State of New Mexico
Oil Conservation Division

Incident ID	nRM2004350563
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?	25.25 (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	nRM2004350563
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: 8-3-2020

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

OCD Only

Received by: Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nRM2004350563
District RP	
Facility ID	
Application ID	

Remediation Plan

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

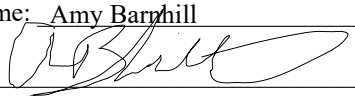
- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] Proposed schedule for remediation (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

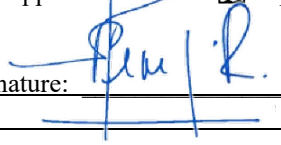
Signature:  Date: 8-3-2020

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

OCD Only

Received by: Victoria Venegas Date: 08/03/2020

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

Signature:  Date: 08/31/2020

nRM2004350563
Delineation Report and Remediation Plan
Skeen 2H Pumping Unit
Produced Water Release
Eddy County, New Mexico

Latitude: N 32.078476°
Longitude: W 104.1631546°

LAI Project No. 20-0107-03

July 21, 2020

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

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 205
Midland, Texas 79701

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

Robert Nelson
Sr. Geoscientist

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1.0 INTRODUCTION

Larson & Associates, Inc. (LAI), has prepared this 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 Skeen 2 26 27 State #002H (Site) located in Unit C (NE/4, NW/4), Section 2, Township 26 South, Range 27 East in Eddy County New Mexico. The geodetic position is North 32.078476° and West -104.1631546°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The release was discovered on January 27, 2020, due to equipment failure. Chevron reported that approximately 2.3 barrels (bbls) of crude oil and 2.95 bbls of produced water were released. Approximately 2 bbls of crude oil and 2.95 bbls of produced water were recovered. The affected area measures approximately 2,598 square feet. Appendix A presents the Chevron Spill Calculation. The initial C-141 was assigned an incident number of nRM2004350563.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,212 feet above mean sea level (msl);
- The surface topography gradually decreases to the southeast;
- There are no karst or surface water features within 1,000 feet of the Site;
- The soils are designated as “Reeves-Gypsum land complex, 0 to 3 percent slopes”, consisting of 0 to 8 inches of loam, underlain by 8 to 32 inches of clay loam, and 32 to 60 inches of gypsiferous material;
- The geology consists of the Rustler Formation (Upper Permian)- siltstone, gypsum, sandstone, and dolomite deposits (USGS);
- Groundwater occurs at approximately 25.25 feet below ground surface (bgs) based on depth to groundwater measurements 72 hours after installing a boring (BH-1) on April 29, 2020.

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 100 mg/Kg
- Chloride 600 mg/Kg

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

2.0 DELINEATION

On February 20, March 17, and May13, 2020, LAI personnel used a stainless steel hand auger to collect soil samples from eleven (11) locations inside of the spill area and in each cardinal direction of the spill

(SP-1 through SP-11) to vertically and horizontally delineate the release. The samples were collected to approximately 1 foot below ground surface (bgs). The soil samples were delivered under chain of custody and preservation to Xenco Laboratories 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 and BTEX were below the remediation action levels of 10 milligrams per kilogram (mg/Kg) and 50 mg/Kg, respectively, in all samples. Chloride and TPH exceeded the surface restoration limits (19.15.29.13 NMAC) of 600 mg/Kg and 100 mg/Kg, respectively, in the following samples:

Sample ID, Depth (Feet)	*Chloride Concentration (mg/Kg)*	*TPH Concentration (mg/Kg)*
S-1, 0 to 0.5	3,210	523
S-1, 0.5 to 1	3,360	237
S-2, 0 to 0.5	4,230	411
S-2, 0.5 to 1	4,290	753
S-3, 0 to 0.5	1,020	694
S-3, 0.5 to 1	677	795
S-4, 0 to 0.5	820	457
S-4, 0.5 to 1	1,050	663
S-6, 0 to 0.5	916	--
S-6, 0.5 to 1	657	--
S-7, 0 to 0.5	--	517
S-7, 0.5 to 1	877	--
S-8, 0 to 0.5	103	--

On March 17 and 18, 2019, LAI personnel used direct push technology (DPT) to further delineate the release. Soil samples were collected at 2, 3, 5 and 10 feet bgs, depending on subsurface conditions. The samples were delivered under chain of custody and preservation to Xenco and were analyzed for BTEX, TPH and chloride by EPA SW-846 Methods 8021B and 8015M, and M300, respectively. Chloride was delineated below the remediation limit (600 mg/Kg) at all sample locations. Table 1 presents the soil sample analytical data summary. Appendix B presents the laboratory reports.

3.0 Remediation Plan

Chevron proposes the following remedial actions:

- Excavate soil from an area measuring approximately 641 square feet, encompassing SP-1 through SP-4 and SP-6 through SP-8 to about 1-foot bgs.
- Collect five (5) point composite bottom and sidewall confirmation soil samples every 200 square feet of excavation and analyze samples for BTEX, TPH and chloride.
- Backfill excavations with clean caliche determined by laboratory analysis.
- Prepare closure report with photographs for submittal to OCD District 2.

Figure 3 presents the proposed excavation areas.

Tables

Table 1
Soil Sample Analytical Data Summary
Skeen 2H
Lea County, New Mexico
North 32 04' 42.83", West 104 09' 47.46"

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:									**100 / 2,500**	**600 / 10,000**
S-1	0 - 0.5	2/20/2020	In-Situ	<0.00202	<0.00202	<50.0	468	55.2	**523**	**3,210**
	0.5 - 1	2/20/2020	In-Situ	<0.00200	<0.00200	<50.0	237	<50.0	**237**	**3,360**
	2	3/17/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	123
	3	3/17/2020	In-Situ	--	--	<49.8	<49.8	<49.8	<49.8	7.00
	5	3/17/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	5.88
	10	3/17/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	29.5
S-2	0 - 0.5	2/20/2020	In-Situ	<0.00200	0.07550	<50.0	411	<50.0	**411**	**4,230**
	0.5 - 1	2/20/2020	In-Situ	<0.00200	0.02440	<49.8	681	71.5	**753**	**4,290**
	2	3/18/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	591
	3	3/18/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	373
	5	3/18/2020	In-Situ	--	--	<49.8	<49.8	<49.8	<49.8	344
	8	3/18/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	261
S-3	0 - 0.5	2/20/2020	In-Situ	<0.00200	<0.00200	<49.9	614	79.9	**694**	**1,020**
	0.5 - 1	2/20/2020	In-Situ	<0.00200	<0.00200	<50.0	711	84	**795**	**677**
	2	3/18/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	323
	5	3/18/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	95.4
	8	3/18/2020	In-Situ	--	--	<49.8	<49.8	<49.8	<49.8	19.6
	10	3/18/2020	In-Situ	--	--	<49.8	<49.8	<49.8	<49.8	14.6
S-4	0 - 0.5	2/20/2020	In-Situ	<0.00202	<0.00202	<49.8	404	52.5	**457**	**820**
	0.5 - 1	2/20/2020	In-Situ	<0.00199	<0.00199	<50.0	597	66.3	**663**	**1,050**
	2	3/17/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	114
	3	3/17/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	43.8

Table 1
Soil Sample Analytical Data Summary
Skeen 2H
Lea County, New Mexico
North 32 04' 42.83", West 104 09' 47.46"

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:									**100 / 2,500**	**600 / 10,000**
	5	3/17/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	61.3
	7.5	3/17/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	40.1
S-5	0 - 0.5	2/20/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	126
	0.5 - 1	2/20/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	151
S-6	0 - 0.5	2/20/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	**916**
	0.5 - 1	2/20/2020	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	**657**
	2	3/17/2020	In-Situ	--	--	--	--	--	--	387
	4	3/17/2020	In-Situ	--	--	--	--	--	--	98.3
	5	3/17/2020	In-Situ	--	--	--	--	--	--	307
	8	3/17/2020	In-Situ	--	--	--	--	--	--	475
S-7	0 - 0.5	2/20/2020	In-Situ	<0.00199	<0.00199	<50.0	455	62.2	**517**	504
	0.5 - 1	2/20/2020	In-Situ	<0.00200	<0.00200	<50.0	60.7	<50.0	60.7	**877**
	2	3/17/2020	In-Situ	--	--	--	--	--	--	478
	3	3/17/2020	In-Situ	--	--	--	--	--	--	61.6
	5	3/17/2020	In-Situ	--	--	--	--	--	--	<4.95
	7.5	3/17/2020	In-Situ	--	--	--	--	--	--	<4.95
S-8	0 - 0.5	2/20/2020	In-Situ	<0.00200	<0.00200	<49.9	103	<49.9	**103**	152
	0.5 - 1	2/20/2020	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	111
S-9	0 - 0.5	3/17/2020	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<5.03
	0.5 - 1	3/17/2020	In-Situ	<0.00199	<0.00199	<49.8	<49.8	<49.8	<49.8	<5.05

Table 1
Soil Sample Analytical Data Summary
Skeen 2H
Lea County, New Mexico
North 32 04' 42.83", West 104 09' 47.46"

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:									**100 / 2,500**	**600 / 10,000**
S-10	0 - 0.5	3/17/2020	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	26.5
	0.5 - 1	3/17/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	18.0
S-11	0 - 0.5	5/13/2020	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	102
	0.5 - 1	5/13/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	104

Notes: Analysis performed by Xenco Laboratories in Midland, TX
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
Bold and Highlighted exceeds OCD delineation limits

Figures

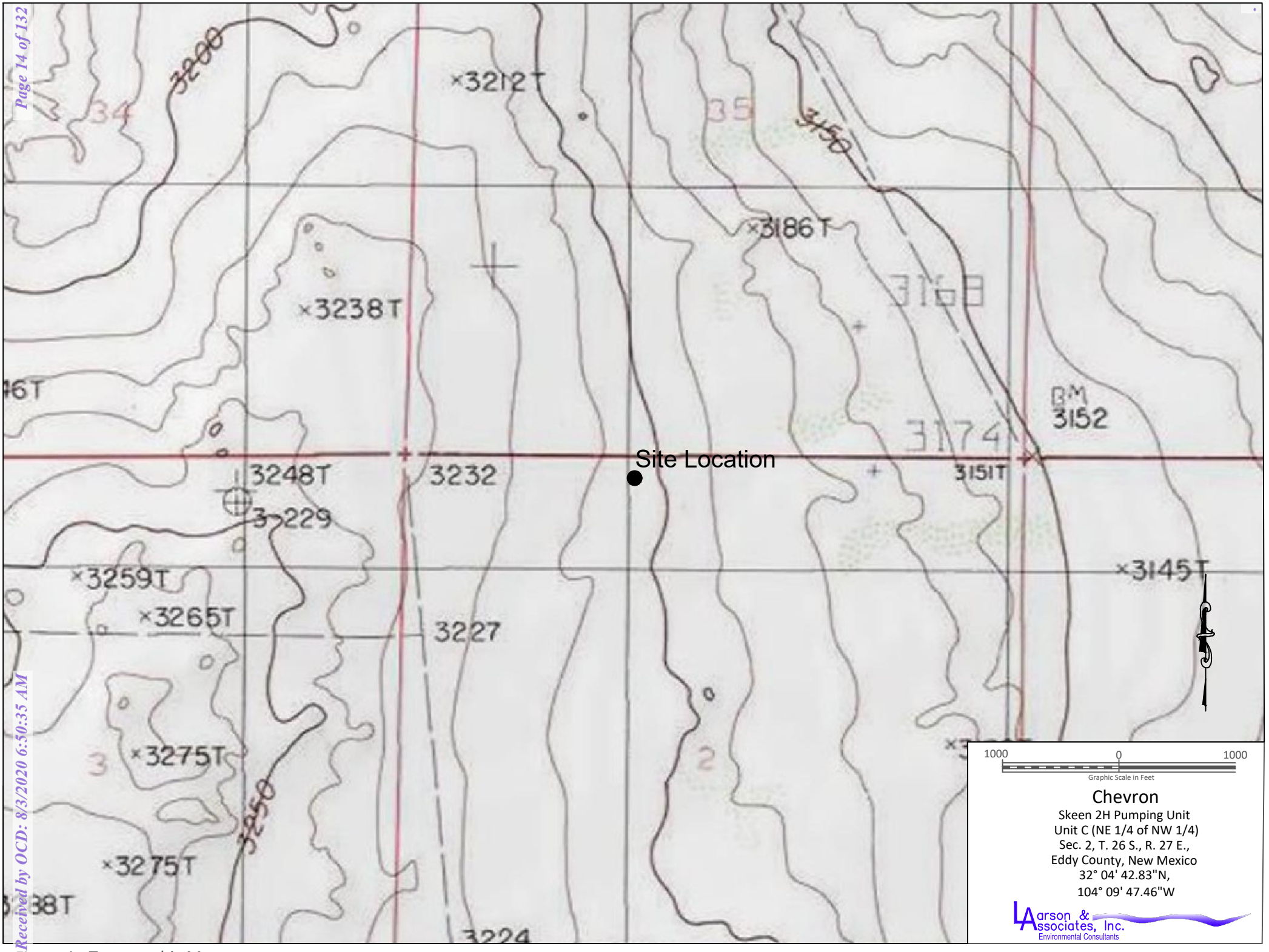

Figure 1 - Topographic Map

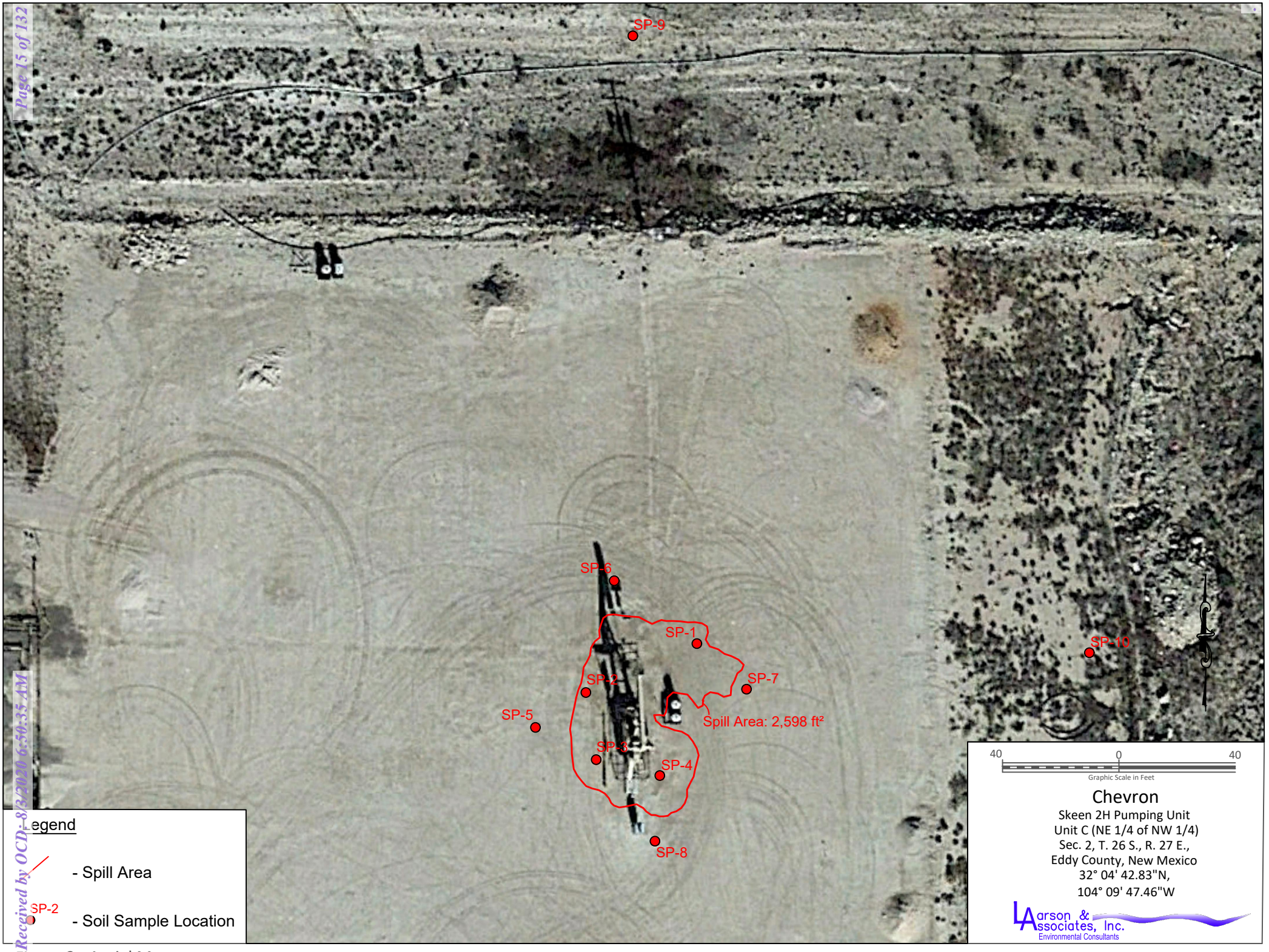

Figure 2 - Aerial Map

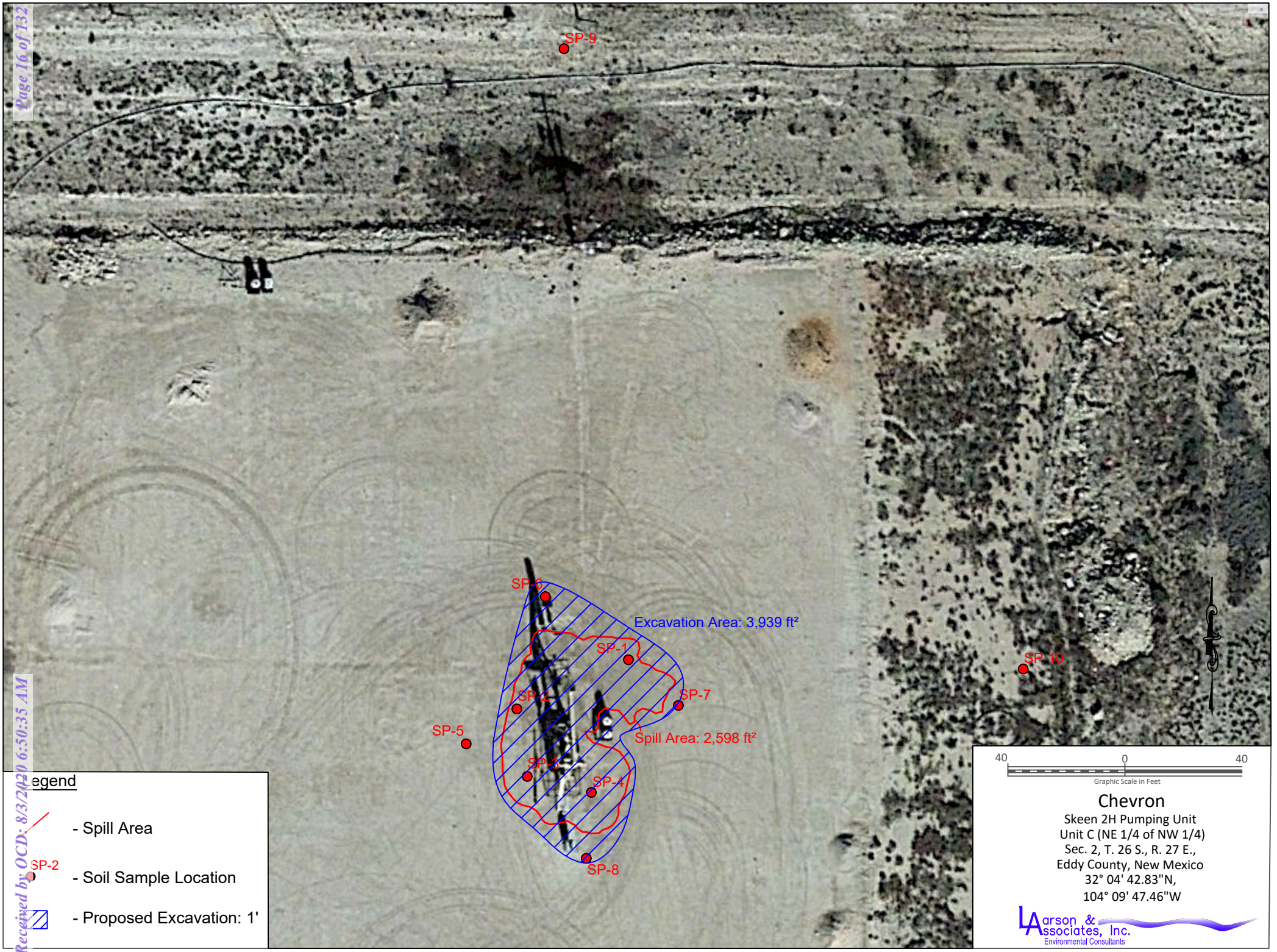

Figure 3 - Aerial Map Showing Proposed Excavation Location

Appendix A

Chevron Spill Calculation

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Incident Date			1/28/2020		
Incident Time			Start Time	End Time	
			7:55 AM	8:00 AM	
Location			Skeen 2H Pumping Unit		
Area	Standing Liquid	In Soil	size	Oil Volume	Water Volume
1	0.1667	0.26	15 X 3.14	2.3	2.95
2					
3					
4					
5					
			Total Fluid	2.3	2.95
	Fluid Recovered		Oil Volume	Water Volume	
			2	2.95	

Appendix B

Laboratory Reports

Certificate of Analysis Summary 653356

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Fri Feb-21-20 03:47 pm
Report Date: 02-MAR-20
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	653356-001		653356-002		653356-003		653356-004		653356-005		653356-006	
	Field Id:	S-1 (0-0.5)		S-1 (0.5-1)		S-2 (0-0.5)		S-2 (0.5-1)		S-3 (0-0.5)		S-3 (0.5-1)	
	Depth:	0-0.5 ft		0.5-1 ft		0-0.5 ft		0.5-1 ft		0-0.5 ft		0.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-20-20 11:40		Feb-20-20 11:41		Feb-20-20 11:53		Feb-20-20 11:54		Feb-20-20 11:43		Feb-20-20 11:47	
BTEX by EPA 8021B	***Extracted:***	Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30	
	Analyzed:	Feb-29-20 14:03		Feb-29-20 14:23		Feb-29-20 14:43		Feb-29-20 15:03		Feb-29-20 15:23		Feb-29-20 15:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200	0.00370	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00403	0.00403	<0.00399	0.00399	0.0536	0.00401	0.0203	0.00401	<0.00399	0.00399	<0.00400	0.00400
o-Xylene		<0.00202	0.00202	<0.00200	0.00200	0.0182	0.00200	0.00412	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200	0.0718	0.00200	0.0244	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00202	0.00202	<0.00200	0.00200	0.0755	0.00200	0.0244	0.00200	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40	
	Analyzed:	Feb-24-20 13:45		Feb-24-20 13:51		Feb-24-20 13:58		Feb-24-20 14:04		Feb-24-20 14:23		Feb-24-20 14:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3210	49.7	3360	49.9	4230	50.2	4290	49.8	1020	49.7	677	24.9
TPH By SW8015 Mod	***Extracted:***	Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00	
	Analyzed:	Feb-24-20 14:36		Feb-24-20 15:38		Feb-24-20 15:59		Feb-24-20 16:20		Feb-24-20 16:41		Feb-24-20 17:02	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<50.0	50.0	<50.0	50.0	<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0
Diesel Range Organics		468	50.0	237	50.0	411	50.0	681	49.8	614	49.9	711	50.0
Oil Range Hydrocarbons		55.2	50.0	<50.0	50.0	<50.0	50.0	71.5	49.8	79.9	49.9	84.0	50.0
Total TPH		523	50.0	237	50.0	411	50.0	753	49.8	694	49.9	795	50.0

Holly Taylor
Project Manager

Certificate of Analysis Summary 653356

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Fri Feb-21-20 03:47 pm
Report Date: 02-MAR-20
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	653356-007		653356-008		653356-009		653356-010		653356-011		653356-012	
	Field Id:	S-4 (0-0.5)		S-4 (0.5-1)		S-5 (0-0.5)		S-5 (0.5-1)		S-6 (0-0.5)		S-6 (0.5-1)	
	Depth:	0-0.5 ft		0.5-1 ft		0-0.5 ft		0.5-1 ft		0-0.5 ft		0.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Feb-20-20 11:36		Feb-20-20 11:38		Feb-20-20 11:50		Feb-20-20 11:53		Feb-20-20 12:02		Feb-20-20 12:07	
BTEX by EPA 8021B	***Extracted:***	Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30		Feb-29-20 08:30	
	Analyzed:	Feb-29-20 16:03		Feb-29-20 16:24		Feb-29-20 16:44		Feb-29-20 17:04		Feb-29-20 18:23		Feb-29-20 18:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
Toluene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
Ethylbenzene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
m,p-Xylenes		<0.00403	0.00403	<0.00398	0.00398	<0.00397	0.00397	<0.00399	0.00399	<0.00397	0.00397	<0.00397	0.00397
o-Xylene		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
Total Xylenes		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
Total BTEX		<0.00202	0.00202	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40	
	Analyzed:	Feb-24-20 14:35		Feb-24-20 14:41		Feb-24-20 14:48		Feb-24-20 15:13		Feb-24-20 15:19		Feb-24-20 15:38	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		820	50.0	1050	50.0	126	50.3	151	49.5	916	25.0	657	49.9
TPH By SW8015 Mod	***Extracted:***	Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00	
	Analyzed:	Feb-24-20 17:23		Feb-24-20 17:44		Feb-24-20 18:05		Feb-24-20 18:26		Feb-24-20 19:08		Feb-24-20 19:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<49.8	49.8
Diesel Range Organics		404	49.8	597	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<49.8	49.8
Oil Range Hydrocarbons		52.5	49.8	66.3	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<49.8	49.8
Total TPH		457	49.8	663	50.0	<50.0	50.0	<49.9	49.9	<49.9	49.9	<49.8	49.8

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 653356

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location: NM

Date Received in Lab: Fri Feb-21-20 03:47 pm
Report Date: 02-MAR-20
Project Manager: Holly Taylor

Analysis Requested															
	Lab Id:	653356-013		653356-014		653356-015		653356-016							
	Field Id:	S-7 (0-0.5)		S-7 (0.5-1)		S-8 (0-0.5)		S-8 (0.5-1)							
	Depth:	0-0.5 ft		0.5-1 ft		0-0.5 ft		0.5-1 ft							
	Matrix:	SOIL		SOIL		SOIL		SOIL							
	Sampled:	Feb-20-20 12:11		Feb-20-20 12:13		Feb-20-20 12:06		Feb-20-20 12:07							
BTEX by EPA 8021B	***Extracted:***	Mar-01-20 10:00		Mar-01-20 10:00		Mar-01-20 10:00		Mar-01-20 10:00							
	Analyzed:	Mar-01-20 15:49		Mar-01-20 16:09		Mar-01-20 16:30		Mar-01-20 16:50							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
Toluene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
Ethylbenzene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
m,p-Xylenes		<0.00398	0.00398	<0.00399	0.00399	<0.00401	0.00401	<0.00398	0.00398						
o-Xylene		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
Total Xylenes		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
Total BTEX		<0.00199	0.00199	<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199						
Chloride by EPA 300	***Extracted:***	Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40		Feb-24-20 12:40							
	Analyzed:	Feb-24-20 15:44		Feb-24-20 15:50		Feb-24-20 15:56		Feb-24-20 16:03							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		504	50.3	877	25.3	152	25.3	111	50.5						
TPH By SW8015 Mod	***Extracted:***	Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00		Feb-24-20 13:00							
	Analyzed:	Feb-24-20 19:50		Feb-24-20 20:11		Feb-24-20 20:32		Feb-24-20 20:53							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons		<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0						
Diesel Range Organics		455	50.0	60.7	50.0	103	49.9	<50.0	50.0						
Oil Range Hydrocarbons		62.2	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0						
Total TPH		517	50.0	60.7	50.0	103	49.9	<50.0	50.0						

Holly Taylor
Project Manager

Analytical Report 653356

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Skeen 2H Pumping Unit

20-0107-03

02-MAR-20

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)

02-MAR-20

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

Reference: XENCO Report No(s): **653356**
Skeen 2H Pumping Unit
Project Address: NM

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) 653356. 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. 653356 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

Sample Cross Reference 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 (0-0.5)	S	02-20-20 11:40	0 - 0.5 ft	653356-001
S-1 (0.5-1)	S	02-20-20 11:41	0.5 - 1 ft	653356-002
S-2 (0-0.5)	S	02-20-20 11:53	0 - 0.5 ft	653356-003
S-2 (0.5-1)	S	02-20-20 11:54	0.5 - 1 ft	653356-004
S-3 (0-0.5)	S	02-20-20 11:43	0 - 0.5 ft	653356-005
S-3 (0.5-1)	S	02-20-20 11:47	0.5 - 1 ft	653356-006
S-4 (0-0.5)	S	02-20-20 11:36	0 - 0.5 ft	653356-007
S-4 (0.5-1)	S	02-20-20 11:38	0.5 - 1 ft	653356-008
S-5 (0-0.5)	S	02-20-20 11:50	0 - 0.5 ft	653356-009
S-5 (0.5-1)	S	02-20-20 11:53	0.5 - 1 ft	653356-010
S-6 (0-0.5)	S	02-20-20 12:02	0 - 0.5 ft	653356-011
S-6 (0.5-1)	S	02-20-20 12:07	0.5 - 1 ft	653356-012
S-7 (0-0.5)	S	02-20-20 12:11	0 - 0.5 ft	653356-013
S-7 (0.5-1)	S	02-20-20 12:13	0.5 - 1 ft	653356-014
S-8 (0-0.5)	S	02-20-20 12:06	0 - 0.5 ft	653356-015
S-8 (0.5-1)	S	02-20-20 12:07	0.5 - 1 ft	653356-016

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Skeen 2H Pumping Unit

Project ID: *20-0107-03*
Work Order Number(s): *653356*

Report Date: *02-MAR-20*
Date Received: *02/21/2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3118121 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3118135 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-1 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-001	Date Collected:	02.20.20 11.40	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3210**	49.7	mg/kg	02.24.20 13.45		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 14.36	U	1
Diesel Range Organics	C10C28DRO	**468**	50.0	mg/kg	02.24.20 14.36		1
Oil Range Hydrocarbons	PHCG2835	**55.2**	50.0	mg/kg	02.24.20 14.36		1
Total TPH	PHC635	**523**	50.0	mg/kg	02.24.20 14.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	02.24.20 14.36	
o-Terphenyl	84-15-1	106	%	70-135	02.24.20 14.36	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-1 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-001	Date Collected:	02.20.20 11.40	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.29.20 14.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.29.20 14.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.29.20 14.03	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.29.20 14.03	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-1 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-002	Date Collected:	02.20.20 11.41	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3360**	49.9	mg/kg	02.24.20 13.51		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 15.38	U	1
Diesel Range Organics	C10C28DRO	**237**	50.0	mg/kg	02.24.20 15.38		1
Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	02.24.20 15.38	U	1
Total TPH	PHC635	**237**	50.0	mg/kg	02.24.20 15.38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	02.24.20 15.38	
o-Terphenyl	84-15-1	98	%	70-135	02.24.20 15.38	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-1 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-002	Date Collected:	02.20.20 11.41	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.29.20 14.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.29.20 14.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.29.20 14.23	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.29.20 14.23	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-003	Date Collected:	02.20.20 11.53	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4230**	50.2	mg/kg	02.24.20 13.58		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 15.59	U	1
Diesel Range Organics	C10C28DRO	**411**	50.0	mg/kg	02.24.20 15.59		1
Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	02.24.20 15.59	U	1
Total TPH	PHC635	**411**	50.0	mg/kg	02.24.20 15.59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	02.24.20 15.59	
o-Terphenyl	84-15-1	100	%	70-135	02.24.20 15.59	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-003	Date Collected:	02.20.20 11.53	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 14.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 14.43	U	1
Ethylbenzene	100-41-4	**0.00370**	0.00200	mg/kg	02.29.20 14.43		1
m,p-Xylenes	179601-23-1	**0.0536**	0.00401	mg/kg	02.29.20 14.43		1
o-Xylene	95-47-6	**0.0182**	0.00200	mg/kg	02.29.20 14.43		1
Total Xylenes	1330-20-7	**0.0718**	0.00200	mg/kg	02.29.20 14.43		1
Total BTEX		**0.0755**	0.00200	mg/kg	02.29.20 14.43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	02.29.20 14.43	
1,4-Difluorobenzene	540-36-3	88	%	70-130	02.29.20 14.43	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-004	Date Collected:	02.20.20 11.54	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4290**	49.8	mg/kg	02.24.20 14.04		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	02.24.20 16.20	U	1
Diesel Range Organics	C10C28DRO	**681**	49.8	mg/kg	02.24.20 16.20		1
Oil Range Hydrocarbons	PHCG2835	**71.5**	49.8	mg/kg	02.24.20 16.20		1
Total TPH	PHC635	**753**	49.8	mg/kg	02.24.20 16.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.24.20 16.20	
o-Terphenyl	84-15-1	106	%	70-135	02.24.20 16.20	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-004	Date Collected:	02.20.20 11.54	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 15.03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 15.03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.29.20 15.03	U	1
m,p-Xylenes	179601-23-1	**0.0203**	0.00401	mg/kg	02.29.20 15.03		1
o-Xylene	95-47-6	**0.00412**	0.00200	mg/kg	02.29.20 15.03		1
Total Xylenes	1330-20-7	**0.0244**	0.00200	mg/kg	02.29.20 15.03		1
Total BTEX		**0.0244**	0.00200	mg/kg	02.29.20 15.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.29.20 15.03	
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.29.20 15.03	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-005	Date Collected:	02.20.20 11.43	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1020**	49.7	mg/kg	02.24.20 14.23		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	02.24.20 16.41	U	1
Diesel Range Organics	C10C28DRO	**614**	49.9	mg/kg	02.24.20 16.41		1
Oil Range Hydrocarbons	PHCG2835	**79.9**	49.9	mg/kg	02.24.20 16.41		1
Total TPH	PHC635	**694**	49.9	mg/kg	02.24.20 16.41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	02.24.20 16.41	
o-Terphenyl	84-15-1	104	%	70-135	02.24.20 16.41	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-005	Date Collected:	02.20.20 11.43	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.29.20 15.23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.29.20 15.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	02.29.20 15.23	
4-Bromofluorobenzene	460-00-4	103	%	70-130	02.29.20 15.23	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-006	Date Collected:	02.20.20 11.47	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**677**	24.9	mg/kg	02.24.20 14.29		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 17.02	U	1
Diesel Range Organics	C10C28DRO	**711**	50.0	mg/kg	02.24.20 17.02		1
Oil Range Hydrocarbons	PHCG2835	**84.0**	50.0	mg/kg	02.24.20 17.02		1
Total TPH	PHC635	**795**	50.0	mg/kg	02.24.20 17.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.24.20 17.02	
o-Terphenyl	84-15-1	109	%	70-135	02.24.20 17.02	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-006	Date Collected:	02.20.20 11.47	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.29.20 15.43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.29.20 15.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.29.20 15.43	
4-Bromofluorobenzene	460-00-4	102	%	70-130	02.29.20 15.43	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-007	Date Collected:	02.20.20 11.36	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**820**	50.0	mg/kg	02.24.20 14.35		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	02.24.20 17.23	U	1
Diesel Range Organics	C10C28DRO	**404**	49.8	mg/kg	02.24.20 17.23		1
Oil Range Hydrocarbons	PHCG2835	**52.5**	49.8	mg/kg	02.24.20 17.23		1
Total TPH	PHC635	**457**	49.8	mg/kg	02.24.20 17.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.24.20 17.23	
o-Terphenyl	84-15-1	100	%	70-135	02.24.20 17.23	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-007	Date Collected:	02.20.20 11.36	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.29.20 16.03	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.29.20 16.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.29.20 16.03	
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.29.20 16.03	

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Skeen 2H Pumping Unit

Sample Id:	**S-4 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-008	Date Collected:	02.20.20 11.38	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1050**	50.0	mg/kg	02.24.20 14.41		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 17.44	U	1
Diesel Range Organics	C10C28DRO	**597**	50.0	mg/kg	02.24.20 17.44		1
Oil Range Hydrocarbons	PHCG2835	**66.3**	50.0	mg/kg	02.24.20 17.44		1
Total TPH	PHC635	**663**	50.0	mg/kg	02.24.20 17.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	02.24.20 17.44	
o-Terphenyl	84-15-1	106	%	70-135	02.24.20 17.44	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-008	Date Collected:	02.20.20 11.38	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.29.20 16.24	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.29.20 16.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	02.29.20 16.24	
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.29.20 16.24	

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Skeen 2H Pumping Unit

Sample Id:	**S-5 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-009	Date Collected:	02.20.20 11.50	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**126**	50.3	mg/kg	02.24.20 14.48		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 18.05	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	02.24.20 18.05	U	1
Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	02.24.20 18.05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.24.20 18.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.24.20 18.05	
o-Terphenyl	84-15-1	94	%	70-135	02.24.20 18.05	

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Skeen 2H Pumping Unit

Sample Id:	**S-5 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-009	Date Collected:	02.20.20 11.50	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.29.20 16.44	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.29.20 16.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.29.20 16.44	
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.29.20 16.44	

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Skeen 2H Pumping Unit

Sample Id:	**S-5 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-010	Date Collected:	02.20.20 11.53	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**151**	49.5	mg/kg	02.24.20 15.13		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	02.24.20 18.26	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	02.24.20 18.26	U	1
Oil Range Hydrocarbons	PHCG2835	<49.9	49.9	mg/kg	02.24.20 18.26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.24.20 18.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	02.24.20 18.26	
o-Terphenyl	84-15-1	120	%	70-135	02.24.20 18.26	

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Skeen 2H Pumping Unit

Sample Id:	**S-5 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-010	Date Collected:	02.20.20 11.53	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.29.20 17.04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.29.20 17.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	02.29.20 17.04	
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.29.20 17.04	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-011	Date Collected:	02.20.20 12.02	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**916**	25.0	mg/kg	02.24.20 15.19		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	02.24.20 19.08	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	02.24.20 19.08	U	1
Oil Range Hydrocarbons	PHCG2835	<49.9	49.9	mg/kg	02.24.20 19.08	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.24.20 19.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.24.20 19.08	
o-Terphenyl	84-15-1	91	%	70-135	02.24.20 19.08	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-011	Date Collected:	02.20.20 12.02	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.29.20 18.23	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.29.20 18.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.29.20 18.23	
4-Bromofluorobenzene	460-00-4	82	%	70-130	02.29.20 18.23	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-012	Date Collected:	02.20.20 12.07	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**657**	49.9	mg/kg	02.24.20 15.38		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	02.24.20 19.29	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	02.24.20 19.29	U	1
Oil Range Hydrocarbons	PHCG2835	<49.8	49.8	mg/kg	02.24.20 19.29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.24.20 19.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.24.20 19.29	
o-Terphenyl	84-15-1	94	%	70-135	02.24.20 19.29	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-012	Date Collected:	02.20.20 12.07	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	02.29.20 08.30	Basis:	Wet Weight
Seq Number:	3118121				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	02.29.20 18.43	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1
Total BTEX		<0.00198	0.00198	mg/kg	02.29.20 18.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	02.29.20 18.43	
1,4-Difluorobenzene	540-36-3	100	%	70-130	02.29.20 18.43	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-013	Date Collected:	02.20.20 12.11	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**504**	50.3	mg/kg	02.24.20 15.44		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 19.50	U	1
Diesel Range Organics	C10C28DRO	**455**	50.0	mg/kg	02.24.20 19.50		1
Oil Range Hydrocarbons	PHCG2835	**62.2**	50.0	mg/kg	02.24.20 19.50		1
Total TPH	PHC635	**517**	50.0	mg/kg	02.24.20 19.50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.24.20 19.50	
o-Terphenyl	84-15-1	106	%	70-135	02.24.20 19.50	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-013	Date Collected:	02.20.20 12.11	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.01.20 10.00	Basis:	Wet Weight
Seq Number:	3118135				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.01.20 15.49	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.01.20 15.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	03.01.20 15.49	
4-Bromofluorobenzene	460-00-4	93	%	70-130	03.01.20 15.49	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-014	Date Collected:	02.20.20 12.13	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**877**	25.3	mg/kg	02.24.20 15.50		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 20.11	U	1
Diesel Range Organics	C10C28DRO	**60.7**	50.0	mg/kg	02.24.20 20.11		1
Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	02.24.20 20.11	U	1
Total TPH	PHC635	**60.7**	50.0	mg/kg	02.24.20 20.11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.24.20 20.11	
o-Terphenyl	84-15-1	97	%	70-135	02.24.20 20.11	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-014	Date Collected:	02.20.20 12.13	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.01.20 10.00	Basis:	Wet Weight
Seq Number:	3118135				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.01.20 16.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.01.20 16.09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	03.01.20 16.09	
1,4-Difluorobenzene	540-36-3	102	%	70-130	03.01.20 16.09	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-8 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-015	Date Collected:	02.20.20 12.06	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**152**	25.3	mg/kg	02.24.20 15.56		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	02.24.20 20.32	U	1
Diesel Range Organics	C10C28DRO	**103**	49.9	mg/kg	02.24.20 20.32		1
Oil Range Hydrocarbons	PHCG2835	<49.9	49.9	mg/kg	02.24.20 20.32	U	1
Total TPH	PHC635	**103**	49.9	mg/kg	02.24.20 20.32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	02.24.20 20.32	
o-Terphenyl	84-15-1	95	%	70-135	02.24.20 20.32	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-8 (0-0.5)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-015	Date Collected:	02.20.20 12.06	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.01.20 10.00	Basis:	Wet Weight
Seq Number:	3118135				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.01.20 16.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.01.20 16.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	03.01.20 16.30	
4-Bromofluorobenzene	460-00-4	86	%	70-130	03.01.20 16.30	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-8 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-016	Date Collected:	02.20.20 12.07	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	02.24.20 12.40	Basis:	Wet Weight
Seq Number:	3117491				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**111**	50.5	mg/kg	02.24.20 16.03		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	02.24.20 13.00	Basis:	Wet Weight
Seq Number:	3117576				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	02.24.20 20.53	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	02.24.20 20.53	U	1
Oil Range Hydrocarbons	PHCG2835	<50.0	50.0	mg/kg	02.24.20 20.53	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	02.24.20 20.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	02.24.20 20.53	
o-Terphenyl	84-15-1	92	%	70-135	02.24.20 20.53	

Certificate of Analytical Results 653356

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-8 (0.5-1)**	Matrix:	Soil	Date Received:	02.21.20 15.47
Lab Sample Id:	653356-016	Date Collected:	02.20.20 12.07	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.01.20 10.00	Basis:	Wet Weight
Seq Number:	3118135				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.01.20 16.50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.01.20 16.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	70-130	03.01.20 16.50	
1,4-Difluorobenzene	540-36-3	102	%	70-130	03.01.20 16.50	

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.

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 653356

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117491 — Matrix: Solid — Date Prep: 02.24.20
MB Sample Id: 7697309-1-BLK — LCS Sample Id: 7697309-1-BKS — LCSD Sample Id: 7697309-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	251	100	250	100	90-110	0	20	mg/kg	02.24.20 13:14	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117491 — Matrix: Soil — Date Prep: 02.24.20
Parent Sample Id: 653386-006 — MS Sample Id: 653386-006 S — MSD Sample Id: 653386-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	42.9	202	237	96	240	98	90-110	1	20	mg/kg	02.24.20 13:33	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3117491 — Matrix: Soil — Date Prep: 02.24.20
Parent Sample Id: 653390-001 — MS Sample Id: 653390-001 S — MSD Sample Id: 653390-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	267	200	466	100	467	100	90-110	0	20	mg/kg	02.24.20 15:00	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3117576 — Matrix: Solid — Date Prep: 02.24.20
MB Sample Id: 7697335-1-BLK — LCS Sample Id: 7697335-1-BKS — LCSD Sample Id: 7697335-1-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	<15.0	1000	879	88	876	88	70-135	0	20	mg/kg	02.24.20 13:54	
Diesel Range Organics	<15.0	1000	967	97	930	93	70-135	4	20	mg/kg	02.24.20 13:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		106		102		70-135	%	02.24.20 13:54
o-Terphenyl	106		109		105		70-135	%	02.24.20 13:54

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3117576 — Matrix: Solid — Date Prep: 02.24.20
MB Sample Id: 7697335-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Oil Range Hydrocarbons	<50.0	mg/kg	02.24.20 13:33	

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

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

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

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

QC Summary 653356

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3117576 — Matrix: Soil — Date Prep: 02.24.20
Parent Sample Id: 653356-001 — MS Sample Id: 653356-001 S — MSD Sample Id: 653356-001 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	<15.0	998	880	88	878	88	70-135	0	20	mg/kg	02.24.20 14:56	
Diesel Range Organics	468	998	1470	100	1450	98	70-135	1	20	mg/kg	02.24.20 14:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		94		70-135	%	02.24.20 14:56
o-Terphenyl	110		109		70-135	%	02.24.20 14:56

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3118121 — Matrix: Solid — Date Prep: 02.29.20
MB Sample Id: 7697783-1-BLK — LCS Sample Id: 7697783-1-BKS — LCSD Sample Id: 7697783-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.116	116	0.117	117	70-130	1	35	mg/kg	02.29.20 11:43	
Toluene	<0.000456	0.100	0.107	107	0.114	114	70-130	6	35	mg/kg	02.29.20 11:43	
Ethylbenzene	<0.000565	0.100	0.101	101	0.108	108	70-130	7	35	mg/kg	02.29.20 11:43	
m,p-Xylenes	<0.00101	0.200	0.198	99	0.216	108	70-130	9	35	mg/kg	02.29.20 11:43	
o-Xylene	<0.000344	0.100	0.0983	98	0.107	107	70-130	8	35	mg/kg	02.29.20 11:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		100		99		70-130	%	02.29.20 11:43
4-Bromofluorobenzene	86		92		98		70-130	%	02.29.20 11:43

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3118135 — Matrix: Solid — Date Prep: 03.01.20
MB Sample Id: 7697798-1-BLK — LCS Sample Id: 7697798-1-BKS — LCSD Sample Id: 7697798-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.124	124	0.107	107	70-130	15	35	mg/kg	03.01.20 12:50	
Toluene	<0.000456	0.100	0.117	117	0.107	107	70-130	9	35	mg/kg	03.01.20 12:50	
Ethylbenzene	<0.000565	0.100	0.112	112	0.103	103	70-130	8	35	mg/kg	03.01.20 12:50	
m,p-Xylenes	<0.00101	0.200	0.222	111	0.209	105	70-130	6	35	mg/kg	03.01.20 12:50	
o-Xylene	<0.000344	0.100	0.111	111	0.104	104	70-130	7	35	mg/kg	03.01.20 12:50	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		102		100		70-130	%	03.01.20 12:50
4-Bromofluorobenzene	83		97		100		70-130	%	03.01.20 12:50

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 653356

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3118121 Matrix: Soil Date Prep: 02.29.20
Parent Sample Id: 653356-002 MS Sample Id: 653356-002 S MSD Sample Id: 653356-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000382	0.0992	0.100	101	0.109	109	70-130	9	35	mg/kg	02.29.20 12:24	
Toluene	0.000719	0.0992	0.0937	94	0.100	100	70-130	7	35	mg/kg	02.29.20 12:24	
Ethylbenzene	<0.000560	0.0992	0.0806	81	0.0901	90	70-130	11	35	mg/kg	02.29.20 12:24	
m,p-Xylenes	<0.00101	0.198	0.157	79	0.177	89	70-130	12	35	mg/kg	02.29.20 12:24	
o-Xylene	0.000439	0.0992	0.0782	78	0.0876	88	70-130	11	35	mg/kg	02.29.20 12:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		98		70-130	%	02.29.20 12:24
4-Bromofluorobenzene	77		96		70-130	%	02.29.20 12:24

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3118135 Matrix: Soil Date Prep: 03.01.20
Parent Sample Id: 653393-002 MS Sample Id: 653393-002 S MSD Sample Id: 653393-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000387	0.101	0.137	136	0.132	132	70-130	4	35	mg/kg	03.01.20 13:30	X
Toluene	<0.000458	0.101	0.130	129	0.121	121	70-130	7	35	mg/kg	03.01.20 13:30	
Ethylbenzene	<0.000568	0.101	0.120	119	0.111	111	70-130	8	35	mg/kg	03.01.20 13:30	
m,p-Xylenes	<0.00102	0.201	0.229	114	0.212	106	70-130	8	35	mg/kg	03.01.20 13:30	
o-Xylene	<0.000346	0.101	0.116	115	0.108	108	70-130	7	35	mg/kg	03.01.20 13:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	03.01.20 13:30
4-Bromofluorobenzene	96		101		70-130	%	03.01.20 13:30

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

№ 0977

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 2/21/2020 PAGE 1 OF 2

PO#: LAB WORK ORDER#: 653356

PROJECT LOCATION OR NAME: Skeen 2H Pumping Unit

LAI PROJECT #: 20-DD7-03 COLLECTOR: EC/DS

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: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
S-1 (0-0.5')		2/20/20	11:40	S	1				X		X	X	X	X														X	
S-1 (0.5-1')			11:41																										
S-2 (0-0.5')			11:53																										
S-2 (0.5-1')			11:54																										
S-3 (0-0.5')			11:43																										
S-3 (0.5-1')			11:47																										
S-4 (0-0.5')			11:36																										
S-4 (0.5-1')			11:38																										
S-5 (0-0.5')			11:50																										
S-5 (0.5-1')			11:53																										
S-6 (0-0.5')			12:02																										
S-6 (0.5-1')			12:07																										
S-7 (0-0.5')			12:11																										
S-7 (0.5-1')			12:13																										
S-8 (0-0.5')			12:06																										
TOTAL 15																													

FIELD NOTES

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 2-21-20 3:47 RECEIVED BY: (Signature)

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

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

LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☒ 5 to 7 DAYS
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: -1.4 THERM#: R8
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

Nº 0978

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 2/21/2020 PAGE 2 OF 2

PO#: LAB WORK ORDER#: 653356

PROJECT LOCATION OR NAME: Skeen 2H Pumping Unit

LAI PROJECT #: 20-0107-03 COLLECTOR: EC/DS

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: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☒	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
S-8(0.5-1')		2/2/20	12:07	S	1				X		X		X	X	X													X		

TOTAL 1

RELINQUISHED BY:(Signature) Rachel Owen	DATE/TIME 2-2-20 3:47	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
LABORATORY: Xenco		

TURN AROUND TIME
NORMAL ☒ 5 to 7 days
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: -1.4 THERM#: BY
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: 02/21/2020 03:47:00 PM

Work Order #: 653356

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-1.4
#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: Alexis Jaime Date: 02/21/2020

Checklist reviewed by: Holly Taylor Date: 03/02/2020

Certificate of Analysis Summary 656204

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 03.19.2020 09:49
Report Date: 03.26.2020 13:35
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	656204-001		656204-002		656204-003		656204-004		656204-005		656204-006	
	Field Id:	S-1 (2')		S-1 (3')		S-1 (5')		S-1 (10')		S-7 (2')		S-7 (3')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	03.17.2020 12:55		03.17.2020 12:56		03.17.2020 13:05		03.17.2020 13:06		03.17.2020 13:18		03.17.2020 13:19	
Chloride by EPA 300	***Extracted:***	03.20.2020 11:05		03.23.2020 11:00		03.23.2020 11:00		03.23.2020 11:00		03.20.2020 11:05		03.20.2020 11:15	
	Analyzed:	03.20.2020 13:52		03.23.2020 14:32		03.23.2020 14:38		03.23.2020 14:44		03.20.2020 14:17		03.20.2020 15:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		123	49.7	7.00	4.98	5.88	4.99	29.5	4.97	478	50.5	61.6	49.7
TPH by SW8015 Mod	***Extracted:***	03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00					
	Analyzed:	03.20.2020 13:04		03.20.2020 14:07		03.20.2020 14:28		03.20.2020 14:49					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9				
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9				
Total TPH		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9				

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 656204

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 03.19.2020 09:49
Report Date: 03.26.2020 13:35
Project Manager: Holly Taylor

Analysis Requested															
	Lab Id:	656204-007		656204-008		656204-009		656204-010		656204-011		656204-012			
	Field Id:	S-7 (5')		S-7 (7.5')		S-9 (0.5')		S-9 (1')		S-10 (0.5')		S-10 (1')			
	Depth:														
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL			
	Sampled:	03.17.2020 13:24		03.17.2020 13:25		03.17.2020 13:23		03.17.2020 12:28		03.17.2020 13:12		03.17.2020 13:16			
BTEX by EPA 8021B	***Extracted:***					03.23.2020 16:00		03.23.2020 16:00		03.23.2020 16:00		03.25.2020 16:00			
	Analyzed:					03.23.2020 22:49		03.23.2020 23:09		03.23.2020 23:30		03.25.2020 20:35			
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
Toluene						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
Ethylbenzene						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
m,p-Xylenes						<0.00397	0.00397	<0.00398	0.00398	<0.00397	0.00397	<0.00401	0.00401		
o-Xylene						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
Total Xylenes						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
Total BTEX						<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198	<0.00200	0.00200		
Chloride by EPA 300	***Extracted:***	03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15			
	Analyzed:	03.20.2020 18:38		03.20.2020 18:44		03.20.2020 18:50		03.20.2020 18:57		03.20.2020 19:03		03.20.2020 19:09			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		<4.95	4.95	<4.95	4.95	<5.03	5.03	<5.05	5.05	26.5	5.05	18.0	5.05		
TPH by SW8015 Mod	***Extracted:***					03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00			
	Analyzed:					03.20.2020 16:34		03.20.2020 16:55		03.20.2020 17:37		03.20.2020 17:58			
	Units/RL:					mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)						<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9		
Diesel Range Organics (DRO)						<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9		
Motor Oil Range Hydrocarbons (MRO)						<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9		
Total TPH						<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9		

Holly Taylor
Project Manager

Certificate of Analysis Summary 656204

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 03.19.2020 09:49
Report Date: 03.26.2020 13:35
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	656204-013		656204-014		656204-015		656204-016		656204-017		656204-018	
	Field Id:	S-4 (2')		S-4 (3')		S-4 (5')		S-4 (7.5')		S-6 (2')		S-6 (4')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	03.17.2020 13:44		03.17.2020 13:45		03.17.2020 14:01		03.17.2020 14:02		03.17.2020 14:14		03.17.2020 14:15	
Chloride by EPA 300	***Extracted:***	03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15	
	Analyzed:	03.20.2020 16:18		03.20.2020 19:16		03.20.2020 16:50		03.20.2020 19:22		03.20.2020 17:15		03.20.2020 17:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		114	25.1	43.8	4.97	61.3	50.5	40.1	4.96	387	50.0	98.3	50.3
TPH by SW8015 Mod	***Extracted:***	03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00					
	Analyzed:	03.20.2020 18:19		03.20.2020 18:39		03.20.2020 19:00		03.20.2020 19:21					
	Units/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	<50.0	50.0				
Diesel Range Organics (DRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				
Total TPH		<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0				

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

Holly Taylor
Project Manager

Certificate of Analysis Summary 656204

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 03.19.2020 09:49
Report Date: 03.26.2020 13:35
Project Manager: Holly Taylor

Analysis Requested													
	Lab Id:	656204-019		656204-020		656204-021		656204-022		656204-023		656204-024	
	Field Id:	S-6 (5')		S-6 (8')		S-2 (2')		S-2 (3')		S-2 (5')		S-2 (8')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	03.17.2020 14:17		03.17.2020 14:18		03.18.2020 10:02		03.18.2020 10:03		03.18.2020 10:06		03.18.2020 10:07	
Chloride by EPA 300	***Extracted:***	03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:15		03.20.2020 11:05	
	Analyzed:	03.20.2020 17:28		03.20.2020 17:34		03.20.2020 17:40		03.20.2020 17:47		03.20.2020 17:53		03.20.2020 14:24	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		307	49.5	475	49.5	591	49.5	373	50.4	344	49.9	261	49.9
TPH by SW8015 Mod	***Extracted:***					03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00	
	Analyzed:					03.20.2020 13:04		03.20.2020 14:07		03.20.2020 14:28		03.20.2020 14:49	
	Units/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
Diesel Range Organics (DRO)						<50.0	50.0	<49.9	49.9	<49.8	49.8	<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
Total TPH						<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0

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Holly Taylor
Project Manager

Certificate of Analysis Summary 656204

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H Pumping Unit

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 03.19.2020 09:49
Report Date: 03.26.2020 13:35
Project Manager: Holly Taylor

Analysis Requested											
	Lab Id:	656204-025		656204-026		656204-027		656204-028			
	Field Id:	S-3 (2')		S-3 (5')		S-3 (8')		S-3 (10')			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	03.18.2020 10:15		03.18.2020 10:16		03.18.2020 10:20		03.18.2020 10:21			
Chloride by EPA 300	***Extracted:***	03.20.2020 17:00		03.20.2020 17:00		03.20.2020 17:00		03.20.2020 17:00			
	Analyzed:	03.21.2020 01:26		03.21.2020 01:47		03.21.2020 01:54		03.21.2020 02:01			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		323	4.98	95.4	4.98	19.6	5.02	14.6	5.03		
TPH by SW8015 Mod	***Extracted:***	03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00		03.20.2020 11:00			
	Analyzed:	03.20.2020 15:10		03.20.2020 15:31		03.20.2020 15:52		03.20.2020 16:13			
	Units/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	<49.8	49.8		
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<49.8	49.8		
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<49.8	49.8		
Total TPH		<50.0	50.0	<49.9	49.9	<49.8	49.8	<49.8	49.8		

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Holly Taylor
Project Manager

Analytical Report 656204

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Skeen 2H Pumping Unit

20-0107-03

03.26.2020

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)

03.26.2020

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

Reference: XENCO Report No(s): **656204**
Skeen 2H Pumping Unit
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) 656204. 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. 656204 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 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 (2')	S	03.17.2020 12:55		656204-001
S-1 (3')	S	03.17.2020 12:56		656204-002
S-1 (5')	S	03.17.2020 13:05		656204-003
S-1 (10')	S	03.17.2020 13:06		656204-004
S-7 (2')	S	03.17.2020 13:18		656204-005
S-7 (3')	S	03.17.2020 13:19		656204-006
S-7 (5')	S	03.17.2020 13:24		656204-007
S-7 (7.5')	S	03.17.2020 13:25		656204-008
S-9 (0.5')	S	03.17.2020 13:23		656204-009
S-9 (1')	S	03.17.2020 12:28		656204-010
S-10 (0.5')	S	03.17.2020 13:12		656204-011
S-10 (1')	S	03.17.2020 13:16		656204-012
S-4 (2')	S	03.17.2020 13:44		656204-013
S-4 (3')	S	03.17.2020 13:45		656204-014
S-4 (5')	S	03.17.2020 14:01		656204-015
S-4 (7.5')	S	03.17.2020 14:02		656204-016
S-6 (2')	S	03.17.2020 14:14		656204-017
S-6 (4')	S	03.17.2020 14:15		656204-018
S-6 (5')	S	03.17.2020 14:17		656204-019
S-6 (8')	S	03.17.2020 14:18		656204-020
S-2 (2')	S	03.18.2020 10:02		656204-021
S-2 (3')	S	03.18.2020 10:03		656204-022
S-2 (5')	S	03.18.2020 10:06		656204-023
S-2 (8')	S	03.18.2020 10:07		656204-024
S-3 (2')	S	03.18.2020 10:15		656204-025
S-3 (5')	S	03.18.2020 10:16		656204-026
S-3 (8')	S	03.18.2020 10:20		656204-027
S-3 (10')	S	03.18.2020 10:21		656204-028

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Skeen 2H Pumping Unit

Project ID: *20-0107-03*
Work Order Number(s): *656204*

Report Date: *03.26.2020*
Date Received: *03.19.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3120695 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3120949 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-1 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-001	Date Collected:	03.17.2020 12:55		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:05	Basis:	Wet Weight
Seq Number:	3120518				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**123**	49.7	mg/kg	03.20.2020 13:52		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.20.2020 13:04	
o-Terphenyl	84-15-1	105	%	70-135	03.20.2020 13:04	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-1 (3')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-002 Date Collected: 03.17.2020 12:56

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 03.23.2020 11:00 Basis: Wet Weight

Seq Number: 3120611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.00**	4.98	mg/kg	03.23.2020 14:32		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.20.2020 14:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.20.2020 14:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.20.2020 14:07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.20.2020 14:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	03.20.2020 14:07	
o-Terphenyl	84-15-1	93	%	70-135	03.20.2020 14:07	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-1 (5')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-003 Date Collected: 03.17.2020 13:05

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 03.23.2020 11:00 Basis: Wet Weight

Seq Number: 3120611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.88**	4.99	mg/kg	03.23.2020 14:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 14:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 14:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 14:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	03.20.2020 14:28	
o-Terphenyl	84-15-1	99	%	70-135	03.20.2020 14:28	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-1 (10')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-004 Date Collected: 03.17.2020 13:06

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 03.23.2020 11:00 Basis: Wet Weight

Seq Number: 3120611

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**29.5**	4.97	mg/kg	03.23.2020 14:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 14:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 14:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 14:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 14:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.20.2020 14:49	
o-Terphenyl	84-15-1	103	%	70-135	03.20.2020 14:49	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-005	Date Collected:	03.17.2020 13:18		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:05	Basis:	Wet Weight
Seq Number:	3120518				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**478**	50.5	mg/kg	03.20.2020 14:17		10

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (3')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-006	Date Collected:	03.17.2020 13:19		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.6**	49.7	mg/kg	03.20.2020 15:21		10

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-007	Date Collected:	03.17.2020 13:24		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	03.20.2020 18:38	U	1

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-7 (7.5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-008	Date Collected:	03.17.2020 13:25		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	03.20.2020 18:44	U	1

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-9 (0.5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-009	Date Collected:	03.17.2020 13:23		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	03.20.2020 18:50	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 16:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 16:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 16:34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 16:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.20.2020 16:34	
o-Terphenyl	84-15-1	96	%	70-135	03.20.2020 16:34	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-9 (0.5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-009	Date Collected:	03.17.2020 13:23		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3120695				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.23.2020 22:49	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.23.2020 22:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	03.23.2020 22:49	
4-Bromofluorobenzene	460-00-4	112	%	70-130	03.23.2020 22:49	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-9 (1')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-010	Date Collected:	03.17.2020 12:28		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	03.20.2020 18:57	U	1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.20.2020 16:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.20.2020 16:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.20.2020 16:55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.20.2020 16:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.20.2020 16:55	
o-Terphenyl	84-15-1	98	%	70-135	03.20.2020 16:55	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-9 (1')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-010	Date Collected:	03.17.2020 12:28		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3120695				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.23.2020 23:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.23.2020 23:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	03.23.2020 23:09	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.23.2020 23:09	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-10 (0.5')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-011 Date Collected: 03.17.2020 13:12

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 03.20.2020 11:15 Basis: Wet Weight

Seq Number: 3120520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**26.5**	5.05	mg/kg	03.20.2020 19:03		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 17:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 17:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 17:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 17:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.20.2020 17:37	
o-Terphenyl	84-15-1	97	%	70-135	03.20.2020 17:37	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-10 (0.5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-011	Date Collected:	03.17.2020 13:12		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.23.2020 16:00	Basis:	Wet Weight
Seq Number:	3120695				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	03.23.2020 23:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	03.23.2020 23:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	03.23.2020 23:30	
4-Bromofluorobenzene	460-00-4	111	%	70-130	03.23.2020 23:30	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-10 (1')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-012 Date Collected: 03.17.2020 13:16

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 03.20.2020 11:15 Basis: Wet Weight

Seq Number: 3120520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.0**	5.05	mg/kg	03.20.2020 19:09		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 17:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 17:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 17:58	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 17:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	03.20.2020 17:58	
o-Terphenyl	84-15-1	92	%	70-135	03.20.2020 17:58	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-10 (1')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-012	Date Collected:	03.17.2020 13:16		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	03.25.2020 16:00	Basis:	Wet Weight
Seq Number:	3120949				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.25.2020 20:35	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.25.2020 20:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	03.25.2020 20:35	
1,4-Difluorobenzene	540-36-3	112	%	70-130	03.25.2020 20:35	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-013	Date Collected:	03.17.2020 13:44		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**114**	25.1	mg/kg	03.20.2020 16:18		5

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 18:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 18:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 18:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 18:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	03.20.2020 18:19	
o-Terphenyl	84-15-1	106	%	70-135	03.20.2020 18:19	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-4 (3')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-014 Date Collected: 03.17.2020 13:45

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 03.20.2020 11:15 Basis: Wet Weight

Seq Number: 3120520

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.8**	4.97	mg/kg	03.20.2020 19:16		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120516

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 18:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 18:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 18:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 18:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	03.20.2020 18:39	
o-Terphenyl	84-15-1	93	%	70-135	03.20.2020 18:39	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-015	Date Collected:	03.17.2020 14:01		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**61.3**	50.5	mg/kg	03.20.2020 16:50		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 19:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 19:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 19:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 19:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.20.2020 19:00	
o-Terphenyl	84-15-1	107	%	70-135	03.20.2020 19:00	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-4 (7.5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-016	Date Collected:	03.17.2020 14:02		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**40.1**	4.96	mg/kg	03.20.2020 19:22		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120516				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 19:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 19:21	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 19:21	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 19:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	03.20.2020 19:21	
o-Terphenyl	84-15-1	103	%	70-135	03.20.2020 19:21	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-017	Date Collected:	03.17.2020 14:14		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**387**	50.0	mg/kg	03.20.2020 17:15		10

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (4')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-018	Date Collected:	03.17.2020 14:15		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**98.3**	50.3	mg/kg	03.20.2020 17:21		10

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-019	Date Collected:	03.17.2020 14:17		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**307**	49.5	mg/kg	03.20.2020 17:28		10

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-6 (8')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-020	Date Collected:	03.17.2020 14:18		
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**475**	49.5	mg/kg	03.20.2020 17:34		10

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-021	Date Collected:	03.18.2020 10:02		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**591**	49.5	mg/kg	03.20.2020 17:40		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 13:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-135	03.20.2020 13:04	
o-Terphenyl	84-15-1	83	%	70-135	03.20.2020 13:04	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (3')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-022	Date Collected:	03.18.2020 10:03		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**373**	50.4	mg/kg	03.20.2020 17:47		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 14:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 14:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 14:07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 14:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.20.2020 14:07	
o-Terphenyl	84-15-1	107	%	70-135	03.20.2020 14:07	

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Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-023	Date Collected:	03.18.2020 10:06		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:15	Basis:	Wet Weight
Seq Number:	3120520				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**344**	49.9	mg/kg	03.20.2020 17:53		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.20.2020 14:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.20.2020 14:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.20.2020 14:28	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.20.2020 14:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	03.20.2020 14:28	
o-Terphenyl	84-15-1	96	%	70-135	03.20.2020 14:28	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-2 (8')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-024	Date Collected:	03.18.2020 10:07		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	03.20.2020 11:05	Basis:	Wet Weight
Seq Number:	3120518				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**261**	49.9	mg/kg	03.20.2020 14:24		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 14:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 14:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 14:49	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 14:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	03.20.2020 14:49	
o-Terphenyl	84-15-1	92	%	70-135	03.20.2020 14:49	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (2')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-025	Date Collected:	03.18.2020 10:15		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.20.2020 17:00	Basis:	Wet Weight
Seq Number:	3120530				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**323**	4.98	mg/kg	03.21.2020 01:26		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 15:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 15:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 15:10	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 15:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	03.20.2020 15:10	
o-Terphenyl	84-15-1	97	%	70-135	03.20.2020 15:10	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (5')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-026	Date Collected:	03.18.2020 10:16		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.20.2020 17:00	Basis:	Wet Weight
Seq Number:	3120530				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**95.4**	4.98	mg/kg	03.21.2020 01:47		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 15:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 15:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 15:31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 15:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	03.20.2020 15:31	
o-Terphenyl	84-15-1	94	%	70-135	03.20.2020 15:31	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id:	**S-3 (8')**	Matrix:	Soil	Date Received:	03.19.2020 09:49
Lab Sample Id:	656204-027	Date Collected:	03.18.2020 10:20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	03.20.2020 17:00	Basis:	Wet Weight
Seq Number:	3120530				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**19.6**	5.02	mg/kg	03.21.2020 01:54		1

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	03.20.2020 11:00	Basis:	Wet Weight
Seq Number:	3120514				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.20.2020 15:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.20.2020 15:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.20.2020 15:52	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.20.2020 15:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.20.2020 15:52	
o-Terphenyl	84-15-1	100	%	70-135	03.20.2020 15:52	

Certificate of Analytical Results 656204

Larson and Associates, Inc., Midland, TX

Skeen 2H Pumping Unit

Sample Id: **S-3 (10')** Matrix: Soil Date Received:03.19.2020 09:49

Lab Sample Id: 656204-028 Date Collected: 03.18.2020 10:21

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 03.20.2020 17:00 Basis: Wet Weight

Seq Number: 3120530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.6**	5.03	mg/kg	03.21.2020 02:01		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 03.20.2020 11:00 Basis: Wet Weight

Seq Number: 3120514

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.20.2020 16:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.20.2020 16:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.20.2020 16:13	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.20.2020 16:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	03.20.2020 16:13	
o-Terphenyl	84-15-1	105	%	70-135	03.20.2020 16:13	

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 656204

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120518 — Matrix: Solid — Date Prep: 03.20.2020
MB Sample Id: 7699379-1-BLK — LCS Sample Id: 7699379-1-BKS — LCSD Sample Id: 7699379-1-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	250	100	249	100	90-110	0	20	mg/kg	03.20.2020 11:20	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120520 — Matrix: Solid — Date Prep: 03.20.2020
MB Sample Id: 7699381-1-BLK — LCS Sample Id: 7699381-1-BKS — LCSD Sample Id: 7699381-1-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	250	100	250	100	90-110	0	20	mg/kg	03.20.2020 14:49	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120530 — Matrix: Solid — Date Prep: 03.20.2020
MB Sample Id: 7699443-1-BLK — LCS Sample Id: 7699443-1-BKS — LCSD Sample Id: 7699443-1-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	258	103	257	103	90-110	0	20	mg/kg	03.20.2020 23:05	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120611 — Matrix: Solid — Date Prep: 03.23.2020
MB Sample Id: 7699487-1-BLK — LCS Sample Id: 7699487-1-BKS — LCSD Sample Id: 7699487-1-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	253	101	255	102	90-110	1	20	mg/kg	03.23.2020 13:19	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120518 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656195-004 — MS Sample Id: 656195-004 S — MSD Sample Id: 656195-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	766	1260	2060	103	2060	103	90-110	0	20	mg/kg	03.20.2020 18:00	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120518 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656199-004 — MS Sample Id: 656199-004 S — MSD Sample Id: 656199-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1770	1250	3090	106	3100	106	90-110	0	20	mg/kg	03.20.2020 18:12	

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 656204

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120520 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656199-008 — MS Sample Id: 656199-008 S — MSD Sample Id: 656199-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	58.9	249	303	98	305	99	90-110	1	20	mg/kg	03.20.2020 16:37	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120520 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656251-002 — MS Sample Id: 656251-002 S — MSD Sample Id: 656251-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.96	251	254	100	252	99	90-110	1	20	mg/kg	03.20.2020 15:08	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120530 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656361-019 — MS Sample Id: 656361-019 S — MSD Sample Id: 656361-019 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	194	250	449	102	435	96	90-110	3	20	mg/kg	03.20.2020 23:26	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120530 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656361-028 — MS Sample Id: 656361-028 S — MSD Sample Id: 656361-028 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	95.9	248	353	104	325	92	90-110	8	20	mg/kg	03.21.2020 01:05	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120611 — Matrix: Soil — Date Prep: 03.23.2020
Parent Sample Id: 656464-002 — MS Sample Id: 656464-002 S — MSD Sample Id: 656464-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	22.8	249	280	103	280	103	90-110	0	20	mg/kg	03.23.2020 15:02	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3120611 — Matrix: Soil — Date Prep: 03.23.2020
Parent Sample Id: 656464-007 — MS Sample Id: 656464-007 S — MSD Sample Id: 656464-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	57.4	250	312	102	304	99	90-110	3	20	mg/kg	03.23.2020 13:37	

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

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

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

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

QC Summary 656204

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3120514 Matrix: Solid Date Prep: 03.20.2020
MB Sample Id: 7699386-1-BLK LCS Sample Id: 7699386-1-BKS LCSD Sample Id: 7699386-1-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	840	84	822	82	70-135	2	20	mg/kg	03.20.2020 12:21	
Diesel Range Organics (DRO)	<50.0	1000	864	86	862	86	70-135	0	20	mg/kg	03.20.2020 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		78		77		70-135	%	03.20.2020 12:21
o-Terphenyl	84		84		83		70-135	%	03.20.2020 12:21

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3120516 Matrix: Solid Date Prep: 03.20.2020
MB Sample Id: 7699382-1-BLK LCS Sample Id: 7699382-1-BKS LCSD Sample Id: 7699382-1-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	852	85	857	86	70-135	1	20	mg/kg	03.20.2020 12:21	
Diesel Range Organics (DRO)	<50.0	1000	936	94	919	92	70-135	2	20	mg/kg	03.20.2020 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	89		89		89		70-135	%	03.20.2020 12:21
o-Terphenyl	101		98		97		70-135	%	03.20.2020 12:21

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3120514 Matrix: Solid Date Prep: 03.20.2020
MB Sample Id: 7699386-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.20.2020 12:00	

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3120516 Matrix: Solid Date Prep: 03.20.2020
MB Sample Id: 7699382-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.20.2020 12:00	

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 656204

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120514 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656204-021 — MS Sample Id: 656204-021 S — MSD Sample Id: 656204-021 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	839	84	878	88	70-135	5	20	mg/kg	03.20.2020 13:25	
Diesel Range Organics (DRO)	<49.9	997	890	89	953	95	70-135	7	20	mg/kg	03.20.2020 13:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	85		88		70-135	%	03.20.2020 13:25
o-Terphenyl	90		96		70-135	%	03.20.2020 13:25

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3120516 — Matrix: Soil — Date Prep: 03.20.2020
Parent Sample Id: 656204-001 — MS Sample Id: 656204-001 S — MSD Sample Id: 656204-001 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	886	89	895	90	70-135	1	20	mg/kg	03.20.2020 13:25	
Diesel Range Organics (DRO)	<49.9	998	965	97	974	98	70-135	1	20	mg/kg	03.20.2020 13:25	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	94		98		70-135	%	03.20.2020 13:25
o-Terphenyl	103		104		70-135	%	03.20.2020 13:25

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3120695 — Matrix: Solid — Date Prep: 03.23.2020
MB Sample Id: 7699582-1-BLK — LCS Sample Id: 7699582-1-BKS — LCSD Sample Id: 7699582-1-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	0.0976	98	0.0896	90	70-130	9	35	mg/kg	03.23.2020 18:25	
Toluene	<0.00200	0.100	0.0978	98	0.0896	90	70-130	9	35	mg/kg	03.23.2020 18:25	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.0912	91	70-130	9	35	mg/kg	03.23.2020 18:25	
m,p-Xylenes	<0.00400	0.200	0.198	99	0.181	91	70-130	9	35	mg/kg	03.23.2020 18:25	
o-Xylene	<0.00200	0.100	0.100	100	0.0921	92	70-130	8	35	mg/kg	03.23.2020 18:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		111		108		70-130	%	03.23.2020 18:25
4-Bromofluorobenzene	102		107		105		70-130	%	03.23.2020 18:25

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 656204

Larson and Associates, Inc.

Skeen 2H Pumping Unit

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3120949 Matrix: Solid Date Prep: 03.25.2020
MB Sample Id: 7699754-1-BLK LCS Sample Id: 7699754-1-BKS LCSD Sample Id: 7699754-1-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	0.101	101	0.0942	94	70-130	7	35	mg/kg	03.25.2020 18:13	
Toluene	<0.00200	0.100	0.0989	99	0.0924	92	70-130	7	35	mg/kg	03.25.2020 18:13	
Ethylbenzene	<0.00200	0.100	0.0985	99	0.0920	92	70-130	7	35	mg/kg	03.25.2020 18:13	
m,p-Xylenes	<0.00400	0.200	0.195	98	0.182	91	70-130	7	35	mg/kg	03.25.2020 18:13	
o-Xylene	<0.00200	0.100	0.0977	98	0.0916	92	70-130	6	35	mg/kg	03.25.2020 18:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		111		108		70-130	%	03.25.2020 18:13
4-Bromofluorobenzene	93		98		95		70-130	%	03.25.2020 18:13

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3120695 Matrix: Soil Date Prep: 03.23.2020
Parent Sample Id: 656199-003 MS Sample Id: 656199-003 S MSD Sample Id: 656199-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0868	87	0.0880	87	70-130	1	35	mg/kg	03.23.2020 19:06	
Toluene	<0.00200	0.100	0.0859	86	0.0874	87	70-130	2	35	mg/kg	03.23.2020 19:06	
Ethylbenzene	<0.00200	0.100	0.0854	85	0.0884	88	70-130	3	35	mg/kg	03.23.2020 19:06	
m,p-Xylenes	<0.00401	0.200	0.169	85	0.175	87	70-130	3	35	mg/kg	03.23.2020 19:06	
o-Xylene	<0.00200	0.100	0.0861	86	0.0892	88	70-130	4	35	mg/kg	03.23.2020 19:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		109		70-130	%	03.23.2020 19:06
4-Bromofluorobenzene	106		107		70-130	%	03.23.2020 19:06

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B
Seq Number: 3120949 Matrix: Soil Date Prep: 03.25.2020
Parent Sample Id: 656204-012 MS Sample Id: 656204-012 S MSD Sample Id: 656204-012 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	0.0911	91	0.0873	88	70-130	4	35	mg/kg	03.25.2020 18:54	
Toluene	<0.00200	0.100	0.0889	89	0.0849	85	70-130	5	35	mg/kg	03.25.2020 18:54	
Ethylbenzene	<0.00200	0.100	0.0868	87	0.0827	83	70-130	5	35	mg/kg	03.25.2020 18:54	
m,p-Xylenes	<0.00401	0.200	0.172	86	0.164	82	70-130	5	35	mg/kg	03.25.2020 18:54	
o-Xylene	<0.00200	0.100	0.0854	85	0.0818	82	70-130	4	35	mg/kg	03.25.2020 18:54	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	109		108		70-130	%	03.25.2020 18:54
4-Bromofluorobenzene	97		96		70-130	%	03.25.2020 18:54

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

№ 1124

E520204

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 3/19/2020 PAGE 1 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Skeen 2H pumping unit

LAI PROJECT #: 20-0107-03 COLLECTOR: DS/EC

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: 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 NOTES
S-1 (2')		3/17/20	1255	S	1				X						X	X	X																								X			
S-1 (3')			1256																																									
S-1 (5')			1305																																									
S-1 (10')			1306																																									
S-7 (2')			1318																																									
S-7 (3')			1319																																									
S-7 (5')			1324																																									
S-7 (7.5')			1325																																									
S-9 (0.5')			1323								X				X	X	X																											
S-9 (1')			1328																																									
S-10 (0.5')			1312																																									
S-10 (1')			1316																																									
S-4 (2')			1344																																									
S-4 (3')			1345																																									
S-4 (5')			1401																																									
TOTAL					15																																							

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 3-19-20 19:49 RECEIVED BY:(Signature) FedEx

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: 0.6/0.3 THERM#: 09
CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED
☐ CARRIER BILL #
☐ HAND DELIVERED

05/16/24

№ 1125

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 3/19/2020 PAGE 2 OF 2

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Skeen 2H pumping unit

LAI PROJECT #: 20-0107-03 COLLECTOR: DS/EC

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: BTEX ☐ MTBE ☐ / TRPH 418.1 ☐ / TPH 1005 ☐ / TPH 1006 ☐ / GASOLINE MOD 8015 ☒ / DIESEL - MOD 8015 ☒ / OIL - MOD 8015 ☒ / VOC 8260 ☐ / SVOC 8270 ☐ / PAH 8270 ☐ / HOLDPAH ☐ / 8081 PESTICIDES ☐ / 8151 HERBICIDES ☐ / 8082 PCBS ☐ / TBLP - METALS (RCRA) ☐ / TCLP - PEST ☐ / HERB ☐ / TCLP VOC ☐ / TOTAL METALS (RCRA) ☐ / Semi-VOC ☐ / LEAD - TOTAL ☐ / D.W. 200.8 ☐ / OTHER LIST ☐ / RCI ☐ / TOX ☐ / TCLP ☐ / TDS ☐ / TSS ☐ / FLASHPOINT ☐ / pH ☐ / % MOISTURE ☐ / HEXAVALENT CHROMIUM ☐ / CYANIDE ☐ / EXPLOSIVES ☐ / PECHLORATE ☐ / CHLORIDE ☒ / ANIONS ☐ / ALKALINITY ☐	FIELD NOTES
S-4 (7.5')		3/17/20	1402	S	1				X		X X X	
S-6 (2')			1414									X
S-6 (3')			1415									
S-6 (5')			1417									
S-6 (8')			1418									
S-2 (2')		3/18/20	1002								X X X	
S-2 (3')			1003									
S-2 (5')			1006									
S-2 (8')			1007									
S-3 (2')			1015									
S-3 (5')			1016									
S-3 (8')			1020									
S-3 (10')			1021									

TOTAL 13

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 3-19-20 / 9:49 RECEIVED BY: (Signature)

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

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

LABORATORY: Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP: 0.6/0.3 THERM#: 129
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: 03.19.2020 09.49.00 AM

Work Order #: 656204

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: 03.19.2020

Brianna Teel

Checklist reviewed by: Holly Taylor Date: 03.24.2020

Holly Taylor

Certificate of Analysis Summary 661563

Larson and Associates, Inc., Midland, TX

Project Name: Skeen 2H,Chevron

Project Id: 20-0107-03
Contact: Mark Larson
Project Location:

Date Received in Lab: Thu 05.14.2020 10:44
Report Date: 05.19.2020 14:02
Project Manager: Holly Taylor

Analysis Requested									
	Lab Id:	661563-001		661563-002					
	Field Id:	SP-11 (0-0.5')		SP-11 (0.5-1')					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	05.13.2020 11:40		05.13.2020 11:43					
BTEX by EPA 8021B	***Extracted:***	05.18.2020 17:00		05.18.2020 17:00					
	Analyzed:	05.18.2020 21:14		05.18.2020 21:34					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00202	0.00202	<0.00200	0.00200				
Toluene		<0.00202	0.00202	<0.00200	0.00200				
Ethylbenzene		<0.00202	0.00202	<0.00200	0.00200				
m,p-Xylenes		<0.00403	0.00403	<0.00399	0.00399				
o-Xylene		<0.00202	0.00202	<0.00200	0.00200				
Total Xylenes		<0.00202	0.00202	<0.00200	0.00200				
Total BTEX		<0.00202	0.00202	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	05.14.2020 15:05		05.14.2020 15:05					
	Analyzed:	05.15.2020 02:19		05.15.2020 02:25					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		102	50.0	104	50.2				
TPH by SW8015 Mod	***Extracted:***	05.14.2020 17:00		05.14.2020 17:00					
	Analyzed:	05.15.2020 09:31		05.15.2020 10:28					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0				
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0				
Total TPH		<50.0	50.0	<50.0	50.0				

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

Holly Taylor
Project Manager

Analytical Report 661563

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Skeen 2H,Chevron

20-0107-03

05.19.2020

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 (T104704221-19-16)
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)

05.19.2020

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

Reference: XENCO Report No(s): **661563**
Skeen 2H,Chevron
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) 661563. 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. 661563 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 661563

Larson and Associates, Inc., Midland, TX

Skeen 2H,Chevron

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-11 (0-0.5')	S	05.13.2020 11:40		661563-001
SP-11 (0.5-1')	S	05.13.2020 11:43		661563-002

CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Skeen 2H,Chevron

Project ID:	*20-0107-03*	Report Date:	*05.19.2020*
Work Order Number(s):	*661563*	Date Received:	*05.14.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analytical Results 661563

Larson and Associates, Inc., Midland, TX

Skeen 2H,Chevron

Sample Id:	**SP-11 (0-0.5')**	Matrix:	Soil	Date Received:	05.14.2020 10:44
Lab Sample Id:	661563-001	Date Collected:	05.13.2020 11:40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.2020 15:05	Basis:	Wet Weight
Seq Number:	3126007				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**102**	50.0	mg/kg	05.15.2020 02:19		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.2020 17:00	Basis:	Wet Weight
Seq Number:	3126160				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.15.2020 09:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.15.2020 09:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.15.2020 09:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.15.2020 09:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	05.15.2020 09:31	
o-Terphenyl	84-15-1	105	%	70-130	05.15.2020 09:31	

Certificate of Analytical Results 661563

Larson and Associates, Inc., Midland, TX

Skeen 2H,Chevron

Sample Id:	**SP-11 (0-0.5')**	Matrix:	Soil	Date Received:	05.14.2020 10:44
Lab Sample Id:	661563-001	Date Collected:	05.13.2020 11:40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.18.2020 17:00	Basis:	Wet Weight
Seq Number:	3126326				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	05.18.2020 21:14	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1
Total BTEX		<0.00202	0.00202	mg/kg	05.18.2020 21:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	05.18.2020 21:14	
1,4-Difluorobenzene	540-36-3	115	%	70-130	05.18.2020 21:14	

Certificate of Analytical Results 661563

Larson and Associates, Inc., Midland, TX

Skeen 2H,Chevron

Sample Id:	**SP-11 (0.5-1')**	Matrix:	Soil	Date Received:	05.14.2020 10:44
Lab Sample Id:	661563-002	Date Collected:	05.13.2020 11:43		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	05.14.2020 15:05	Basis:	Wet Weight
Seq Number:	3126007				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**104**	50.2	mg/kg	05.15.2020 02:25		10

Analytical Method:	TPH by SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	05.14.2020 17:00	Basis:	Wet Weight
Seq Number:	3126160				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	05.15.2020 10:28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	05.15.2020 10:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	05.15.2020 10:28	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	05.15.2020 10:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	05.15.2020 10:28	
o-Terphenyl	84-15-1	102	%	70-130	05.15.2020 10:28	

Certificate of Analytical Results 661563

Larson and Associates, Inc., Midland, TX

Skeen 2H,Chevron

Sample Id:	**SP-11 (0.5-1')**	Matrix:	Soil	Date Received:	05.14.2020 10:44
Lab Sample Id:	661563-002	Date Collected:	05.13.2020 11:43		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	05.18.2020 17:00	Basis:	Wet Weight
Seq Number:	3126326				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	05.18.2020 21:34	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1
Total BTEX		<0.00200	0.00200	mg/kg	05.18.2020 21:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	110	%	70-130	05.18.2020 21:34	
1,4-Difluorobenzene	540-36-3	114	%	70-130	05.18.2020 21:34	

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 661563

Larson and Associates, Inc.

Skeen 2H,Chevron

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126007 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703342-1-BLK — LCS Sample Id: 7703342-1-BKS — LCSD Sample Id: 7703342-1-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	236	94	90-110	3	20	mg/kg	05.14.2020 23:35	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126007 — Matrix: Soil — Date Prep: 05.14.2020
Parent Sample Id: 661555-004 — MS Sample Id: 661555-004 S — MSD Sample Id: 661555-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	58.4	252	298	95	292	93	90-110	2	20	mg/kg	05.14.2020 23:52	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3126007 — Matrix: Soil — Date Prep: 05.14.2020
Parent Sample Id: 661555-011 — MS Sample Id: 661555-011 S — MSD Sample Id: 661555-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	174	249	425	101	426	101	90-110	0	20	mg/kg	05.15.2020 01:16	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3126160 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703367-1-BLK — LCS Sample Id: 7703367-1-BKS — LCSD Sample Id: 7703367-1-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	934	93	928	93	70-130	1	20	mg/kg	05.15.2020 08:53	
Diesel Range Organics (DRO)	<50.0	1000	897	90	897	90	70-130	0	20	mg/kg	05.15.2020 08:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		117		117		70-130	%	05.15.2020 08:53
o-Terphenyl	107		111		112		70-130	%	05.15.2020 08:53

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3126160 — Matrix: Solid — Date Prep: 05.14.2020
MB Sample Id: 7703367-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	05.15.2020 08:34	

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 661563

Larson and Associates, Inc.

Skeen 2H,Chevron

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3126160 Matrix: Soil Date Prep: 05.14.2020
Parent Sample Id: 661563-001 MS Sample Id: 661563-001 S MSD Sample Id: 661563-001 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)	<49.8	996	923	93	933	94	70-130	1	20	mg/kg	05.15.2020 09:50	
Diesel Range Organics (DRO)	<49.8	996	903	91	913	92	70-130	1	20	mg/kg	05.15.2020 09:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	115		119		70-130	%	05.15.2020 09:50
o-Terphenyl	108		108		70-130	%	05.15.2020 09:50

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126326 Matrix: Solid Date Prep: 05.18.2020
MB Sample Id: 7703598-1-BLK LCS Sample Id: 7703598-1-BKS LCSD Sample Id: 7703598-1-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	0.102	102	0.0982	98	70-130	4	35	mg/kg	05.18.2020 17:15	
Toluene	<0.00200	0.100	0.110	110	0.104	104	70-130	6	35	mg/kg	05.18.2020 17:15	
Ethylbenzene	<0.00200	0.100	0.105	105	0.0985	99	70-130	6	35	mg/kg	05.18.2020 17:15	
m,p-Xylenes	<0.00400	0.200	0.210	105	0.197	99	70-130	6	35	mg/kg	05.18.2020 17:15	
o-Xylene	<0.00200	0.100	0.101	101	0.0943	94	70-130	7	35	mg/kg	05.18.2020 17:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		104		104		70-130	%	05.18.2020 17:15
4-Bromofluorobenzene	90		101		100		70-130	%	05.18.2020 17:15

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3126326 Matrix: Soil Date Prep: 05.18.2020
Parent Sample Id: 661896-001 MS Sample Id: 661896-001 S MSD Sample Id: 661896-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0910	91	0.100	100	70-130	9	35	mg/kg	05.18.2020 18:08	
Toluene	<0.00199	0.0996	0.0856	86	0.0978	98	70-130	13	35	mg/kg	05.18.2020 18:08	
Ethylbenzene	<0.00199	0.0996	0.0700	70	0.0860	86	70-130	21	35	mg/kg	05.18.2020 18:08	
m,p-Xylenes	<0.00398	0.199	0.141	71	0.173	87	70-130	20	35	mg/kg	05.18.2020 18:08	
o-Xylene	<0.00199	0.0996	0.0668	67	0.0828	83	70-130	21	35	mg/kg	05.18.2020 18:08	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		108		70-130	%	05.18.2020 18:08
4-Bromofluorobenzene	99		94		70-130	%	05.18.2020 18:08

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

№1152

Lab 1563

CHAIN-OF-CUSTODY

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

DATE: 5/14/20 PAGE 1 OF 1

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: Skeenah, Chevron

LAI PROJECT #: 20-0107-03 COLLECTOR: RO

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	UNPRESERVED	ANALYSES: BTEX ☒ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☒	DIESEL - MOD 8015 ☒	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐ M300	FIELD NOTES
SP-11 (0-0.5')		5/13/20	11:40	S	1				X		X		X	X	X													X	
SP-11 (0.5-1')		5/13/20	11:43	S	1				X		X		X	X	X													X	

TOTAL 2

RELINQUISHED BY:(Signature) Rachel Owen DATE/TIME 5-14-20/ RECEIVED BY: (Signature) Ramona Patton

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

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

LABORATORY: Xenco

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

LABORATORY USE ONLY:
RECEIVING TEMP: 3.4/3.3 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: 05.14.2020 10.44.00 AM

Work Order #: 661563

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)?	3.3	
#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**	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: 05.14.2020

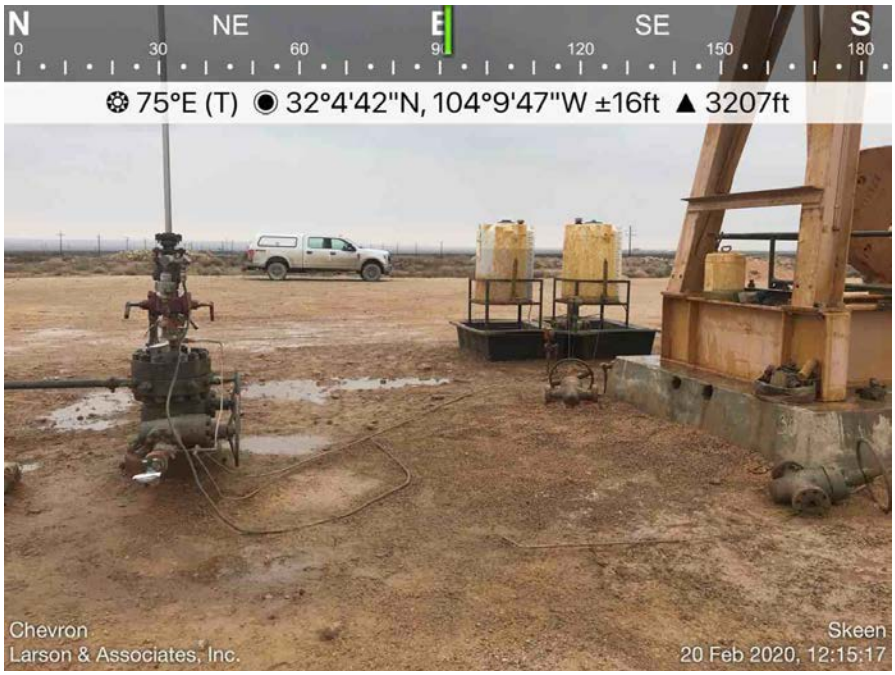
Brianna Teel

Checklist reviewed by: Holly Taylor Date: 05.18.2020

Holly Taylor

Appendix C

Photographs



Spill area viewing east

Spill area viewing west

Spill area viewing west/southwest