1129								Hold until further instruction	
S-8 (1')			1210								X X X X	
S-8 (3')			1211								X X X X	

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

TOTAL 15

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 4/23 1620 RECEIVED BY: (Signature)

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

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

LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☒ 5days
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.9/1.6 THERM#: 89
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

№1142

E59019

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 4/23/2020 PAGE 3 OF 3

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Salado 29 26 33

LAI PROJECT #: 20-0107-08 COLLECTOR: EC/DS

Data Reported to:

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
S-8 (5')		4/22/20	1216	S	1				X		X	
S-8 (10')			1215								Hold until further instruction	
S-11 (1')			1005								X	
S-11 (3')			1006								X	
S-11 (5')			1010								X	
S-11 (10')			1011								X	
											Hold until further instruction	

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

TOTAL 6

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 4/23/20 1020 RECEIVED BY: (Signature) Bill

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

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

LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☒ 5 days
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.9/1.6 THERM#: 29
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 04.23.2020 10.20.00 AM

Work Order #: 659619

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.6	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 04.23.2020

Brianna Teel

Checklist reviewed by: Holly Taylor Date: 04.23.2020

Holly Taylor

Certificate of Analysis Summary 663026

Larson and Associates, Inc., Midland, TX

Project Name: Salado 29-26-33

Project Id: 20-0107-08
Contact: Mark Larson
Project Location:

Date Received in Lab: Mon 06.01.2020 08:06
Report Date: 06.08.2020 08:36
Project Manager: Holly Taylor

Analysis Requested									
	Lab Id:	663026-001		663026-002					
	Field Id:	S-12 (0.5)		S-12 (1')					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	05.29.2020 10:30		05.29.2020 10:35					
BTEX by EPA 8021B	***Extracted:***	06.02.2020 08:00		06.02.2020 08:00					
	Analyzed:	06.02.2020 15:45		06.02.2020 16:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00201	0.00201				
Toluene		<0.00199	0.00199	<0.00201	0.00201				
Ethylbenzene		<0.00199	0.00199	<0.00201	0.00201				
m,p-Xylenes		<0.00398	0.00398	<0.00402	0.00402				
o-Xylene		<0.00199	0.00199	<0.00201	0.00201				
Total Xylenes		<0.00199	0.00199	<0.00201	0.00201				
Total BTEX		<0.00199	0.00199	<0.00201	0.00201				
Chloride by EPA 300	***Extracted:***	06.01.2020 16:50		06.01.2020 16:50					
	Analyzed:	06.01.2020 20:17		06.01.2020 20:27					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		10.9	5.01	9.90	5.00				
TPH by SW8015 Mod	***Extracted:***	06.03.2020 16:30		06.03.2020 16:30					
	Analyzed:	06.05.2020 07:23		06.04.2020 16:12					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8				
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8				
Total TPH		<50.0	50.0	<49.8	49.8				

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

Holly Taylor
Project Manager

Analytical Report 663026

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Salado 29-26-33

20-0107-08

06.08.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-32), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-23), Arizona (AZ0809)

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

06.08.2020

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

Reference: XENCO Report No(s): **663026**
Salado 29-26-33
Project Address:

Mark Larson :

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 663026. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 663026 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Holly Taylor

Holly Taylor
Project Manager

A Small Business and Minority Company

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

Sample Cross Reference 663026

Larson and Associates, Inc., Midland, TX

Salado 29-26-33

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-12 (0.5)	S	05.29.2020 10:30		663026-001
S-12 (1')	S	05.29.2020 10:35		663026-002

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Salado 29-26-33

Project ID:	*20-0107-08*	Report Date:	*06.08.2020*
Work Order Number(s):	*663026*	Date Received:	*06.01.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 663026

Larson and Associates, Inc., Midland, TX

Salado 29-26-33

Sample Id: **S-12 (0.5)** Matrix: Soil Date Received:06.01.2020 08:06

Lab Sample Id: 663026-001 Date Collected: 05.29.2020 10:30

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 06.01.2020 16:50 Basis: Wet Weight

Seq Number: 3127635

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.9**	5.01	mg/kg	06.01.2020 20:17		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 06.03.2020 16:30 Basis: Wet Weight

Seq Number: 3128011

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	06.05.2020 07:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	06.05.2020 07:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	06.05.2020 07:23	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	06.05.2020 07:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	06.05.2020 07:23	
o-Terphenyl	84-15-1	108	%	70-130	06.05.2020 07:23	

Certificate of Analytical Results 663026

Larson and Associates, Inc., Midland, TX

Salado 29-26-33

Sample Id:	**S-12 (0.5)**	Matrix:	Soil	Date Received:	06.01.2020 08:06
Lab Sample Id:	663026-001	Date Collected:	05.29.2020 10:30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	06.02.2020 08:00	Basis:	Wet Weight
Seq Number:	3127693				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	06.02.2020 15:45	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1
Total BTEX		<0.00199	0.00199	mg/kg	06.02.2020 15:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	06.02.2020 15:45	
1,4-Difluorobenzene	540-36-3	110	%	70-130	06.02.2020 15:45	

Certificate of Analytical Results 663026

Larson and Associates, Inc., Midland, TX

Salado 29-26-33

Sample Id: **S-12 (1')** Matrix: Soil Date Received:06.01.2020 08:06

Lab Sample Id: 663026-002 Date Collected: 05.29.2020 10:35

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 06.01.2020 16:50 Basis: Wet Weight

Seq Number: 3127635

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.90**	5.00	mg/kg	06.01.2020 20:27		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 06.03.2020 16:30 Basis: Wet Weight

Seq Number: 3128011

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	06.04.2020 16:12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	06.04.2020 16:12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	06.04.2020 16:12	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	06.04.2020 16:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	06.04.2020 16:12	
o-Terphenyl	84-15-1	95	%	70-130	06.04.2020 16:12	

Certificate of Analytical Results 663026

Larson and Associates, Inc., Midland, TX

Salado 29-26-33

Sample Id:	**S-12 (1')**	Matrix:	Soil	Date Received:	06.01.2020 08:06
Lab Sample Id:	663026-002	Date Collected:	05.29.2020 10:35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	06.02.2020 08:00	Basis:	Wet Weight
Seq Number:	3127693				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.02.2020 16:06	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.02.2020 16:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	06.02.2020 16:06	
1,4-Difluorobenzene	540-36-3	113	%	70-130	06.02.2020 16:06	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 663026

Larson and Associates, Inc.

Salado 29-26-33

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127635 — Matrix: Solid — Date Prep: 06.01.2020
MB Sample Id: 7704549-1-BLK — LCS Sample Id: 7704549-1-BKS — LCSD Sample Id: 7704549-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	254	102	90-110	1	20	mg/kg	06.01.2020 19:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127635 — Matrix: Soil — Date Prep: 06.01.2020
Parent Sample Id: 662924-006 — MS Sample Id: 662924-006 S — MSD Sample Id: 662924-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	110	250	364	102	361	100	90-110	1	20	mg/kg	06.01.2020 20:02	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3127635 — Matrix: Soil — Date Prep: 06.01.2020
Parent Sample Id: 663032-007 — MS Sample Id: 663032-007 S — MSD Sample Id: 663032-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	248	249	491	98	482	94	90-110	2	20	mg/kg	06.01.2020 21:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128011 — Matrix: Solid — Date Prep: 06.03.2020
MB Sample Id: 7704701-1-BLK — LCS Sample Id: 7704701-1-BKS — LCSD Sample Id: 7704701-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	863	86	810	81	70-130	6	20	mg/kg	06.04.2020 10:26	
Diesel Range Organics (DRO)	<50.0	1000	889	89	840	84	70-130	6	20	mg/kg	06.04.2020 10:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		104		99		70-130	%	06.04.2020 10:26
o-Terphenyl	110		109		102		70-130	%	06.04.2020 10:26

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128011 — Matrix: Solid — Date Prep: 06.03.2020
MB Sample Id: 7704701-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	06.04.2020 10:04	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 663026

Larson and Associates, Inc.

Salado 29-26-33

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3128011 — Matrix: Soil — Date Prep: 06.03.2020
Parent Sample Id: 663026-001 — MS Sample Id: 663026-001 S — MSD Sample Id: 663026-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	948	95	909	91	70-130	4	20	mg/kg	06.05.2020 07:46	
Diesel Range Organics (DRO)	<49.9	998	899	90	858	86	70-130	5	20	mg/kg	06.05.2020 07:46	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		106		70-130	%	06.05.2020 07:46
o-Terphenyl	105		98		70-130	%	06.05.2020 07:46

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3127693 — Matrix: Solid — Date Prep: 06.02.2020
MB Sample Id: 7704596-1-BLK — LCS Sample Id: 7704596-1-BKS — LCSD Sample Id: 7704596-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0943	94	0.102	102	70-130	8	35	mg/kg	06.02.2020 09:16	
Toluene	<0.00200	0.100	0.104	104	0.110	110	70-130	6	35	mg/kg	06.02.2020 09:16	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.105	105	70-130	5	35	mg/kg	06.02.2020 09:16	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.213	107	70-130	4	35	mg/kg	06.02.2020 09:16	
o-Xylene	<0.00200	0.100	0.0977	98	0.102	102	70-130	4	35	mg/kg	06.02.2020 09:16	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		101		104		70-130	%	06.02.2020 09:16
4-Bromofluorobenzene	103		106		109		70-130	%	06.02.2020 09:16

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3127693 — Matrix: Soil — Date Prep: 06.02.2020
Parent Sample Id: 663034-001 — MS Sample Id: 663034-001 S — MSD Sample Id: 663034-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0997	101	0.0914	92	70-130	9	35	mg/kg	06.02.2020 09:57	
Toluene	0.00235	0.0992	0.105	103	0.0968	95	70-130	8	35	mg/kg	06.02.2020 09:57	
Ethylbenzene	<0.00198	0.0992	0.0940	95	0.0845	85	70-130	11	35	mg/kg	06.02.2020 09:57	
m,p-Xylenes	<0.00397	0.198	0.190	96	0.172	87	70-130	10	35	mg/kg	06.02.2020 09:57	
o-Xylene	<0.00198	0.0992	0.0916	92	0.0834	84	70-130	9	35	mg/kg	06.02.2020 09:57	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		102		70-130	%	06.02.2020 09:57
4-Bromofluorobenzene	113		112		70-130	%	06.02.2020 09:57

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

№ 1177

663024

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to:

DATE: 5/29/20 PAGE 1 OF 1
PO#: LAB WORK ORDER#:
PROJECT LOCATION OR NAME: Salado 29-26-33
LAI PROJECT #: 20-0107-08 COLLECTOR: DS/TJ

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	BTEX	TRPH/TPH	GASOLINE	DIESEL	OIL	VOC	SVOC/PAH	8081	8082	TBLP	TCLP	TOTAL METALS	LEAD	RCI	TDS	pH	EXPLOSIVES	CHLORIDE	FIELD NOTES
S-12 (0.5)		5/29/20	1030	S	1				X		X		X	X	X													X	
S-12 (1)		5/29/20	1035	S	1				X		X		X	X	X													X	

TOTAL 2

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
	6/1	[signature]
[signature]	6/1	

LABORATORY: Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP: 3.8/3.5 THERM#: Rq
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 06.01.2020 08.06.00 AM

Work Order #: 663026

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	3.5	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 06.01.2020
Brianna Teel

Checklist reviewed by: Holly Taylor Date: 06.02.2020
Holly Taylor

Appendix C

Photographs

Spill area and S-5 viewing Northeast/East

Spill area and S-2 viewing southeast

Spill area viewing west

Spill area viewing south