

Incident ID	nRM2006453458
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?	>110 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

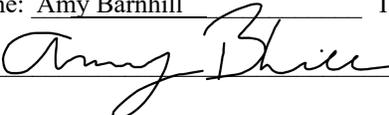
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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.

State of New Mexico
Oil Conservation Division

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 3-12-21

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

OCD Only

Received by: _____ Date: _____

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Remediation Plan

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

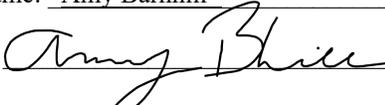
- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation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

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

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

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist

Signature:  Date: 3-12-21

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

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

Incident ID	nRM2006453458
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Closure

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

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

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

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

Printed Name: Amy Barnhill Title: Lead Environmental Specialist
 Signature:  Date: 3-12-21
 email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Chad Hensley Date: 04/30/2021

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

Closure Approved by:  Date: 04/30/2021
 Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Tracking Number: nRM2006453458
Closure Report
Talco 25 25 35 Federal #001H
Produced Water Release
Lea County, New Mexico

Latitude: 32.107986
Longitude: -103.327119

LAI Project No. 20-0107-07

March 3, 2021

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

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



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



Robert Nelson
Sr. Geologist

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Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

1.0 INTRODUCTION

Larson & Associates, Inc. (LAI), has prepared this closure report on behalf of Chevron USA Inc. (Chevron) for submittal to the New Mexico Oil Conservation Division (OCD) District 1 for a produced water release at the Talco 25 25 35 Federal #001H (Site) located in Unit M (NW/4, SW/4), Section 25, Township 25 South, Range 35 East in Lea County New Mexico. The geodetic position is 32.107986, -103.327119. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The release was discovered on February 19, 2020, at 1:20PM MST. The spill occurred due to corrosion in the load line inside the lined containment. Chevron reported that 138 barrels (bbls) of produced water were released and 138 bbls were recovered. A small amount of liquid pooled outside near the west and east sides of the containment. Inspection of the liner did not reveal any defects. The affected area measures approximately 3,964 square feet. The initial C-141 was submitted to OCD District 1 on February 28, 2020 and received incident number nRM2006453458. Appendix A presents the Chevron spill calculation.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,100 feet above mean sea level (msl).
- The surface topography gradually decreases to the southeast.
- There are no surface water features within 1,000 feet of the Site.
- Karst Data provided by the USGS describes the site as "Low Risk" potential.
- The soils are designated as Simona-Upton association, 0 to 3 percent slopes, consisting of 8 inches of gravelly fine sandy loam, underlain by 8 inches of a fine sandy loam, and 8 inches of cemented material (caliche) in descending order.
- The geology is Quaternary age sand and silt, and locally includes cover sand.
- Groundwater occurs at greater than 110 feet below ground surface (bgs) based on depth to groundwater measurements taken 72 hours after installing an exploratory boring (BH-1) on April 28, 2020.

Appendix B presents the karst risk potential map. Appendix C presents the boring log.

1.3 Remediation Action Levels

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

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

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Chevron USA, Inc., Talco 25 25 35 Federal #001H

Produced Water Release

March 3, 2020

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 March 9 and 23, 2020, LAI personnel used a stainless-steel hand auger to collect soil samples from eight (8) locations outside the lined containment (SP-1 through SP-8) to delineate the release vertically and horizontally. The samples were collected at approximately 1-foot bgs. The soil samples were delivered under chain of custody and preservation to Xenco Laboratories (Xenco) in Midland, Texas, which 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 chloride were below the remediation action levels of 10 milligrams per kilogram (mg/Kg) and 600 mg/Kg in all samples. BTEX and TPH exceeded the OCD remediation limits of 50 mg/Kg and 2,500 mg/Kg, respectively, in the following samples.

Sample ID, Depth (feet)	BTEX (mg/Kg)	TPH (mg/Kg)
<i>SP-3, 0 to 0.5'</i>	1,080	3,000
<i>SP-3, 0.5 to 1'</i>	112	1,040
<i>SP-6, 0 to 0.5'</i>	--	4,850
<i>SP-6, 0.5 to 1'</i>	--	3,770

On March 25, 2020, LAI personnel used a Geoprobe® Model 7822DT direct push rig to further delineate the release at sample points SP-3 and SP-6. Soil samples were collected at 2, 3, 4, 5, 6, and 10 feet bgs depending on subsurface conditions. The samples were delivered under chain of custody and preservation to PBEL and were analyzed for BTEX, TPH, and chloride by EPA SW-846 Methods 8021B and 8015M, and M300, respectively.

According to the release rule (19.15.29.11(5)(C) NMAC) vertical delineation for chloride to 600 mg/Kg is not required where groundwater exceeds 100 feet in depth. Chloride was delineated below the remediation limit (20,000 mg/Kg) at all sample locations, therefore, the release was delineated vertically for chloride according to 19.15.29.11(5)(C) NMAC. Table 1 presents the delineation soil sample analytical data summary. Appendix D presents the laboratory reports.

3.0 REMEDIATION

On January 20, 2021, Rocky Peak Construction, Inc. (Rocky Peak), under supervision from LAI, used hand tools to excavate soil encompassing sample location SP-3 (East Excavation) and a backhoe to excavate soil encompassing sample location SP-6 (West Excavation) measuring approximately a combined 380 square

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feet to a depth of two (2) feet bgs. Approximately forty (40) cubic yards of impacted material was removed and placed on a liner outside the excavation.

On January 25, 2021, LAI personnel collected four (4) bottom (C-1, C-2, C-5, and C-6) and four (4) sidewall (C-3, C-4, C-7, and C-8) confirmation soil samples from within the excavation. Laboratory analysis indicated three (3) bottom (C-2, C-5, and C-6) were above the OCD closure criteria for TPH (100 mg/Kg) at 5,750 mg/Kg, 245 mg/Kg, and 1,310 mg/Kg, respectively. One sidewall (C-4) was above the OCD closure criteria for chloride (600 mg/Kg) at 628 mg/Kg. Table 2 presents the confirmation soil sample analytical data summary. Figure 3 presents an aerial map showing the excavation boundaries and confirmation sample locations. Appendix D presents the laboratory reports.

On February 4, 2021, Rocky Peak excavated an additional 2.1 feet from the bottom encompassing sample location C-5 and C-6, one (1) foot from the bottom of C-2, and one (1) foot from the sidewall of C-4. Approximately thirty-two (32) cubic yards of impacted material was removed and placed on a liner. Subsequent laboratory analysis reported TPH and/or chloride concentrations below OCD closure criteria. All impacted material and plastic liner were disposed at the Sundance Disposal facility located east of Eunice, New Mexico. Appendix E presents the waste manifests.

LAI personnel collected one (1) composite sample of clean caliche and sand from a nearby borrow pit. TPH was below the analytical method reporting limit. Benzene, BTEX, and chloride were below the OCD limits of 10 mg/Kg, 50 mg/Kg, and 600 mg/Kg, respectively. On February 25 and 26, 2021, the east excavation was backfilled with approximately 2.5 feet of clean sand and to ground surface with clean caliche. The west excavation was backfilled to ground surface with clean caliche. Appendix F presents the photographic documentation.

4.0 CLOSURE REQUEST

Chevron USA requests no further action for nRM2003453458.

Tables

Table 1
Soil Sample Analytical Data Summary
Chevron USA, Talco 25 25 35 Federal #001H
Lea County, New Mexico
North 32 6 28.78, West 103 19 37.36

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50	100 / 2,500				600 / 20,000
SP-1	0 - 0.5	3/9/2020	In-Situ	<0.00200	0.00804	<50.0	<50.0	<50.0	<50.0	<5.05
	0.5 - 1	3/9/2020	In-Situ	<0.00199	0.12900	<50.0	<50.0	<50.0	<50.0	<4.99
SP-2	0 - 0.5	3/9/2020	In-Situ	<0.00199	0.13700	<49.9	<49.9	<49.9	<49.9	125
	0.5 - 1	3/9/2020	In-Situ	<0.00198	0.19400	<50.0	<50.0	<50.0	<50.0	119
SP-3	0 - 0.5	3/9/2020	In-Situ	<0.200	1,080	3,000	<50.0	<50.0	3,000	20.6
	0.5 - 1	3/9/2020	In-Situ	<0.200	112	1,040	<49.9	<49.9	1,040	292
	2	3/26/2020	In-Situ	<0.00199	0.0690	<50.0	<50.0	<50.0	<50.0	<4.99
	3	3/26/2020	In-Situ	<0.00199	0.0608	<50.0	<50.0	<50.0	<50.0	11.2
	4	3/26/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	8.77
	5	3/26/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	<4.96
	6	3/26/2020	In-Situ	--	--	<49.8	<49.8	<49.8	<49.8	<4.95
SP-4	0 - 0.5	3/9/2020	In-Situ	<0.00200	0.03210	<49.8	<49.8	<49.8	<49.8	72.8
	0.5 - 1	3/9/2020	In-Situ	<0.00198	0.00774	<50.0	<50.0	<50.0	<50.0	56.0
SP-5	0 - 0.5	3/9/2020	In-Situ	<0.00199	0.16600	<50.0	<50.0	<50.0	<50.0	14.1
	0.5 - 1	3/9/2020	In-Situ	<0.00200	0.21000	<49.9	<49.9	<49.9	<49.9	83.6
SP-6	0 - 0.5	3/9/2020	In-Situ	<0.00199	0.14300	120	4,080	646	4,850	149
	0.5 - 1	3/9/2020	In-Situ	<0.00198	<0.00198	252	3,000	522	3,770	22.7
	2	3/25/2020	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	139
	3	3/25/2020	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	21.3
	4	3/25/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	20.8

Table 1
Soil Sample Analytical Data Summary
Chevron USA, Talco 25 25 35 Federal #001H
Lea County, New Mexico
North 32 6 28.78, West 103 19 37.36

Sample	Depth (Feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
Remediation Level:				10	50	100 / 2,500				600 / 20,000
	5	3/25/2020	In-Situ	--	--	<50.0	<50.0	<50.0	<50.0	26.1
	10	3/25/2020	In-Situ	--	--	<49.9	<49.9	<49.9	<49.9	137
SP-7	0 - 0.5	3/19/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	56.4
	0.5 - 1	3/19/2020	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	17.6
SP-8	0 - 0.5	3/19/2020	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<4.96
	0.5 - 1	3/19/2020	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	7.62

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

Depth in feet below ground surface (bgs)

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

<: denotes concentration less than analytical method reporting limit

Bold and Highlighted exceeds OCD remediation action limits

Table 2
Confirmation Soil Sample Analytical Data Summary
Chevron USA, Talco 25 25 35 Federal #001H
Lea County, New Mexico
North 32.107986 West -104.327119

Sample ID	Location	Depth (feet)	Collection Date	Status	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)		
RAL:					10	50						100 / 2,500	600 / 20,000
C-1	Bottom	2	1/25/2021	In-Situ	<0.00199	0.00957	<50.0	<50.0	<50.0	<50.0	398		
C-2	Bottom	2	1/25/2021	Excavated	<0.00200	0.0259	5,750	<49.8	<49.8	5,750	37.5		
		3	2/4/2021	In-Situ	<0.00199	1.00	<49.9	<49.9	<49.9	<49.9	107		
C-3	Sidewall	0 - 2	1/25/2021	In-Situ	<0.00201	0.239	<50.0	<50.0	<50.0	<50.0	88.2		
C-4	Sidewall	0 - 2	1/25/2021	Excavated	<0.00198	0.0852	<50.0	<50.0	<50.0	<50.0	628		
			2/4/2021	In-Situ	<0.00200	0.0824	<49.9	<49.9	<49.9	<49.9	50.1		
C-5	Bottom	2	1/25/2021	Excavated	<0.00200	0.0323	<49.9	245	<49.9	245	82.0		
		4.1	2/4/2021	In-Situ	<0.00201	0.00260	<49.8	<49.8	<49.8	<49.8	34.3		
C-6	Bottom	2	1/25/2021	Excavated	0.00224	0.0604	50.3	1,150	106	1,310	51.8		
		4.1	2/4/2021	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	33.6		
C-7	Sidewall	0 - 2	1/25/2021	In-Situ	0.00308	0.0558	<49.9	<49.9	<49.9	<49.9	44.0		
C-8	Sidewall	0 - 2	1/25/2021	In-Situ	0.00427	0.0414	<49.8	<49.8	<49.8	<49.8	45.4		
Backfill Caliche 1	--	--	1/25/2021	In-Situ	0.00526	0.193	<50.0	<50.0	<50.0	<50.0	8.04		

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

Depth in feet below ground surface (bgs)

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

Bold and Highlighted Denotes Conetrations Above OCD Closure Criteria

Figures

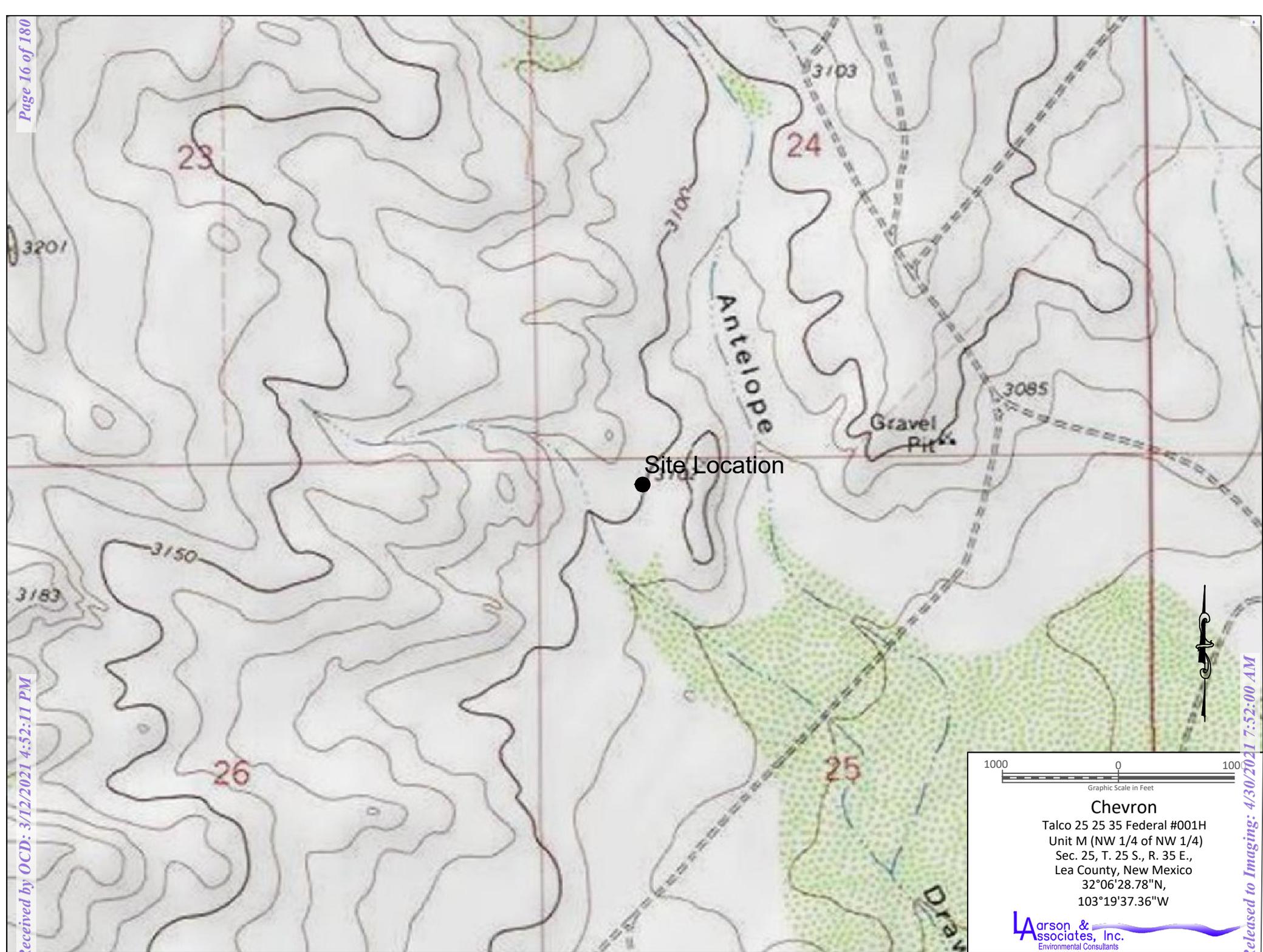
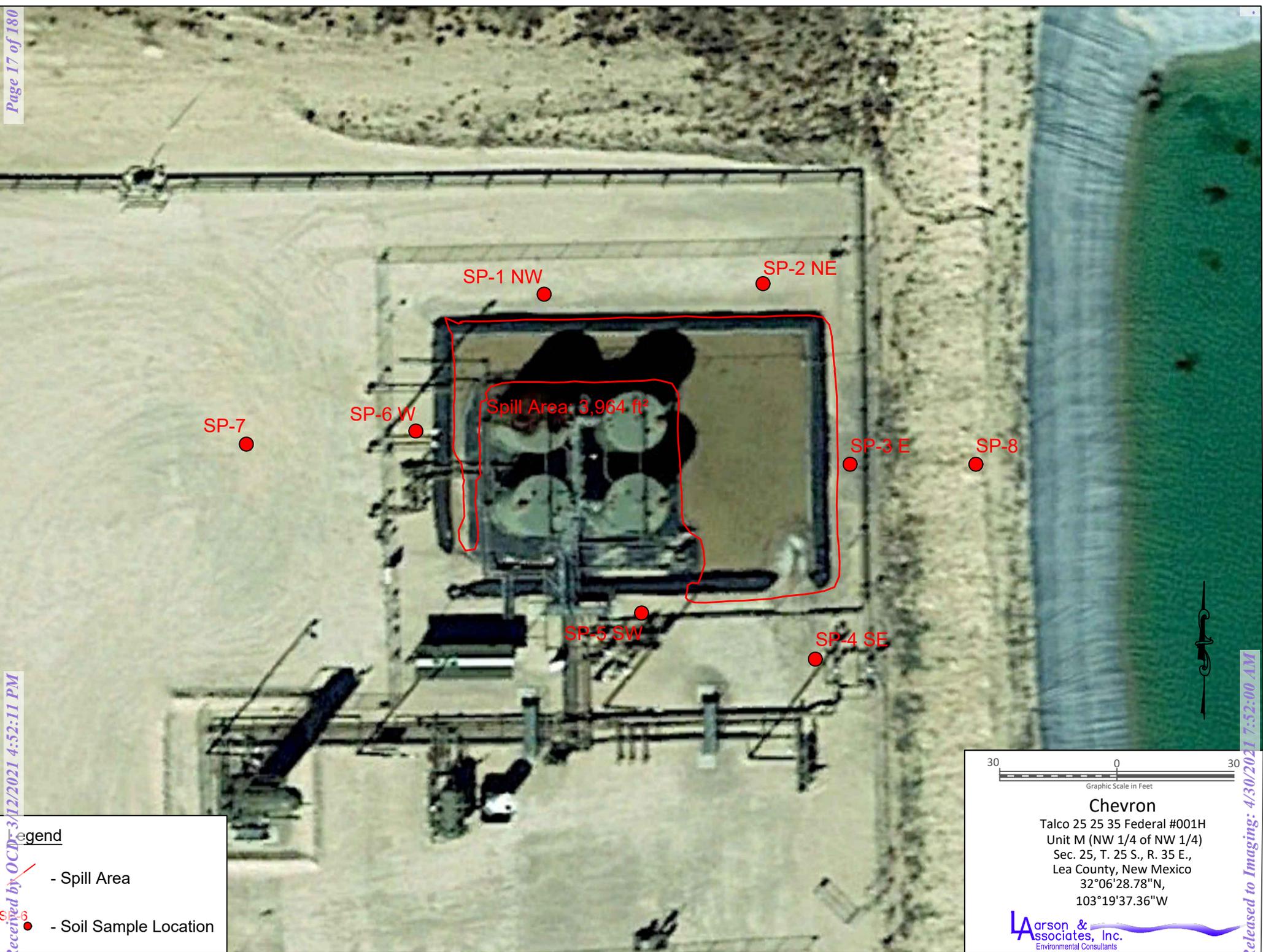


Figure 1 - Topographic Map



Legend

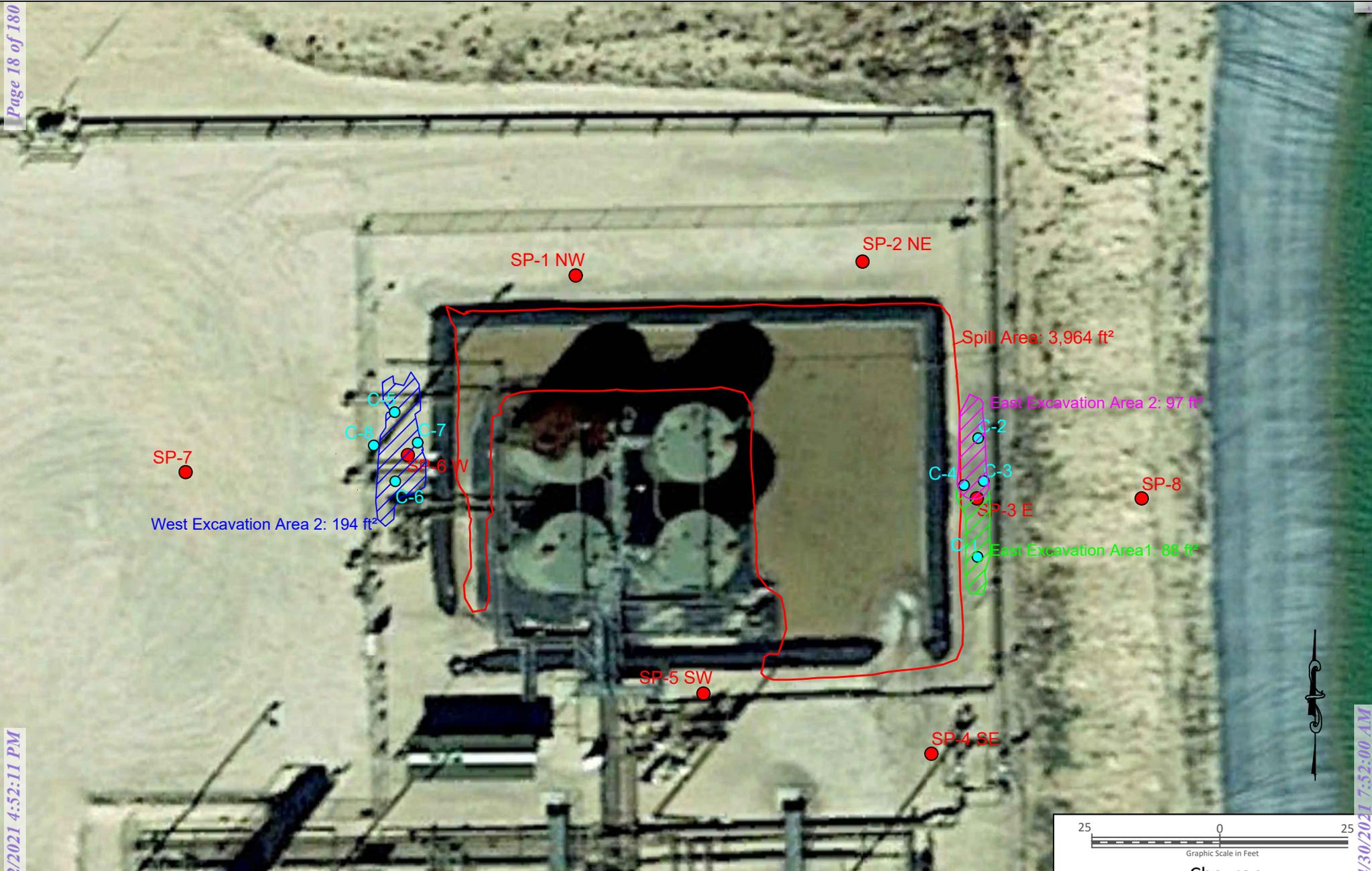
- Spill Area
- - Soil Sample Location

30 0 30
Graphic Scale in Feet

Chevron
 Talco 25 25 35 Federal #001H
 Unit M (NW 1/4 of NW 1/4)
 Sec. 25, T. 25 S., R. 35 E.,
 Lea County, New Mexico
 32°06'28.78"N,
 103°19'37.36"W

Larson &
 Associates, Inc.
 Environmental Consultants

Figure 2 - Aerial Map



Legend

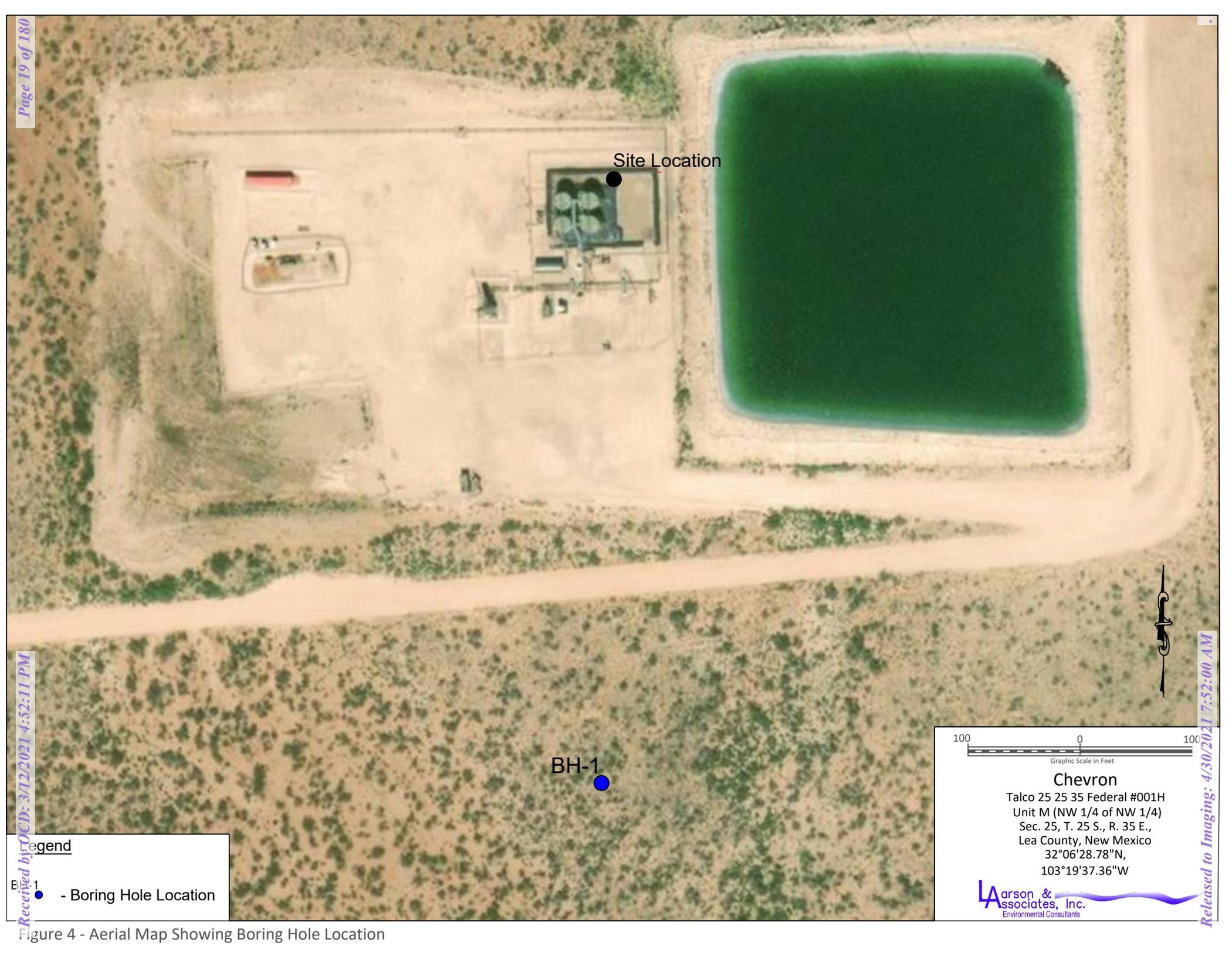
- Spill Area
- Soil Sample Location
- Confirmation Sample Location
- Excavation Location: 2 feet
- Excavation Location: 3 feet
- Excavation Location: 4.1 feet

25 0 25
Graphic Scale in Feet

Chevron
 Talco 25 25 35 Federal #001H
 Unit M (NW 1/4 of NW 1/4)
 Sec. 25, T. 25 S., R. 35 E.,
 Lea County, New Mexico
 32°06'28.78"N,
 103°19'37.36"W

Larson & Associates, Inc.
 Environmental Consultants

Figure 3 - Aerial Map Showing Excavation Locations and Confirmation Sample Locations



Site Location

BH-1

Legend

- - Boring Hole Location

100 0 100
Graphic Scale in Feet

Chevron
 Talco 25 25 35 Federal #001H
 Unit M (NW 1/4 of NW 1/4)
 Sec. 25, T. 25 S., R. 35 E.,
 Lea County, New Mexico
 32°06'28.78"N,
 103°19'37.36"W

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 Associates, Inc.
 Environmental Consultants

Figure 4 - Aerial Map Showing Boring Hole Location

Appendix A
Chevron Spill Calculation

Incident ID	
District RP	
Facility ID	
Application ID	

Incident Date		2/19/2020			
Incident Time		1:20 PM			
Location		TALCO 25 25 35 FED 1 H- API 30-0-25-42548			
Tk Battery/Oil-Gas-Water Well?					
Area	Standing Liquid	In Soil	size	Oil Volume	Water Volume
1	X		82X10X2"		24.35
2	X		40X32X6"		114
3					
4					
5					
Soil Type- Caliche/gravel/sand/clay/other?		PLASTIC LINER			
Total Fluid				0.00	138.3
1					
Fluid Recovered		Oil Volume	Water Volume		
			138		

Appendix B
Karst Risk Potential



Browser

- ★ Favorites
- ▶ Spatial Bookmarks
- ▶ Project Home
- ▶ Home
- ▶ C:\
- ▶ D:\
- ▶ L:\
- ▶ Z:\
- ▶ GeoPackage
- ▶ SpatiaLite
- ▶ PostGIS
- ▶ MSSQL
- ▶ Oracle
- ▶ DB2
- ▶ WMS/WMTS
- ▶ XYZ Tiles
- ▶ WCS
- ▶ WFS / OGC API - Features
- ▶ OWS
- ▶ ArcGisMapServer
- ▶ ArcGisFeatureServer
- ▶ GeoNode

Layers

- ✓ **Added geom info**
- ✓ **Karst_or_No_Karst**
 - ✓ High
 - ✓ Low
 - ✓ Medium
- ✓ **Bing Satellite**



Appendix C

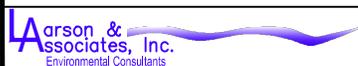
Boring Log

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: 11:15 Finish: 12:15 DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING										SAMPLE			REMARKS							
					PPM X _____										NUMBER	PID READING	RECOVERY	DEPTH	BACKGROUND PID READING SOIL : _____ PPM SOIL : _____ PPM						
					2	4	6	8	10	12	14	16	18												
	0	Sand, Quartz Fine Sand, Rounded, 1/8-1/4mm with Very Coarse Angular Clast (~1cm), 7.5YR 7/6, Reddish Yellow, Moderately Sorted	SW																	1					
	5																						5		
	10																							10	
	15																							15	
	20																							20	
	25																				25				
	30	Sand, Quartz Fine Sand, 1/6-1/8mm, Rounded, Well Sorted, 10YR 8/4, Very Pale Brown	SW																		30				
	35																						35		
	40																						40		
	45																						45		
	50																						50		
	55	Silty Sand, Round, Fine Grained with Angular Clast, 0.5-1cm Diameter, 7.5YR 7/4, Pink, Moderately Sorted	SM																		55				
	60																						60		
	65	Sand, Very Fine Grained Quartz Sand, 1/16-1/8mm, Well Sorted, Well Rounded, 7.5YR 8/3	SW																		65				
	70																						70		
	75			SM																		75			

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

JOB NUMBER : Chevron/ 20-0107-07
HOLE DIAMETER : 2"
LOCATION : Talco 25 25 35 Federal #001H
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : SDI
DRILLING METHOD : Air Rotary



DRILL DATE : 4-28-2020

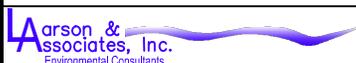
BORING NUMBER : BH-1

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: 11:15 Finish: 12:15 DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING								SAMPLE			REMARKS		
					PPM X <u>1</u>								NUMBER	PID READING	RECOVERY	DEPTH	BACKGROUND PID READING SOIL: _____ PPM SOIL: _____ PPM	
					2	4	6	8	10	12	14	16						18
	80	Sand, Fine Grained Quartz Sand, Rounded, 1/8-1/4mm, Moderately Sorted, 7.5YR 8/2, Pinkish White	SW															
	85	Silty Sand, Rounded, Fine Grained with Subangular Clasts, 0.5-1cm in Diameter, Moderately Sorted, 7.5YR 7/6, Reddish Yellow	SM														85	
	90																90	
	95	Silty Sand, Rounded, Fine Grained, Well Sorted, 2.5YR 6/6, Reddish Yellow															95	
	100		SM														100	
	105	Sand, Very Fine Grained Quartz Sand, Well Rounded, Well Sorted, 7.5YR 7/6, Reddish Yellow	SW														105	
	110	TD:110' *Dry After 72 Hours*															110	

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

JOB NUMBER : Chevron/ 20-0107-07
 HOLE DIAMETER : 2"
 LOCATION : Talco 25 25 35 Federal #001H
 LAI GEOLOGIST : R. Nelson
 DRILLING CONTRACTOR : SDI
 DRILLING METHOD : Air Rotary



DRILL DATE : 4-28-2020

BORING NUMBER : BH-1

Appendix D
Laboratory Reports



Certificate of Analysis Summary 655065

Larson and Associates, Inc., Midland, TX

Project Name: Talco 25

Project Id: 20-0107-07

Contact: Mark Larson

Project Location:

Date Received in Lab: Mon 03.09.2020 15:32

Report Date: 03.17.2020 11:30

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	655065-001	655065-002	655065-003	655065-004	655065-005	655065-006
<i>Field Id:</i>	SP-1 NW 0.5'	SP-1 NW 1'	SP-2 NE 0.5'	SP-2 NE 1'	SP-3 E 0.5'	SP-3 E 1'	
<i>Depth:</i>							
<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
<i>Sampled:</i>	03.09.2020 10:36	03.09.2020 10:38	03.09.2020 10:44	03.09.2020 10:48	03.09.2020 10:50	03.09.2020 10:52	
BTEX by EPA 8021B	<i>Extracted:</i>	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15
<i>Analyzed:</i>	03.15.2020 14:31	03.15.2020 14:51	03.15.2020 15:11	03.15.2020 15:32	03.16.2020 00:36	03.16.2020 00:56	
<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.200 0.200	<0.200 0.200
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198	<0.200 0.200	<0.200 0.200
Ethylbenzene		<0.00200 0.00200	0.0220 0.00199	0.0264 0.00199	0.0351 0.00198	20.8 0.200	14.0 0.200
m,p-Xylenes		0.00488 0.00400	0.0766 0.00398	0.0799 0.00398	0.114 0.00397	779 D 3.99	74.0 0.399
o-Xylene		0.00316 0.00200	0.0308 0.00199	0.0305 0.00199	0.0448 0.00198	280 D 2.00	24.3 0.200
Total Xylenes		0.00804 0.00200	0.107 0.00199	0.110 0.00199	0.159 0.00198	1060 2.00	98.3 0.200
Total BTEX		0.00804 0.00200	0.129 0.00199	0.137 0.00199	0.194 0.00198	1080 0.200	112 0.200
Chloride by EPA 300	<i>Extracted:</i>	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50
<i>Analyzed:</i>	03.10.2020 10:23	03.10.2020 11:00	03.10.2020 11:06	03.10.2020 11:12	03.10.2020 11:20	03.10.2020 12:19	
<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.05 5.05	<4.99 4.99	125 4.96	119 5.00	20.6 4.98	292 5.04
TPH by SW8015 Mod	<i>Extracted:</i>	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30
<i>Analyzed:</i>	03.10.2020 09:38	03.10.2020 10:33	03.10.2020 10:52	03.10.2020 11:11	03.10.2020 11:30	03.10.2020 11:48	
<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	3000 50.0	1040 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	3000 50.0	1040 49.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 655065

Larson and Associates, Inc., Midland, TX

Project Name: Talco 25

Project Id: 20-0107-07

Contact: Mark Larson

Project Location:

Date Received in Lab: Mon 03.09.2020 15:32

Report Date: 03.17.2020 11:30

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	655065-007	655065-008	655065-009	655065-010	655065-011	655065-012
	<i>Field Id:</i>	SP-4 SE 0.5'	SP-4 SE 1'	SP-5 SW 0.5'	SP-5 SW 1'	SP-6 W 0.5'	SP-6 W 1'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.09.2020 10:55	03.09.2020 11:01	03.09.2020 11:08	03.09.2020 11:07	03.09.2020 11:11	03.09.2020 11:16
BTEX by EPA 8021B	<i>Extracted:</i>	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15	03.15.2020 10:15
	<i>Analyzed:</i>	03.15.2020 15:52	03.15.2020 16:12	03.15.2020 16:32	03.15.2020 16:52	03.15.2020 17:12	03.15.2020 17:32
	<i>Units/RL:</i>	mg/kg RL					
Benzene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Ethylbenzene		0.00409 0.00200	<0.00198 0.00198	0.0301 0.00199	0.0375 0.00200	0.0237 0.00199	0.0134 0.00200
m,p-Xylenes		0.0185 0.00400	0.00466 0.00397	0.0981 0.00398	0.124 0.00401	0.0875 0.00398	0.0989 0.00399
o-Xylene		0.00947 0.00200	0.00308 0.00198	0.0374 0.00199	0.0486 0.00200	0.0319 0.00199	0.0579 0.00200
Total Xylenes		0.0280 0.00200	0.00774 0.00198	0.136 0.00199	0.173 0.00200	0.119 0.00199	0.157 0.00200
Total BTEX		0.0321 0.00200	0.00774 0.00198	0.166 0.00199	0.210 0.00200	0.143 0.00199	0.170 0.00200
Chloride by EPA 300	<i>Extracted:</i>	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50	03.10.2020 09:50
	<i>Analyzed:</i>	03.10.2020 12:28	03.10.2020 12:38	03.10.2020 12:47	03.10.2020 12:56	03.10.2020 13:05	03.10.2020 13:33
	<i>Units/RL:</i>	mg/kg RL					
Chloride		72.8 5.01	56.0 4.97	14.1 4.96	83.6 5.00	149 5.00	22.7 5.02
TPH by SW8015 Mod	<i>Extracted:</i>	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30	03.10.2020 09:30
	<i>Analyzed:</i>	03.10.2020 12:07	03.10.2020 12:26	03.10.2020 12:45	03.10.2020 13:04	03.10.2020 13:23	03.10.2020 13:42
	<i>Units/RL:</i>	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	120 50.0	252 49.9
Diesel Range Organics (DRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	4080 50.0	3000 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	646 50.0	522 49.9
Total TPH		<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	4850 50.0	3770 49.9

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Holly Taylor
Project Manager



Analytical Report 655065

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Talco 25

20-0107-07

03.17.2020

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)



03.17.2020

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

Reference: XENCO Report No(s): **655065**
Talco 25
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) 655065. 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. 655065 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,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive style with a horizontal line underneath it.

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 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-1 NW 0.5'	S	03.09.2020 10:36		655065-001
SP-1 NW 1'	S	03.09.2020 10:38		655065-002
SP-2 NE 0.5'	S	03.09.2020 10:44		655065-003
SP-2 NE 1'	S	03.09.2020 10:48		655065-004
SP-3 E 0.5'	S	03.09.2020 10:50		655065-005
SP-3 E 1'	S	03.09.2020 10:52		655065-006
SP-4 SE 0.5'	S	03.09.2020 10:55		655065-007
SP-4 SE 1'	S	03.09.2020 11:01		655065-008
SP-5 SW 0.5'	S	03.09.2020 11:08		655065-009
SP-5 SW 1'	S	03.09.2020 11:07		655065-010
SP-6 W 0.5'	S	03.09.2020 11:11		655065-011
SP-6 W 1'	S	03.09.2020 11:16		655065-012



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Talco 25

Project ID: 20-0107-07
Work Order Number(s): 655065

Report Date: 03.17.2020
Date Received: 03.09.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3119699 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Samples affected are: 7698912-1-BLK.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Due to matrix, the initial run for samples 005 & 006 was performed at a dilution of 100X.



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-1 NW 0.5'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-001 Date Collected: 03.09.2020 10:36
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.05	5.05	mg/kg	03.10.2020 10:23	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.10.2020 09:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 09:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 09:38	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.10.2020 09:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	03.10.2020 09:38	
o-Terphenyl	84-15-1	90	%	70-135	03.10.2020 09:38	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-1 NW 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-001

Date Collected: 03.09.2020 10:36

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.15.2020 14:31	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.15.2020 14:31	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.15.2020 14:31	U	1
m,p-Xylenes	179601-23-1	0.00488	0.00400	mg/kg	03.15.2020 14:31		1
o-Xylene	95-47-6	0.00316	0.00200	mg/kg	03.15.2020 14:31		1
Total Xylenes	1330-20-7	0.00804	0.00200	mg/kg	03.15.2020 14:31		1
Total BTEX		0.00804	0.00200	mg/kg	03.15.2020 14:31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	74	%	70-130	03.15.2020 14:31	
1,4-Difluorobenzene	540-36-3	107	%	70-130	03.15.2020 14:31	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-1 NW 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-002 Date Collected: 03.09.2020 10:38
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	03.10.2020 11:00	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.10.2020 10:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 10:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 10:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.10.2020 10:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	03.10.2020 10:33	
o-Terphenyl	84-15-1	99	%	70-135	03.10.2020 10:33	



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Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-1 NW 1'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-002

Date Collected: 03.09.2020 10:38

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.15.2020 14:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.15.2020 14:51	U	1
Ethylbenzene	100-41-4	0.0220	0.00199	mg/kg	03.15.2020 14:51		1
m,p-Xylenes	179601-23-1	0.0766	0.00398	mg/kg	03.15.2020 14:51		1
o-Xylene	95-47-6	0.0308	0.00199	mg/kg	03.15.2020 14:51		1
Total Xylenes	1330-20-7	0.107	0.00199	mg/kg	03.15.2020 14:51		1
Total BTEX		0.129	0.00199	mg/kg	03.15.2020 14:51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	03.15.2020 14:51	
4-Bromofluorobenzene	460-00-4	82	%	70-130	03.15.2020 14:51	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-2 NE 0.5'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-003 Date Collected: 03.09.2020 10:44
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	125	4.96	mg/kg	03.10.2020 11:06		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.10.2020 10:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.10.2020 10:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.10.2020 10:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.10.2020 10:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.10.2020 10:52	
o-Terphenyl	84-15-1	92	%	70-135	03.10.2020 10:52	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-2 NE 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-003

Date Collected: 03.09.2020 10:44

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.15.2020 15:11	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.15.2020 15:11	U	1
Ethylbenzene	100-41-4	0.0264	0.00199	mg/kg	03.15.2020 15:11		1
m,p-Xylenes	179601-23-1	0.0799	0.00398	mg/kg	03.15.2020 15:11		1
o-Xylene	95-47-6	0.0305	0.00199	mg/kg	03.15.2020 15:11		1
Total Xylenes	1330-20-7	0.110	0.00199	mg/kg	03.15.2020 15:11		1
Total BTEX		0.137	0.00199	mg/kg	03.15.2020 15:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	88	%	70-130	03.15.2020 15:11	
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.15.2020 15:11	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-2 NE 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-004 Date Collected: 03.09.2020 10:48
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	119	5.00	mg/kg	03.10.2020 11:12		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.10.2020 11:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 11:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 11:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.10.2020 11:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	03.10.2020 11:11	
o-Terphenyl	84-15-1	105	%	70-135	03.10.2020 11:11	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-2 NE 1'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-004

Date Collected: 03.09.2020 10:48

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.15.2020 15:32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.15.2020 15:32	U	1
Ethylbenzene	100-41-4	0.0351	0.00198	mg/kg	03.15.2020 15:32		1
m,p-Xylenes	179601-23-1	0.114	0.00397	mg/kg	03.15.2020 15:32		1
o-Xylene	95-47-6	0.0448	0.00198	mg/kg	03.15.2020 15:32		1
Total Xylenes	1330-20-7	0.159	0.00198	mg/kg	03.15.2020 15:32		1
Total BTEX		0.194	0.00198	mg/kg	03.15.2020 15:32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	78	%	70-130	03.15.2020 15:32	
1,4-Difluorobenzene	540-36-3	105	%	70-130	03.15.2020 15:32	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: SP-3 E 0.5'	Matrix: Soil	Date Received: 03.09.2020 15:32
Lab Sample Id: 655065-005	Date Collected: 03.09.2020 10:50	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 03.10.2020 09:50	Basis: Wet Weight
Seq Number: 3119152		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.6	4.98	mg/kg	03.10.2020 11:20		1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: ARM	Date Prep: 03.10.2020 09:30
Seq Number: 3119216	Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3000	50.0	mg/kg	03.10.2020 11:30		1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 11:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 11:30	U	1
Total TPH	PHC635	3000	50.0	mg/kg	03.10.2020 11:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	03.10.2020 11:30	
o-Terphenyl	84-15-1	104	%	70-135	03.10.2020 11:30	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-3 E 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-005

Date Collected: 03.09.2020 10:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.200	0.200	mg/kg	03.16.2020 00:36	U	100
Toluene	108-88-3	<0.200	0.200	mg/kg	03.16.2020 00:36	U	100
Ethylbenzene	100-41-4	20.8	0.200	mg/kg	03.16.2020 00:36		100
m,p-Xylenes	179601-23-1	779	3.99	mg/kg	03.16.2020 14:12	D	1000
o-Xylene	95-47-6	280	2.00	mg/kg	03.16.2020 14:12	D	1000
Total Xylenes	1330-20-7	1060	2.00	mg/kg	03.16.2020 14:12		1000
Total BTEX		1080	0.200	mg/kg	03.16.2020 14:12		1000

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	03.16.2020 00:36	
1,4-Difluorobenzene	540-36-3	91	%	70-130	03.16.2020 00:36	



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Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-3 E 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-006 Date Collected: 03.09.2020 10:52
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	292	5.04	mg/kg	03.10.2020 12:19		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1040	49.9	mg/kg	03.10.2020 11:48		1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.10.2020 11:48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.10.2020 11:48	U	1
Total TPH	PHC635	1040	49.9	mg/kg	03.10.2020 11:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	03.10.2020 11:48	
o-Terphenyl	84-15-1	101	%	70-135	03.10.2020 11:48	



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Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-3 E 1'**
Lab Sample Id: 655065-006

Matrix: Soil
Date Collected: 03.09.2020 10:52

Date Received: 03.09.2020 15:32

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.200	0.200	mg/kg	03.16.2020 00:56	U	100
Toluene	108-88-3	<0.200	0.200	mg/kg	03.16.2020 00:56	U	100
Ethylbenzene	100-41-4	14.0	0.200	mg/kg	03.16.2020 00:56		100
m,p-Xylenes	179601-23-1	74.0	0.399	mg/kg	03.16.2020 00:56		100
o-Xylene	95-47-6	24.3	0.200	mg/kg	03.16.2020 00:56		100
Total Xylenes	1330-20-7	98.3	0.200	mg/kg	03.16.2020 00:56		100
Total BTEX		112	0.200	mg/kg	03.16.2020 00:56		100

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	03.16.2020 00:56	
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.16.2020 00:56	



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Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-4 SE 0.5'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-007 Date Collected: 03.09.2020 10:55
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.8	5.01	mg/kg	03.10.2020 12:28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.10.2020 12:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.10.2020 12:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.10.2020 12:07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.10.2020 12:07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	03.10.2020 12:07	
o-Terphenyl	84-15-1	106	%	70-135	03.10.2020 12:07	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-4 SE 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-007

Date Collected: 03.09.2020 10:55

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.15.2020 15:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.15.2020 15:52	U	1
Ethylbenzene	100-41-4	0.00409	0.00200	mg/kg	03.15.2020 15:52		1
m,p-Xylenes	179601-23-1	0.0185	0.00400	mg/kg	03.15.2020 15:52		1
o-Xylene	95-47-6	0.00947	0.00200	mg/kg	03.15.2020 15:52		1
Total Xylenes	1330-20-7	0.0280	0.00200	mg/kg	03.15.2020 15:52		1
Total BTEX		0.0321	0.00200	mg/kg	03.15.2020 15:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	76	%	70-130	03.15.2020 15:52	
1,4-Difluorobenzene	540-36-3	109	%	70-130	03.15.2020 15:52	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-4 SE 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-008 Date Collected: 03.09.2020 11:01
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.0	4.97	mg/kg	03.10.2020 12:38		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.10.2020 12:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 12:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 12:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.10.2020 12:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	03.10.2020 12:26	
o-Terphenyl	84-15-1	90	%	70-135	03.10.2020 12:26	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-4 SE 1'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-008

Date Collected: 03.09.2020 11:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	03.15.2020 16:12	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	03.15.2020 16:12	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	03.15.2020 16:12	U	1
m,p-Xylenes	179601-23-1	0.00466	0.00397	mg/kg	03.15.2020 16:12		1
o-Xylene	95-47-6	0.00308	0.00198	mg/kg	03.15.2020 16:12		1
Total Xylenes	1330-20-7	0.00774	0.00198	mg/kg	03.15.2020 16:12		1
Total BTEX		0.00774	0.00198	mg/kg	03.15.2020 16:12		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	75	%	70-130	03.15.2020 16:12		
1,4-Difluorobenzene	540-36-3	108	%	70-130	03.15.2020 16:12		



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: SP-5 SW 0.5'	Matrix: Soil	Date Received: 03.09.2020 15:32
Lab Sample Id: 655065-009	Date Collected: 03.09.2020 11:08	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 03.10.2020 09:50	Basis: Wet Weight
Seq Number: 3119152		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.1	4.96	mg/kg	03.10.2020 12:47		1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: ARM	Date Prep: 03.10.2020 09:30
Seq Number: 3119216	Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.10.2020 12:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.10.2020 12:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.10.2020 12:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.10.2020 12:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.10.2020 12:45	
o-Terphenyl	84-15-1	91	%	70-135	03.10.2020 12:45	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-5 SW 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-009

Date Collected: 03.09.2020 11:08

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.15.2020 16:32	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.15.2020 16:32	U	1
Ethylbenzene	100-41-4	0.0301	0.00199	mg/kg	03.15.2020 16:32		1
m,p-Xylenes	179601-23-1	0.0981	0.00398	mg/kg	03.15.2020 16:32		1
o-Xylene	95-47-6	0.0374	0.00199	mg/kg	03.15.2020 16:32		1
Total Xylenes	1330-20-7	0.136	0.00199	mg/kg	03.15.2020 16:32		1
Total BTEX		0.166	0.00199	mg/kg	03.15.2020 16:32		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	85	%	70-130	03.15.2020 16:32		
1,4-Difluorobenzene	540-36-3	106	%	70-130	03.15.2020 16:32		



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-5 SW 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-010 Date Collected: 03.09.2020 11:07
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.10.2020 09:50 Basis: Wet Weight
 Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	83.6	5.00	mg/kg	03.10.2020 12:56		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.10.2020 09:30 Basis: Wet Weight
 Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.10.2020 13:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.10.2020 13:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.10.2020 13:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.10.2020 13:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	03.10.2020 13:04	
o-Terphenyl	84-15-1	89	%	70-135	03.10.2020 13:04	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-5 SW 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-010 Date Collected: 03.09.2020 11:07
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 03.15.2020 10:15 Basis: Wet Weight
 Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.15.2020 16:52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.15.2020 16:52	U	1
Ethylbenzene	100-41-4	0.0375	0.00200	mg/kg	03.15.2020 16:52		1
m,p-Xylenes	179601-23-1	0.124	0.00401	mg/kg	03.15.2020 16:52		1
o-Xylene	95-47-6	0.0486	0.00200	mg/kg	03.15.2020 16:52		1
Total Xylenes	1330-20-7	0.173	0.00200	mg/kg	03.15.2020 16:52		1
Total BTEX		0.210	0.00200	mg/kg	03.15.2020 16:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	81	%	70-130	03.15.2020 16:52	
1,4-Difluorobenzene	540-36-3	107	%	70-130	03.15.2020 16:52	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-6 W 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-011

Date Collected: 03.09.2020 11:11

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.10.2020 09:50

Basis: Wet Weight

Seq Number: 3119152

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	149	5.00	mg/kg	03.10.2020 13:05		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.10.2020 09:30

Basis: Wet Weight

Seq Number: 3119216

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	120	50.0	mg/kg	03.10.2020 13:23		1
Diesel Range Organics (DRO)	C10C28DRO	4080	50.0	mg/kg	03.10.2020 13:23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	646	50.0	mg/kg	03.10.2020 13:23		1
Total TPH	PHC635	4850	50.0	mg/kg	03.10.2020 13:23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	03.10.2020 13:23	
o-Terphenyl	84-15-1	116	%	70-135	03.10.2020 13:23	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-6 W 0.5'**

Matrix: Soil

Date Received: 03.09.2020 15:32

Lab Sample Id: 655065-011

Date Collected: 03.09.2020 11:11

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.15.2020 10:15

Basis: Wet Weight

Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.15.2020 17:12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.15.2020 17:12	U	1
Ethylbenzene	100-41-4	0.0237	0.00199	mg/kg	03.15.2020 17:12		1
m,p-Xylenes	179601-23-1	0.0875	0.00398	mg/kg	03.15.2020 17:12		1
o-Xylene	95-47-6	0.0319	0.00199	mg/kg	03.15.2020 17:12		1
Total Xylenes	1330-20-7	0.119	0.00199	mg/kg	03.15.2020 17:12		1
Total BTEX		0.143	0.00199	mg/kg	03.15.2020 17:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	03.15.2020 17:12	
1,4-Difluorobenzene	540-36-3	93	%	70-130	03.15.2020 17:12	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: SP-6 W 1'	Matrix: Soil	Date Received: 03.09.2020 15:32
Lab Sample Id: 655065-012	Date Collected: 03.09.2020 11:16	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 03.10.2020 09:50	Basis: Wet Weight
Seq Number: 3119152		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	22.7	5.02	mg/kg	03.10.2020 13:33		1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: ARM	Date Prep: 03.10.2020 09:30
Seq Number: 3119216	Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	252	49.9	mg/kg	03.10.2020 13:42		1
Diesel Range Organics (DRO)	C10C28DRO	3000	49.9	mg/kg	03.10.2020 13:42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	522	49.9	mg/kg	03.10.2020 13:42		1
Total TPH	PHC635	3770	49.9	mg/kg	03.10.2020 13:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	03.10.2020 13:42	
o-Terphenyl	84-15-1	128	%	70-135	03.10.2020 13:42	



Certificate of Analytical Results 655065

Larson and Associates, Inc., Midland, TX

Talco 25

Sample Id: **SP-6 W 1'** Matrix: Soil Date Received: 03.09.2020 15:32
 Lab Sample Id: 655065-012 Date Collected: 03.09.2020 11:16
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 03.15.2020 10:15 Basis: Wet Weight
 Seq Number: 3119699

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.15.2020 17:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.15.2020 17:32	U	1
Ethylbenzene	100-41-4	0.0134	0.00200	mg/kg	03.15.2020 17:32		1
m,p-Xylenes	179601-23-1	0.0989	0.00399	mg/kg	03.15.2020 17:32		1
o-Xylene	95-47-6	0.0579	0.00200	mg/kg	03.15.2020 17:32		1
Total Xylenes	1330-20-7	0.157	0.00200	mg/kg	03.15.2020 17:32		1
Total BTEX		0.170	0.00200	mg/kg	03.15.2020 17:32		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	88	%	70-130	03.15.2020 17:32	
4-Bromofluorobenzene	460-00-4	168	%	70-130	03.15.2020 17:32	**



Larson and Associates, Inc.

Talco 25

Analytical Method: Chloride by EPA 300

Seq Number: 3119152
 MB Sample Id: 7698441-1-BLK

Matrix: Solid

LCS Sample Id: 7698441-1-BKS

Prep Method: E300P

Date Prep: 03.10.2020

LCSD Sample Id: 7698441-1-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	255	102	254	102	90-110	0	20	mg/kg	03.10.2020 10:02	

Analytical Method: Chloride by EPA 300

Seq Number: 3119152
 Parent Sample Id: 655065-001

Matrix: Soil

MS Sample Id: 655065-001 S

Prep Method: E300P

Date Prep: 03.10.2020

MSD Sample Id: 655065-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.63	253	269	105	268	105	90-110	0	20	mg/kg	03.10.2020 10:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3119152
 Parent Sample Id: 655065-011

Matrix: Soil

MS Sample Id: 655065-011 S

Prep Method: E300P

Date Prep: 03.10.2020

MSD Sample Id: 655065-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	149	250	409	104	406	103	90-110	1	20	mg/kg	03.10.2020 13:14	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3119216
 MB Sample Id: 7698502-1-BLK

Matrix: Solid

LCS Sample Id: 7698502-1-BKS

Prep Method: SW8015P

Date Prep: 03.10.2020

LCSD Sample Id: 7698502-1-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)	<15.0	1000	927	93	913	91	70-135	2	20	mg/kg	03.10.2020 09:01	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	991	99	70-135	3	20	mg/kg	03.10.2020 09:01	

Surrogate

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		104		103		70-135	%	03.10.2020 09:01
o-Terphenyl	89		98		100		70-135	%	03.10.2020 09:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3119216
 MB Sample Id: 7698502-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.10.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.10.2020 08:42	

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

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

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

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



Larson and Associates, Inc.
Talco 25

Analytical Method: TPH by SW8015 Mod

Seq Number: 3119216

Parent Sample Id: 655065-001

Matrix: Soil

MS Sample Id: 655065-001 S

Prep Method: SW8015P

Date Prep: 03.10.2020

MSD Sample Id: 655065-001 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)	<15.0	997	910	91	912	92	70-135	0	20	mg/kg	03.10.2020 09:56	
Diesel Range Organics (DRO)	22.5	997	986	97	1000	98	70-135	1	20	mg/kg	03.10.2020 09:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		103		70-135	%	03.10.2020 09:56
o-Terphenyl	98		100		70-135	%	03.10.2020 09:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3119699

MB Sample Id: 7698912-1-BLK

Matrix: Solid

LCS Sample Id: 7698912-1-BKS

Prep Method: SW5030B

Date Prep: 03.15.2020

LCSD Sample Id: 7698912-1-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	0.108	108	0.106	106	70-130	2	35	mg/kg	03.15.2020 12:12	
Toluene	<0.000456	0.100	0.111	111	0.107	107	70-130	4	35	mg/kg	03.15.2020 12:12	
Ethylbenzene	<0.000565	0.100	0.110	110	0.104	104	70-130	6	35	mg/kg	03.15.2020 12:12	
m,p-Xylenes	<0.00101	0.200	0.219	110	0.205	103	70-130	7	35	mg/kg	03.15.2020 12:12	
o-Xylene	<0.000344	0.100	0.108	108	0.101	101	70-130	7	35	mg/kg	03.15.2020 12:12	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		107		106		70-130	%	03.15.2020 12:12
4-Bromofluorobenzene	67	**	91		91		70-130	%	03.15.2020 12:12

Analytical Method: BTEX by EPA 8021B

Seq Number: 3119699

Parent Sample Id: 655065-001

Matrix: Soil

MS Sample Id: 655065-001 S

Prep Method: SW5030B

Date Prep: 03.15.2020

MSD Sample Id: 655065-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000382	0.0992	0.0818	82	0.114	114	70-130	33	35	mg/kg	03.15.2020 12:52	
Toluene	0.000560	0.0992	0.0988	99	0.111	111	70-130	12	35	mg/kg	03.15.2020 12:52	
Ethylbenzene	0.00129	0.0992	0.0984	98	0.107	106	70-130	8	35	mg/kg	03.15.2020 12:52	
m,p-Xylenes	0.00488	0.198	0.195	96	0.211	103	70-130	8	35	mg/kg	03.15.2020 12:52	
o-Xylene	0.00316	0.0992	0.0968	94	0.103	100	70-130	6	35	mg/kg	03.15.2020 12:52	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		111		70-130	%	03.15.2020 12:52
4-Bromofluorobenzene	80		93		70-130	%	03.15.2020 12:52

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



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

Data Reported to:

DATE: 3/09/2020
PO#: 10550405
PROJECT LOCATION OR NAME: Traco 25
LAB PROJECT #: 20-2107-07
LAB WORK ORDER#: _____
COLLECTOR: DSIRN
PAGE 1 OF 1

№ 0890
CHAIN-OF-CUSTODY

TRRP report?
 Yes No

TIME ZONE:
Time zone/State:
MST / NM

Field Sample I.D.

S=SOIL
W=WATER
A=AIR

P=PAINT
SL=SLUDGE
OT=OTHER

PRESERVATION
HCl
HNO₃
H₂SO₄ NaOH
ICE
UNPRESERVED

- ANALYSES**
- BTEX MTBE TPH 418.1 TPH 1005 TPH 1006
 - GASOLINE MOD 8015
 - DIESEL - MOD 8015
 - OIL - MOD 8015
 - VOC 8280
 - SVOC 8270 PAH 8270 HOLDPAH
 - 8081 PESTICIDES 8151 HERBICIDES
 - 8082 PESTICIDES
 - TBLP - METALS (RCRA) TCLP - METALS (RCRA) Semi-VOC
 - TCLP - PEST HERB OTHER LIST
 - TOTAL METALS (RCRA) D.W. 200.8 TCLP
 - LEAD - TOTAL FLASHPOINT
 - RCI TOX % MOISTURE CYANIDE
 - TDS TSS HEXAVALENT CHROMIUM
 - pH TOX FLASHPOINT
 - EXPLOSIVES PECHLORATE
 - CHLORIDE ANIONS ALKALINITY

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO ₃	H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/>	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
SP-1 NW 0.5'		3/9/20	1034	S	1						<input checked="" type="checkbox"/> BTEX <input type="checkbox"/> MTBE <input type="checkbox"/> TPH 418.1 <input type="checkbox"/> TPH 1005 <input type="checkbox"/> TPH 1006 <input type="checkbox"/>	
SP-1 NW 1'			1038	S	1						<input checked="" type="checkbox"/> GASOLINE MOD 8015 <input checked="" type="checkbox"/>	
SP-2 NE 0.5'			1044	S	1						<input checked="" type="checkbox"/> DIESEL - MOD 8015 <input checked="" type="checkbox"/>	
SP-2 NE 1'			1048	S	1						<input checked="" type="checkbox"/> OIL - MOD 8015 <input checked="" type="checkbox"/>	
SP-3 E 0.5'			1050	S	1						<input checked="" type="checkbox"/> VOC 8280 <input checked="" type="checkbox"/>	
SP-3 E 1'			1052	S	1						<input checked="" type="checkbox"/> SVOC 8270 <input type="checkbox"/> PAH 8270 <input type="checkbox"/> HOLDPAH <input type="checkbox"/>	
SP-4 SE 0.5'			1055	S	1						<input type="checkbox"/> 8081 PESTICIDES <input type="checkbox"/> 8151 HERBICIDES <input type="checkbox"/>	
SP-4 SE 1'			1101	S	1						<input type="checkbox"/> 8082 PESTICIDES <input type="checkbox"/>	
SP-5 SW 0.5'			1108	S	1						<input type="checkbox"/> TBLP - METALS (RCRA) <input type="checkbox"/> TCLP - METALS (RCRA) <input type="checkbox"/> Semi-VOC <input type="checkbox"/>	
SP-5 SW 1'			1107	S	1						<input type="checkbox"/> TCLP - PEST <input type="checkbox"/> HERB <input type="checkbox"/> OTHER LIST <input type="checkbox"/>	
SP-6 W 0.5'			1114	S	1						<input type="checkbox"/> TOTAL METALS (RCRA) <input type="checkbox"/> D.W. 200.8 <input type="checkbox"/> TCLP <input type="checkbox"/>	
SP-6 W 1'			1114	S	1						<input type="checkbox"/> LEAD - TOTAL <input type="checkbox"/> FLASHPOINT <input type="checkbox"/>	
TOTAL	12										<input type="checkbox"/> RCI <input type="checkbox"/> TOX <input type="checkbox"/> % MOISTURE <input type="checkbox"/> CYANIDE <input type="checkbox"/>	

RELINQUISHED BY: (Signature) David K. [Signature] DATE/TIME: 3/9/20 RECEIVED BY: (Signature) [Signature]

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

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

LABORATORY: _____

TURN AROUND TIME
 NORMAL
 1 DAY
 2 DAY
 OTHER

LABORATORY USE ONLY:
 RECEIVING TEMP: 5.1/48
 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: 03.09.2020 03.32.00 PM

Work Order #: 655065

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)?	4.8
#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: 03.10.2020
Brianna Teel

Checklist reviewed by: Holly Taylor Date: 03.16.2020
Holly Taylor



Certificate of Analysis Summary 656298

Larson and Associates, Inc., Midland, TX

Project Name: Taclo 25 25 35 Fed #001H

Project Id: 20-0107-07

Contact: Mark Larson

Project Location:

Date Received in Lab: Thu 03.19.2020 16:04

Report Date: 03.23.2020 15:07

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	656298-001	656298-002	656298-003	656298-004		
	<i>Field Id:</i>	SP-7 (0.5')	SP-7 (1')	SP-8 (0.5')	SP-8 (1')		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	03.19.2020 10:48	03.19.2020 10:50	03.19.2020 11:10	03.19.2020 11:11		
BTEX by EPA 8021B	<i>Extracted:</i>	03.21.2020 09:00	03.21.2020 09:00	03.21.2020 09:00	03.21.2020 09:00		
	<i>Analyzed:</i>	03.21.2020 23:17	03.21.2020 23:38	03.21.2020 23:58	03.22.2020 01:21		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402		
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201		
Chloride by EPA 300	<i>Extracted:</i>	03.20.2020 08:30	03.20.2020 08:30	03.20.2020 08:30	03.20.2020 08:30		
	<i>Analyzed:</i>	03.20.2020 10:21	03.20.2020 10:26	03.20.2020 09:39	03.20.2020 10:31		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		56.4 25.2	17.6 4.98	<4.96 4.96	7.62 4.96		
TPH by SW8015 Mod	<i>Extracted:</i>	03.20.2020 16:00	03.20.2020 16:00	03.20.2020 16:00	03.20.2020 16:00		
	<i>Analyzed:</i>	03.20.2020 19:32	03.20.2020 20:26	03.20.2020 20:45	03.20.2020 21:03		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9		
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9		
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<49.9 49.9		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Holly Taylor
Project Manager



Analytical Report 656298

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Taclo 25 25 35 Fed #001H

20-0107-07

03.23.2020

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)



03.23.2020

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

Reference: XENCO Report No(s): **656298**
Taclo 25 25 35 Fed #001H
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) 656298. 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. 656298 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,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

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 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-7 (0.5')	S	03.19.2020 10:48		656298-001
SP-7 (1')	S	03.19.2020 10:50		656298-002
SP-8 (0.5')	S	03.19.2020 11:10		656298-003
SP-8 (1')	S	03.19.2020 11:11		656298-004



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Taclø 25 25 35 Fed #001H

Project ID: 20-0107-07
Work Order Number(s): 656298

Report Date: 03.23.2020
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-3120574 BTEX by EPA 8021B

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



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-7 (0.5')** Matrix: Soil Date Received: 03.19.2020 16:04
 Lab Sample Id: 656298-001 Date Collected: 03.19.2020 10:48
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.20.2020 08:30 Basis: Wet Weight
 Seq Number: 3120517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.4	25.2	mg/kg	03.20.2020 10:21		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.20.2020 16:00 Basis: Wet Weight
 Seq Number: 3120509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 19:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 19:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 19:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 19:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.20.2020 19:32	
o-Terphenyl	84-15-1	93	%	70-135	03.20.2020 19:32	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-7 (0.5')**

Matrix: Soil

Date Received: 03.19.2020 16:04

Lab Sample Id: 656298-001

Date Collected: 03.19.2020 10:48

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.21.2020 09:00

Basis: Wet Weight

Seq Number: 3120574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.21.2020 23:17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.21.2020 23:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	03.21.2020 23:17	
4-Bromofluorobenzene	460-00-4	106	%	70-130	03.21.2020 23:17	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-7 (1')** Matrix: Soil Date Received: 03.19.2020 16:04
 Lab Sample Id: 656298-002 Date Collected: 03.19.2020 10:50
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.20.2020 08:30 Basis: Wet Weight
 Seq Number: 3120517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.6	4.98	mg/kg	03.20.2020 10:26		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.20.2020 16:00 Basis: Wet Weight
 Seq Number: 3120509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 20:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 20:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 20:26	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 20:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-135	03.20.2020 20:26	
o-Terphenyl	84-15-1	92	%	70-135	03.20.2020 20:26	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-7 (1')**
 Lab Sample Id: 656298-002

Matrix: Soil
 Date Collected: 03.19.2020 10:50

Date Received: 03.19.2020 16:04

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.21.2020 09:00

Basis: Wet Weight

Seq Number: 3120574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.21.2020 23:38	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.21.2020 23:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.21.2020 23:38	
1,4-Difluorobenzene	540-36-3	99	%	70-130	03.21.2020 23:38	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-8 (0.5')** Matrix: Soil Date Received: 03.19.2020 16:04
 Lab Sample Id: 656298-003 Date Collected: 03.19.2020 11:10
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.20.2020 08:30 Basis: Wet Weight
 Seq Number: 3120517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	03.20.2020 09:39	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.20.2020 16:00 Basis: Wet Weight
 Seq Number: 3120509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.20.2020 20:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.20.2020 20:45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.20.2020 20:45	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.20.2020 20:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	03.20.2020 20:45	
o-Terphenyl	84-15-1	91	%	70-135	03.20.2020 20:45	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-8 (0.5')**

Matrix: Soil

Date Received: 03.19.2020 16:04

Lab Sample Id: 656298-003

Date Collected: 03.19.2020 11:10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 03.21.2020 09:00

Basis: Wet Weight

Seq Number: 3120574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.21.2020 23:58	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.21.2020 23:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.21.2020 23:58		
1,4-Difluorobenzene	540-36-3	98	%	70-130	03.21.2020 23:58		



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-8 (1')**
Lab Sample Id: 656298-004

Matrix: Soil
Date Collected: 03.19.2020 11:11

Date Received: 03.19.2020 16:04

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 03.20.2020 08:30

Basis: Wet Weight

Seq Number: 3120517

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7.62	4.96	mg/kg	03.20.2020 10:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 03.20.2020 16:00

Basis: Wet Weight

Seq Number: 3120509

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.20.2020 21:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.20.2020 21:03	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.20.2020 21:03	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.20.2020 21:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-135	03.20.2020 21:03	
o-Terphenyl	84-15-1	89	%	70-135	03.20.2020 21:03	



Certificate of Analytical Results 656298

Larson and Associates, Inc., Midland, TX

Taclo 25 25 35 Fed #001H

Sample Id: **SP-8 (1')** Matrix: Soil Date Received: 03.19.2020 16:04
 Lab Sample Id: 656298-004 Date Collected: 03.19.2020 11:11
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 03.21.2020 09:00 Basis: Wet Weight
 Seq Number: 3120574

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.22.2020 01:21	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.22.2020 01:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	03.22.2020 01:21	
4-Bromofluorobenzene	460-00-4	96	%	70-130	03.22.2020 01:21	



QC Summary 656298

Larson and Associates, Inc.

Taclo 25 25 35 Fed #001H

Analytical Method: Chloride by EPA 300

Seq Number: 3120517
 MB Sample Id: 7699378-1-BLK

Matrix: Solid

LCS Sample Id: 7699378-1-BKS

Prep Method: E300P

Date Prep: 03.20.2020

LCSD Sample Id: 7699378-1-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	254	102	255	102	90-110	0	20	mg/kg	03.20.2020 09:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3120517
 Parent Sample Id: 656192-008

Matrix: Soil

MS Sample Id: 656192-008 S

Prep Method: E300P

Date Prep: 03.20.2020

MSD Sample Id: 656192-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	93.9	250	339	98	344	100	90-110	1	20	mg/kg	03.20.2020 11:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3120517
 Parent Sample Id: 656298-003

Matrix: Soil

MS Sample Id: 656298-003 S

Prep Method: E300P

Date Prep: 03.20.2020

MSD Sample Id: 656298-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.21	248	251	100	248	99	90-110	1	20	mg/kg	03.20.2020 09:44	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3120509
 MB Sample Id: 7699421-1-BLK

Matrix: Solid

LCS Sample Id: 7699421-1-BKS

Prep Method: SW8015P

Date Prep: 03.20.2020

LCSD Sample Id: 7699421-1-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	922	92	70-135	1	20	mg/kg	03.20.2020 18:55	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	1030	103	70-135	0	20	mg/kg	03.20.2020 18:55	

Surrogate

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	86		108		107		70-135	%	03.20.2020 18:55
o-Terphenyl	91		102		99		70-135	%	03.20.2020 18:55

Analytical Method: TPH by SW8015 Mod

Seq Number: 3120509

Matrix: Solid

MB Sample Id: 7699421-1-BLK

Prep Method: SW8015P

Date Prep: 03.20.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.20.2020 18:37	

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 656298

Larson and Associates, Inc.

Taclo 25 25 35 Fed #001H

Analytical Method: TPH by SW8015 Mod

Seq Number: 3120509

Parent Sample Id: 656298-001

Matrix: Soil

MS Sample Id: 656298-001 S

Prep Method: SW8015P

Date Prep: 03.20.2020

MSD Sample Id: 656298-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	923	93	922	93	70-135	0	20	mg/kg	03.20.2020 19:50	
Diesel Range Organics (DRO)	<49.9	997	1030	103	1030	103	70-135	0	20	mg/kg	03.20.2020 19:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		102		70-135	%	03.20.2020 19:50
o-Terphenyl	99		98		70-135	%	03.20.2020 19:50

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120574

MB Sample Id: 7699497-1-BLK

Matrix: Solid

LCS Sample Id: 7699497-1-BKS

Prep Method: SW5030B

Date Prep: 03.21.2020

LCSD Sample Id: 7699497-1-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	0.0910	91	0.0909	91	70-130	0	35	mg/kg	03.21.2020 18:33	
Toluene	<0.00200	0.100	0.0890	89	0.0908	91	70-130	2	35	mg/kg	03.21.2020 18:33	
Ethylbenzene	<0.00200	0.100	0.0878	88	0.0925	93	70-130	5	35	mg/kg	03.21.2020 18:33	
m,p-Xylenes	<0.00400	0.200	0.174	87	0.184	92	70-130	6	35	mg/kg	03.21.2020 18:33	
o-Xylene	<0.00200	0.100	0.0900	90	0.0923	92	70-130	3	35	mg/kg	03.21.2020 18:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		98		70-130	%	03.21.2020 18:33
4-Bromofluorobenzene	96		99		97		70-130	%	03.21.2020 18:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3120574

Parent Sample Id: 655881-063

Matrix: Soil

MS Sample Id: 655881-063 S

Prep Method: SW5030B

Date Prep: 03.21.2020

MSD Sample Id: 655881-063 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0906	91	0.0672	68	70-130	30	35	mg/kg	03.21.2020 19:13	X
Toluene	<0.00200	0.0998	0.0768	77	0.0547	55	70-130	34	35	mg/kg	03.21.2020 19:13	X
Ethylbenzene	<0.00200	0.0998	0.0756	76	0.0525	53	70-130	36	35	mg/kg	03.21.2020 19:13	XF
m,p-Xylenes	<0.00399	0.200	0.147	74	0.102	52	70-130	36	35	mg/kg	03.21.2020 19:13	XF
o-Xylene	<0.00200	0.0998	0.0801	80	0.0597	60	70-130	29	35	mg/kg	03.21.2020 19:13	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		95		70-130	%	03.21.2020 19:13
4-Bromofluorobenzene	101		99		70-130	%	03.21.2020 19:13

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 03.19.2020 04.04.00 PM

Work Order #: 656298

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1
#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: 03.23.2020
 Holly Taylor



Certificate of Analysis Summary 657072

Larson and Associates, Inc., Midland, TX

Project Name: Chevron -Talco

Project Id: 20-0107-07

Contact: Mark Larson

Project Location:

Date Received in Lab: Fri 03.27.2020 08:21

Report Date: 04.02.2020 15:42

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	657072-001	657072-002	657072-003	657072-004	657072-005	657072-006
	<i>Field Id:</i>	SP-6,2'	SP-6,3'	SP-6,4'	SP-6,5'	SP-6,10'	SP-3,2'
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.25.2020 11:12	03.25.2020 11:14	03.25.2020 11:15	03.25.2020 11:20	03.25.2020 11:21	03.26.2020 12:08
BTEX by EPA 8021B	<i>Extracted:</i>	04.01.2020 16:00	04.01.2020 16:00				04.01.2020 16:00
	<i>Analyzed:</i>	04.02.2020 05:23	04.02.2020 05:43				04.02.2020 06:04
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL				mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200				<0.00199 0.00199
Toluene		<0.00202 0.00202	<0.00200 0.00200				<0.00199 0.00199
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200				<0.00199 0.00199
m,p-Xylenes		<0.00403 0.00403	<0.00399 0.00399				0.0355 0.00398
o-Xylene		<0.00202 0.00202	<0.00200 0.00200				0.0335 0.00199
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200				0.0690 0.00199
Total BTEX		<0.00202 0.00202	<0.00200 0.00200				0.0690 0.00199
Chloride by EPA 300	<i>Extracted:</i>	03.27.2020 18:15	03.27.2020 18:15	03.27.2020 18:15	03.27.2020 18:15	03.30.2020 11:30	03.30.2020 11:30
	<i>Analyzed:</i>	03.27.2020 23:46	03.27.2020 23:51	03.27.2020 23:57	03.28.2020 00:02	03.30.2020 14:10	03.30.2020 14:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		139 24.8	21.3 4.95	20.8 5.02	26.1 24.9	137 5.01	<4.99 4.99
TPH by SW8015 Mod	<i>Extracted:</i>	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00
	<i>Analyzed:</i>	03.31.2020 12:31	03.31.2020 13:36	03.31.2020 13:57	03.31.2020 14:17	03.31.2020 14:38	03.31.2020 14:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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

Holly Taylor
Project Manager



Certificate of Analysis Summary 657072

Larson and Associates, Inc., Midland, TX

Project Name: Chevron -Talco

Project Id: 20-0107-07

Contact: Mark Larson

Project Location:

Date Received in Lab: Fri 03.27.2020 08:21

Report Date: 04.02.2020 15:42

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	657072-007	657072-008	657072-009	657072-010		
	<i>Field Id:</i>	SP-3,3'	SP-3,4'	SP-3,5'	SP-3,6'		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	03.26.2020 12:09	03.26.2020 12:10	03.26.2020 12:11	03.26.2020 12:15		
BTEX by EPA 8021B	<i>Extracted:</i>	04.01.2020 16:00					
	<i>Analyzed:</i>	04.02.2020 06:24					
	<i>Units/RL:</i>	mg/kg	RL				
Benzene		<0.00199	0.00199				
Toluene		<0.00199	0.00199				
Ethylbenzene		<0.00199	0.00199				
m,p-Xylenes		0.0329	0.00398				
o-Xylene		0.0279	0.00199				
Total Xylenes		0.0608	0.00199				
Total BTEX		0.0608	0.00199				
Chloride by EPA 300	<i>Extracted:</i>	03.30.2020 11:30		03.30.2020 11:30	03.30.2020 11:30	03.30.2020 11:30	
	<i>Analyzed:</i>	03.30.2020 14:35		03.30.2020 14:41	03.30.2020 15:00	03.30.2020 15:07	
	<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.2	5.02	8.77	4.99	<4.96	4.96
				<4.95	4.95		
TPH by SW8015 Mod	<i>Extracted:</i>	03.31.2020 11:00		03.31.2020 11:00	03.31.2020 11:00	03.31.2020 11:00	
	<i>Analyzed:</i>	03.31.2020 15:20		03.31.2020 15:40	03.31.2020 16:01	03.31.2020 16:22	
	<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Holly Taylor
Project Manager



Analytical Report 657072

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Chevron -Talco

20-0107-07

04.02.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



04.02.2020

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

Reference: XENCO Report No(s): **657072**
Chevron -Talco
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) 657072. 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. 657072 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,

A handwritten signature in black ink that reads 'Holly Taylor'. The signature is written in a cursive, flowing style.

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 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP-6,2'	S	03.25.2020 11:12		657072-001
SP-6,3'	S	03.25.2020 11:14		657072-002
SP-6,4'	S	03.25.2020 11:15		657072-003
SP-6,5'	S	03.25.2020 11:20		657072-004
SP-6,10'	S	03.25.2020 11:21		657072-005
SP-3,2'	S	03.26.2020 12:08		657072-006
SP-3,3'	S	03.26.2020 12:09		657072-007
SP-3,4'	S	03.26.2020 12:10		657072-008
SP-3,5'	S	03.26.2020 12:11		657072-009
SP-3,6'	S	03.26.2020 12:15		657072-010



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Chevron -Talco

Project ID: 20-0107-07
Work Order Number(s): 657072

Report Date: 04.02.2020
Date Received: 03.27.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3121690 BTEX by EPA 8021B

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



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-6,2'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-001 Date Collected: 03.25.2020 11:12
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.27.2020 18:15 Basis: Wet Weight
 Seq Number: 3121272

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	139	24.8	mg/kg	03.27.2020 23:46		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 12:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 12:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 12:31	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 12:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	03.31.2020 12:31	
o-Terphenyl	84-15-1	107	%	70-130	03.31.2020 12:31	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-6,2'**
Lab Sample Id: 657072-001

Matrix: Soil
Date Collected: 03.25.2020 11:12

Date Received: 03.27.2020 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.01.2020 16:00

Basis: Wet Weight

Seq Number: 3121690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.02.2020 05:23	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.02.2020 05:23	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.02.2020 05:23		
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.2020 05:23		



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX
Chevron -Talco

Sample Id: **SP-6,3'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-002 Date Collected: 03.25.2020 11:14
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.27.2020 18:15 Basis: Wet Weight
 Seq Number: 3121272

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.3	4.95	mg/kg	03.27.2020 23:51		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.2020 13:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.2020 13:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.2020 13:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.2020 13:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	03.31.2020 13:36	
o-Terphenyl	84-15-1	112	%	70-130	03.31.2020 13:36	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-6,3'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-002 Date Collected: 03.25.2020 11:14
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5030B
 Tech: KTL % Moisture:
 Analyst: KTL Date Prep: 04.01.2020 16:00 Basis: Wet Weight
 Seq Number: 3121690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.02.2020 05:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.02.2020 05:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	116	%	70-130	04.02.2020 05:43	
4-Bromofluorobenzene	460-00-4	112	%	70-130	04.02.2020 05:43	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-6,4'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-003 Date Collected: 03.25.2020 11:15
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.27.2020 18:15 Basis: Wet Weight
 Seq Number: 3121272

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	20.8	5.02	mg/kg	03.27.2020 23:57		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 13:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 13:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 13:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 13:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	03.31.2020 13:57	
o-Terphenyl	84-15-1	105	%	70-130	03.31.2020 13:57	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX
Chevron -Talco

Sample Id: **SP-6,5'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-004 Date Collected: 03.25.2020 11:20
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 03.27.2020 18:15 Basis: Wet Weight
 Seq Number: 3121272

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.1	24.9	mg/kg	03.28.2020 00:02		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 14:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 14:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 14:17	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 14:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	03.31.2020 14:17	
o-Terphenyl	84-15-1	110	%	70-130	03.31.2020 14:17	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-6,10'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-005 Date Collected: 03.25.2020 11:21
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 03.30.2020 11:30 Basis: Wet Weight
 Seq Number: 3121356

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	137	5.01	mg/kg	03.30.2020 14:10		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.2020 14:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.2020 14:38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.2020 14:38	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.2020 14:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	03.31.2020 14:38	
o-Terphenyl	84-15-1	117	%	70-130	03.31.2020 14:38	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX
Chevron -Talco

Sample Id: **SP-3,2'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-006 Date Collected: 03.26.2020 12:08
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 03.30.2020 11:30 Basis: Wet Weight
 Seq Number: 3121356

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	03.30.2020 14:16	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 14:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 14:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 14:59	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 14:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	03.31.2020 14:59	
o-Terphenyl	84-15-1	104	%	70-130	03.31.2020 14:59	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-3,2'**
Lab Sample Id: 657072-006

Matrix: Soil
Date Collected: 03.26.2020 12:08

Date Received: 03.27.2020 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.01.2020 16:00

Basis: Wet Weight

Seq Number: 3121690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.2020 06:04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.2020 06:04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.2020 06:04	U	1
m,p-Xylenes	179601-23-1	0.0355	0.00398	mg/kg	04.02.2020 06:04		1
o-Xylene	95-47-6	0.0335	0.00199	mg/kg	04.02.2020 06:04		1
Total Xylenes	1330-20-7	0.0690	0.00199	mg/kg	04.02.2020 06:04		1
Total BTEX		0.0690	0.00199	mg/kg	04.02.2020 06:04		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	70-130	04.02.2020 06:04		
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.02.2020 06:04		



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: SP-3,3'	Matrix: Soil	Date Received: 03.27.2020 08:21
Lab Sample Id: 657072-007	Date Collected: 03.26.2020 12:09	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: SPC		% Moisture:
Analyst: SPC	Date Prep: 03.30.2020 11:30	Basis: Wet Weight
Seq Number: 3121356		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11.2	5.02	mg/kg	03.30.2020 14:35		1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: ARM	Date Prep: 03.31.2020 11:00
Seq Number: 3121604	Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 15:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 15:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 15:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 15:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	03.31.2020 15:20	
o-Terphenyl	84-15-1	105	%	70-130	03.31.2020 15:20	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-3,3'**
Lab Sample Id: 657072-007

Matrix: Soil
Date Collected: 03.26.2020 12:09

Date Received: 03.27.2020 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.01.2020 16:00

Basis: Wet Weight

Seq Number: 3121690

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.02.2020 06:24	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.02.2020 06:24	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.02.2020 06:24	U	1
m,p-Xylenes	179601-23-1	0.0329	0.00398	mg/kg	04.02.2020 06:24		1
o-Xylene	95-47-6	0.0279	0.00199	mg/kg	04.02.2020 06:24		1
Total Xylenes	1330-20-7	0.0608	0.00199	mg/kg	04.02.2020 06:24		1
Total BTEX		0.0608	0.00199	mg/kg	04.02.2020 06:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	04.02.2020 06:24	
1,4-Difluorobenzene	540-36-3	112	%	70-130	04.02.2020 06:24	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX
Chevron -Talco

Sample Id: **SP-3,4'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-008 Date Collected: 03.26.2020 12:10
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 03.30.2020 11:30 Basis: Wet Weight
 Seq Number: 3121356

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.77	4.99	mg/kg	03.30.2020 14:41		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.31.2020 15:40	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.31.2020 15:40	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.31.2020 15:40	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.31.2020 15:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	03.31.2020 15:40	
o-Terphenyl	84-15-1	108	%	70-130	03.31.2020 15:40	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: SP-3,5'	Matrix: Soil	Date Received: 03.27.2020 08:21
Lab Sample Id: 657072-009	Date Collected: 03.26.2020 12:11	
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: SPC		% Moisture:
Analyst: SPC	Date Prep: 03.30.2020 11:30	Basis: Wet Weight
Seq Number: 3121356		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	03.30.2020 15:00	U	1

Analytical Method: TPH by SW8015 Mod	Prep Method: SW8015P
Tech: DVM	% Moisture:
Analyst: ARM	Date Prep: 03.31.2020 11:00
Seq Number: 3121604	Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.31.2020 16:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.31.2020 16:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.31.2020 16:01	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.31.2020 16:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-130	03.31.2020 16:01	
o-Terphenyl	84-15-1	110	%	70-130	03.31.2020 16:01	



Certificate of Analytical Results 657072

Larson and Associates, Inc., Midland, TX

Chevron -Talco

Sample Id: **SP-3,6'** Matrix: Soil Date Received: 03.27.2020 08:21
 Lab Sample Id: 657072-010 Date Collected: 03.26.2020 12:15
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 03.30.2020 11:30 Basis: Wet Weight
 Seq Number: 3121356

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	03.30.2020 15:07	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 03.31.2020 11:00 Basis: Wet Weight
 Seq Number: 3121604

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.31.2020 16:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	03.31.2020 16:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	03.31.2020 16:22	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	03.31.2020 16:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	03.31.2020 16:22	
o-Terphenyl	84-15-1	102	%	70-130	03.31.2020 16:22	



Larson and Associates, Inc.
Chevron -Talco

Analytical Method: Chloride by EPA 300

Seq Number: 3121272
MB Sample Id: 7699975-1-BLK

Matrix: Solid
LCS Sample Id: 7699975-1-BKS

Prep Method: E300P
Date Prep: 03.27.2020
LCSD Sample Id: 7699975-1-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	256	102	246	98	90-110	4	20	mg/kg	03.27.2020 21:40	

Analytical Method: Chloride by EPA 300

Seq Number: 3121356
MB Sample Id: 7700049-1-BLK

Matrix: Solid
LCS Sample Id: 7700049-1-BKS

Prep Method: E300P
Date Prep: 03.30.2020
LCSD Sample Id: 7700049-1-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	259	104	258	103	90-110	0	20	mg/kg	03.30.2020 12:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3121272
Parent Sample Id: 656937-110

Matrix: Soil
MS Sample Id: 656937-110 S

Prep Method: E300P
Date Prep: 03.27.2020
MSD Sample Id: 656937-110 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.9	250	250	93	280	105	90-110	11	20	mg/kg	03.27.2020 21:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3121272
Parent Sample Id: 656937-113

Matrix: Soil
MS Sample Id: 656937-113 S

Prep Method: E300P
Date Prep: 03.27.2020
MSD Sample Id: 656937-113 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11.5	251	248	94	286	109	90-110	14	20	mg/kg	03.27.2020 23:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3121356
Parent Sample Id: 657072-006

Matrix: Soil
MS Sample Id: 657072-006 S

Prep Method: E300P
Date Prep: 03.30.2020
MSD Sample Id: 657072-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.99	250	263	105	265	106	90-110	1	20	mg/kg	03.30.2020 14:22	

Analytical Method: Chloride by EPA 300

Seq Number: 3121356
Parent Sample Id: 657151-014

Matrix: Soil
MS Sample Id: 657151-014 S

Prep Method: E300P
Date Prep: 03.30.2020
MSD Sample Id: 657151-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1.53	249	257	103	250	100	90-110	3	20	mg/kg	03.30.2020 12:58	

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

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

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

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



Larson and Associates, Inc.
Chevron -Talco

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121604

MB Sample Id: 7700206-1-BLK

Matrix: Solid

LCS Sample Id: 7700206-1-BKS

Prep Method: SW8015P

Date Prep: 03.31.2020

LCSD Sample Id: 7700206-1-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	946	95	950	95	70-130	0	20	mg/kg	03.31.2020 11:49	
Diesel Range Organics (DRO)	<50.0	1000	1090	109	1090	109	70-130	0	20	mg/kg	03.31.2020 11:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		91		93		70-130	%	03.31.2020 11:49
o-Terphenyl	102		106		102		70-130	%	03.31.2020 11:49

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121604

MB Sample Id: 7700206-1-BLK

Matrix: Solid

MB Sample Id: 7700206-1-BLK

Prep Method: SW8015P

Date Prep: 03.31.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.31.2020 11:28	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3121604

Parent Sample Id: 657072-001

Matrix: Soil

MS Sample Id: 657072-001 S

Prep Method: SW8015P

Date Prep: 03.31.2020

MSD Sample Id: 657072-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	946	95	819	82	70-130	14	20	mg/kg	03.31.2020 12:52	
Diesel Range Organics (DRO)	<49.9	997	1100	110	964	97	70-130	13	20	mg/kg	03.31.2020 12:52	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	91		79		70-130	%	03.31.2020 12:52
o-Terphenyl	105		90		70-130	%	03.31.2020 12:52

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121690

MB Sample Id: 7700315-1-BLK

Matrix: Solid

LCS Sample Id: 7700315-1-BKS

Prep Method: SW5030B

Date Prep: 04.01.2020

LCSD Sample Id: 7700315-1-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	0.0861	86	0.0835	84	70-130	3	35	mg/kg	04.02.2020 02:58	
Toluene	<0.00200	0.100	0.0904	90	0.0865	87	70-130	4	35	mg/kg	04.02.2020 02:58	
Ethylbenzene	<0.00200	0.100	0.0927	93	0.0870	87	70-130	6	35	mg/kg	04.02.2020 02:58	
m,p-Xylenes	<0.00400	0.200	0.184	92	0.174	87	70-130	6	35	mg/kg	04.02.2020 02:58	
o-Xylene	<0.00200	0.100	0.0934	93	0.0895	90	70-130	4	35	mg/kg	04.02.2020 02:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		105		107		70-130	%	04.02.2020 02:58
4-Bromofluorobenzene	101		97		99		70-130	%	04.02.2020 02:58

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 657072

Larson and Associates, Inc.
Chevron -Talco

Analytical Method: BTEX by EPA 8021B

Seq Number: 3121690

Parent Sample Id: 657072-001

Matrix: Soil

MS Sample Id: 657072-001 S

Prep Method: SW5030B

Date Prep: 04.01.2020

MSD Sample Id: 657072-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0758	76	0.0841	84	70-130	10	35	mg/kg	04.02.2020 03:39	
Toluene	<0.00199	0.0994	0.0794	80	0.0854	86	70-130	7	35	mg/kg	04.02.2020 03:39	
Ethylbenzene	<0.00199	0.0994	0.0795	80	0.0846	85	70-130	6	35	mg/kg	04.02.2020 03:39	
m,p-Xylenes	<0.00398	0.199	0.160	80	0.169	85	70-130	5	35	mg/kg	04.02.2020 03:39	
o-Xylene	<0.00199	0.0994	0.0825	83	0.0869	87	70-130	5	35	mg/kg	04.02.2020 03:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		109		70-130	%	04.02.2020 03:39
4-Bromofluorobenzene	103		107		70-130	%	04.02.2020 03:39

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

Airson & Associates, Inc.
Environmental Consultants

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

Data Reported to:

DATE: 3/12/2020 PAGE 1 OF 1
PO#: 1571072 LAB WORK ORDER#: 20-0167-07
PROJECT LOCATION OR NAME: Chevron - Tocco COLLECTOR: QW/JS
LAI PROJECT #: 20-0167-07

TRRP report?
 Yes No

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

TIME ZONE:
Time zone/State:

Field Sample I.D.

Lab # Date Time Matrix

of Containers
HCl
HNO₃
H₂SO₄ NaOH
ICE
UNPRESERVED

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

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO ₃	H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/>	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
sp-4,2		3/12/20	11:12	S	1				X		X	
sp-4,3			11:14								X	
sp-4,4			11:15								X	
sp-4,5			11:20								X	
sp-4,10			11:21								X	
sp-3,2		3/12/20	12:08								X	
sp-3,3			12:09								X	
sp-3,4			12:10								X	
sp-3,5			12:11								X	
sp-3,6			12:15								X	
TOTAL												

RELINQUISHED BY: (Signature) [Signature] DATE/TIME 3/12/20 0821 RECEIVED BY: (Signature) [Signature]

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

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

LABORATORY: Xeno

TURN AROUND TIME
 NORMAL
 1 DAY
 2 DAY
 OTHER

LABORATORY USE ONLY:
 RECEIVING TEMP: 50/5.3 THERM#: 29
 CUSTODY SEALS - BROKEN INTACT NOT USED
 CARRIER BILL #
 HAND DELIVERED

BT
1571072 CHAIN-OF-CUSTODY

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 03.27.2020 08.21.00 AM

Work Order #: 657072

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)?	-5.3
#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: 03.27.2020
Brianna Teel

Checklist reviewed by: Holly Taylor Date: 03.31.2020
Holly Taylor



Certificate of Analysis Summary 685962

Larson and Associates, Inc., Midland, TX

Project Name: Talco 25 35 35

Project Id: 20-0107-07

Date Received in Lab: Tue 01.26.2021 08:50

Contact: Mark Larson

Report Date: 02.02.2021 12:41

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	685962-001	685962-002	685962-003	685962-004	685962-005	685962-006
	<i>Field Id:</i>	C-1	C-2	C-3	C-4	C-5	C-6
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.25.2021 09:35	01.25.2021 09:40	01.25.2021 09:42	01.25.2021 09:44	01.25.2021 14:49	01.25.2021 14:50
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00
	<i>Analyzed:</i>	01.30.2021 10:28	01.30.2021 10:49	01.30.2021 11:09	01.30.2021 11:30	01.30.2021 11:50	01.30.2021 12:10
	<i>Units/RL:</i>	mg/kg RL					
	Benzene	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	0.00224 0.00201
Toluene	<0.00199 0.00199	0.0259 0.00200	0.00381 0.00201	0.00236 0.00198	0.00207 0.00200	0.00454 0.00201	
Ethylbenzene	<0.00199 0.00199	<0.00200 0.00200	0.0435 0.00201	0.00466 0.00198	0.00267 0.00200	0.0108 0.00201	
m,p-Xylenes	0.00679 0.00398	<0.00399 0.00399	0.140 0.00402	0.0487 0.00396	0.0182 0.00400	0.0139 0.00402	
o-Xylene	0.00278 0.00199	<0.00200 0.00200	0.0518 0.00201	0.0295 0.00198	0.00935 0.00200	0.0289 0.00201	
Total Xylenes	0.00957 0.00199	<0.00200 0.00200	0.192 0.00201	0.0782 0.00198	0.0276 0.00200	0.0428 0.00201	
Total BTEX	0.00957 0.00199	0.0259 0.00200	0.239 0.00201	0.0852 0.00198	0.0323 0.00200	0.0604 0.00201	
Chloride by EPA 300	<i>Extracted:</i>	01.27.2021 10:00	01.27.2021 10:00	01.27.2021 12:00	01.27.2021 12:00	01.27.2021 12:00	01.27.2021 12:00
	<i>Analyzed:</i>	01.27.2021 15:48	01.27.2021 15:53	01.27.2021 13:39	01.27.2021 13:54	01.27.2021 13:59	01.27.2021 14:15
	<i>Units/RL:</i>	mg/kg RL					
	Chloride	398 24.9	37.5 4.99	88.2 5.00	628 25.3	82.0 4.98	51.8 49.5
TPH by SW8015 Mod	<i>Extracted:</i>	01.28.2021 17:00	01.28.2021 17:00	01.28.2021 17:00	01.28.2021 17:00	01.28.2021 17:00	01.28.2021 17:00
	<i>Analyzed:</i>	01.28.2021 23:02	01.29.2021 00:06	01.29.2021 00:26	01.29.2021 00:47	01.29.2021 01:08	01.29.2021 01:29
	<i>Units/RL:</i>	mg/kg RL					
	Gasoline Range Hydrocarbons (GRO)	<50.0 50.0	5750 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	50.3 50.0
Diesel Range Organics (DRO)	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	245 49.9	1150 50.0	
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	106 50.0	
Total TPH	<50.0 50.0	5750 49.8	<50.0 50.0	<50.0 50.0	245 49.9	1310 50.0	

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 685962



Larson and Associates, Inc., Midland, TX

Project Name: Talco 25 35 35

Project Id: 20-0107-07

Date Received in Lab: Tue 01.26.2021 08:50

Contact: Mark Larson

Report Date: 02.02.2021 12:41

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	685962-007	685962-008	685962-009			
	<i>Field Id:</i>	C-7	C-8	Backfill-1			
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL			
	<i>Sampled:</i>	01.25.2021 14:52	01.25.2021 14:54	01.25.2021 14:23			
BTEX by EPA 8021B	<i>Extracted:</i>	01.29.2021 17:00	01.29.2021 17:00	01.29.2021 17:00			
	<i>Analyzed:</i>	01.30.2021 12:31	01.30.2021 12:51	01.30.2021 13:12			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		0.00308 0.00199	0.00427 0.00199	0.00526 0.00201			
Toluene		0.0107 0.00199	0.0106 0.00199	0.0155 0.00201			
Ethylbenzene		0.00455 0.00199	0.00463 0.00199	0.0210 0.00201			
m,p-Xylenes		0.0226 0.00398	0.0133 0.00398	0.117 0.00402			
o-Xylene		0.0149 0.00199	0.00862 0.00199	0.0339 0.00201			
Total Xylenes		0.0375 0.00199	0.0219 0.00199	0.151 0.00201			
Total BTEX		0.0558 0.00199	0.0414 0.00199	0.193 0.00201			
Chloride by EPA 300	<i>Extracted:</i>	01.27.2021 12:00	01.27.2021 12:00	01.27.2021 12:00			
	<i>Analyzed:</i>	01.27.2021 14:20	01.27.2021 14:25	01.27.2021 14:31			
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		44.0 4.99	45.4 4.98	8.04 4.95			
TPH by SW8015 Mod	<i>Extracted:</i>	01.28.2021 17:00	01.28.2021 17:00	01.28.2021 17:00			
	<i>Analyzed:</i>	01.29.2021 01:50	01.29.2021 02:11	01.29.2021 02:33			
	<i>Units/RL:</i>	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			
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0			
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0			

BRL - Below Reporting Limit

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

Analytical Report 685962

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Talco 25 35 35

20-0107-07

02.02.2021

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.02.2021

Project Manager: **Mark Larson**
Larson and Associates, Inc.

P. O. Box 50685
Midland, TX 79710

Reference: Eurofins Xenco, LLC Report No(s): **685962**
Talco 25 35 35
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 685962. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 685962 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
C-1	S	01.25.2021 09:35		685962-001
C-2	S	01.25.2021 09:40		685962-002
C-3	S	01.25.2021 09:42		685962-003
C-4	S	01.25.2021 09:44		685962-004
C-5	S	01.25.2021 14:49		685962-005
C-6	S	01.25.2021 14:50		685962-006
C-7	S	01.25.2021 14:52		685962-007
C-8	S	01.25.2021 14:54		685962-008
Backfill-1	S	01.25.2021 14:23		685962-009



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Talco 25 35 35

Project ID: 20-0107-07
Work Order Number(s): 685962

Report Date: 02.02.2021
Date Received: 01.26.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3149455 BTEX by EPA 8021B

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

Samples affected are: 685962-002.

Batch: LBA-3149651 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7720309-1-BKS,7720309-1-BLK,685962-008,685962-004.



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-1** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-001 Date Collected: 01.25.2021 09:35
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 10:00 % Moisture:
 Seq Number: 3149178 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	398	24.9	mg/kg	01.27.2021 15:48		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.28.2021 23:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.28.2021 23:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.28.2021 23:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.28.2021 23:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	01.28.2021 23:02	
o-Terphenyl	84-15-1	122	%	70-130	01.28.2021 23:02	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-1** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-001 Date Collected: 01.25.2021 09:35
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.2021 10:28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.2021 10:28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.2021 10:28	U	1
m,p-Xylenes	179601-23-1	0.00679	0.00398	mg/kg	01.30.2021 10:28		1
o-Xylene	95-47-6	0.00278	0.00199	mg/kg	01.30.2021 10:28		1
Total Xylenes	1330-20-7	0.00957	0.00199	mg/kg	01.30.2021 10:28		1
Total BTEX		0.00957	0.00199	mg/kg	01.30.2021 10:28		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.30.2021 10:28	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 10:28	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-2** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-002 Date Collected: 01.25.2021 09:40
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 10:00 % Moisture:
 Seq Number: 3149178 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	37.5	4.99	mg/kg	01.27.2021 15:53		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	5750	49.8	mg/kg	01.29.2021 00:06		1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.29.2021 00:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.29.2021 00:06	U	1
Total TPH	PHC635	5750	49.8	mg/kg	01.29.2021 00:06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	01.29.2021 00:06	
o-Terphenyl	84-15-1	125	%	70-130	01.29.2021 00:06	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-2** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-002 Date Collected: 01.25.2021 09:40
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 10:49	U	1
Toluene	108-88-3	0.0259	0.00200	mg/kg	01.30.2021 10:49		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.2021 10:49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.2021 10:49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.2021 10:49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.2021 10:49	U	1
Total BTEX		0.0259	0.00200	mg/kg	01.30.2021 10:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	248	%	70-130	01.30.2021 10:49	**
1,4-Difluorobenzene	540-36-3	86	%	70-130	01.30.2021 10:49	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-3** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-003 Date Collected: 01.25.2021 09:42
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 12:00 % Moisture:
 Seq Number: 3149179 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	88.2	5.00	mg/kg	01.27.2021 13:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.29.2021 00:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.29.2021 00:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.29.2021 00:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.29.2021 00:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	01.29.2021 00:26	
o-Terphenyl	84-15-1	128	%	70-130	01.29.2021 00:26	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-3** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-003 Date Collected: 01.25.2021 09:42
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.2021 11:09	U	1
Toluene	108-88-3	0.00381	0.00201	mg/kg	01.30.2021 11:09		1
Ethylbenzene	100-41-4	0.0435	0.00201	mg/kg	01.30.2021 11:09		1
m,p-Xylenes	179601-23-1	0.140	0.00402	mg/kg	01.30.2021 11:09		1
o-Xylene	95-47-6	0.0518	0.00201	mg/kg	01.30.2021 11:09		1
Total Xylenes	1330-20-7	0.192	0.00201	mg/kg	01.30.2021 11:09		1
Total BTEX		0.239	0.00201	mg/kg	01.30.2021 11:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.30.2021 11:09	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.30.2021 11:09	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-4** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-004 Date Collected: 01.25.2021 09:44
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 01.27.2021 12:00 Basis: Wet Weight
 Seq Number: 3149179

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	628	25.3	mg/kg	01.27.2021 13:54		5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 01.28.2021 17:00 Basis: Wet Weight
 Seq Number: 3149651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.29.2021 00:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.29.2021 00:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.29.2021 00:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.29.2021 00:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	01.29.2021 00:47	
o-Terphenyl	84-15-1	135	%	70-130	01.29.2021 00:47	**



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-4**
Lab Sample Id: 685962-004

Matrix: Soil
Date Collected: 01.25.2021 09:44

Date Received: 01.26.2021 08:50

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.29.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149455

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.30.2021 11:30	U	1
Toluene	108-88-3	0.00236	0.00198	mg/kg	01.30.2021 11:30		1
Ethylbenzene	100-41-4	0.00466	0.00198	mg/kg	01.30.2021 11:30		1
m,p-Xylenes	179601-23-1	0.0487	0.00396	mg/kg	01.30.2021 11:30		1
o-Xylene	95-47-6	0.0295	0.00198	mg/kg	01.30.2021 11:30		1
Total Xylenes	1330-20-7	0.0782	0.00198	mg/kg	01.30.2021 11:30		1
Total BTEX		0.0852	0.00198	mg/kg	01.30.2021 11:30		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	01.30.2021 11:30		
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.30.2021 11:30		



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Talco 25 35 35

Sample Id: **C-5** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-005 Date Collected: 01.25.2021 14:49
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 12:00 % Moisture:
 Seq Number: 3149179 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	82.0	4.98	mg/kg	01.27.2021 13:59		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.29.2021 01:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	245	49.9	mg/kg	01.29.2021 01:08		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.29.2021 01:08	U	1
Total TPH	PHC635	245	49.9	mg/kg	01.29.2021 01:08		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	01.29.2021 01:08	
o-Terphenyl	84-15-1	127	%	70-130	01.29.2021 01:08	



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Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-5** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-005 Date Collected: 01.25.2021 14:49
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.2021 11:50	U	1
Toluene	108-88-3	0.00207	0.00200	mg/kg	01.30.2021 11:50		1
Ethylbenzene	100-41-4	0.00267	0.00200	mg/kg	01.30.2021 11:50		1
m,p-Xylenes	179601-23-1	0.0182	0.00400	mg/kg	01.30.2021 11:50		1
o-Xylene	95-47-6	0.00935	0.00200	mg/kg	01.30.2021 11:50		1
Total Xylenes	1330-20-7	0.0276	0.00200	mg/kg	01.30.2021 11:50		1
Total BTEX		0.0323	0.00200	mg/kg	01.30.2021 11:50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	01.30.2021 11:50	
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.30.2021 11:50	



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Talco 25 35 35

Sample Id: **C-6** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-006 Date Collected: 01.25.2021 14:50
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 12:00 % Moisture:
 Seq Number: 3149179 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.8	49.5	mg/kg	01.27.2021 14:15		10

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	50.3	50.0	mg/kg	01.29.2021 01:29		1
Diesel Range Organics (DRO)	C10C28DRO	1150	50.0	mg/kg	01.29.2021 01:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	106	50.0	mg/kg	01.29.2021 01:29		1
Total TPH	PHC635	1310	50.0	mg/kg	01.29.2021 01:29		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	01.29.2021 01:29	
o-Terphenyl	84-15-1	127	%	70-130	01.29.2021 01:29	



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Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-6** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-006 Date Collected: 01.25.2021 14:50
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00224	0.00201	mg/kg	01.30.2021 12:10		1
Toluene	108-88-3	0.00454	0.00201	mg/kg	01.30.2021 12:10		1
Ethylbenzene	100-41-4	0.0108	0.00201	mg/kg	01.30.2021 12:10		1
m,p-Xylenes	179601-23-1	0.0139	0.00402	mg/kg	01.30.2021 12:10		1
o-Xylene	95-47-6	0.0289	0.00201	mg/kg	01.30.2021 12:10		1
Total Xylenes	1330-20-7	0.0428	0.00201	mg/kg	01.30.2021 12:10		1
Total BTEX		0.0604	0.00201	mg/kg	01.30.2021 12:10		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.30.2021 12:10		
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.2021 12:10		



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Talco 25 35 35

Sample Id: C-7 Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-007 Date Collected: 01.25.2021 14:52
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 12:00 % Moisture:
 Seq Number: 3149179 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.0	4.99	mg/kg	01.27.2021 14:20		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	01.29.2021 01:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	01.29.2021 01:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.29.2021 01:50	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.29.2021 01:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	88	%	70-130	01.29.2021 01:50	
o-Terphenyl	84-15-1	125	%	70-130	01.29.2021 01:50	



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Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-7** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-007 Date Collected: 01.25.2021 14:52
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00308	0.00199	mg/kg	01.30.2021 12:31		1
Toluene	108-88-3	0.0107	0.00199	mg/kg	01.30.2021 12:31		1
Ethylbenzene	100-41-4	0.00455	0.00199	mg/kg	01.30.2021 12:31		1
m,p-Xylenes	179601-23-1	0.0226	0.00398	mg/kg	01.30.2021 12:31		1
o-Xylene	95-47-6	0.0149	0.00199	mg/kg	01.30.2021 12:31		1
Total Xylenes	1330-20-7	0.0375	0.00199	mg/kg	01.30.2021 12:31		1
Total BTEX		0.0558	0.00199	mg/kg	01.30.2021 12:31		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.30.2021 12:31	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.30.2021 12:31	



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-8** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-008 Date Collected: 01.25.2021 14:54
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 01.27.2021 12:00 % Moisture:
 Seq Number: 3149179 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	45.4	4.98	mg/kg	01.27.2021 14:25		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.28.2021 17:00 % Moisture:
 Seq Number: 3149651 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	01.29.2021 02:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	01.29.2021 02:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.29.2021 02:11	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.29.2021 02:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	01.29.2021 02:11	
o-Terphenyl	84-15-1	136	%	70-130	01.29.2021 02:11	**



Certificate of Analytical Results 685962

Larson and Associates, Inc., Midland, TX

Talco 25 35 35

Sample Id: **C-8** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-008 Date Collected: 01.25.2021 14:54
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00427	0.00199	mg/kg	01.30.2021 12:51		1
Toluene	108-88-3	0.0106	0.00199	mg/kg	01.30.2021 12:51		1
Ethylbenzene	100-41-4	0.00463	0.00199	mg/kg	01.30.2021 12:51		1
m,p-Xylenes	179601-23-1	0.0133	0.00398	mg/kg	01.30.2021 12:51		1
o-Xylene	95-47-6	0.00862	0.00199	mg/kg	01.30.2021 12:51		1
Total Xylenes	1330-20-7	0.0219	0.00199	mg/kg	01.30.2021 12:51		1
Total BTEX		0.0414	0.00199	mg/kg	01.30.2021 12:51		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.30.2021 12:51		
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.30.2021 12:51		



Certificate of Analytical Results 685962

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Talco 25 35 35

Sample Id: **Backfill-1** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-009 Date Collected: 01.25.2021 14:23
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 01.27.2021 12:00 Basis: Wet Weight
 Seq Number: 3149179

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.04	4.95	mg/kg	01.27.2021 14:31		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 01.28.2021 17:00 Basis: Wet Weight
 Seq Number: 3149651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.29.2021 02:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.29.2021 02:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.29.2021 02:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.29.2021 02:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.29.2021 02:33	
o-Terphenyl	84-15-1	121	%	70-130	01.29.2021 02:33	



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Talco 25 35 35

Sample Id: **Backfill-1** Matrix: Soil Date Received: 01.26.2021 08:50
 Lab Sample Id: 685962-009 Date Collected: 01.25.2021 14:23
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: KTL
 Analyst: KTL Date Prep: 01.29.2021 17:00 % Moisture:
 Seq Number: 3149455 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00526	0.00201	mg/kg	01.30.2021 13:12		1
Toluene	108-88-3	0.0155	0.00201	mg/kg	01.30.2021 13:12		1
Ethylbenzene	100-41-4	0.0210	0.00201	mg/kg	01.30.2021 13:12		1
m,p-Xylenes	179601-23-1	0.117	0.00402	mg/kg	01.30.2021 13:12		1
o-Xylene	95-47-6	0.0339	0.00201	mg/kg	01.30.2021 13:12		1
Total Xylenes	1330-20-7	0.151	0.00201	mg/kg	01.30.2021 13:12		1
Total BTEX		0.193	0.00201	mg/kg	01.30.2021 13:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.30.2021 13:12	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.30.2021 13:12	



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Analytical Method: Chloride by EPA 300

Seq Number: 3149178
MB Sample Id: 7720097-1-BLK

Matrix: Solid
LCS Sample Id: 7720097-1-BKS

Prep Method: E300P
Date Prep: 01.27.2021
LCSD Sample Id: 7720097-1-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	244	98	90-110	0	20	mg/kg	01.27.2021 12:02	

Analytical Method: Chloride by EPA 300

Seq Number: 3149179
MB Sample Id: 7720119-1-BLK

Matrix: Solid
LCS Sample Id: 7720119-1-BKS

Prep Method: E300P
Date Prep: 01.27.2021
LCSD Sample Id: 7720119-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	261	104	261	104	90-110	0	20	mg/kg	01.27.2021 12:15	

Analytical Method: Chloride by EPA 300

Seq Number: 3149178
Parent Sample Id: 685961-009

Matrix: Soil
MS Sample Id: 685961-009 S

Prep Method: E300P
Date Prep: 01.27.2021
MSD Sample Id: 685961-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.24	250	252	98	251	97	90-110	0	20	mg/kg	01.27.2021 13:32	

Analytical Method: Chloride by EPA 300

Seq Number: 3149178
Parent Sample Id: 685961-015

Matrix: Soil
MS Sample Id: 685961-015 S

Prep Method: E300P
Date Prep: 01.27.2021
MSD Sample Id: 685961-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	44.1	252	305	104	292	98	90-110	4	20	mg/kg	01.27.2021 12:18	

Analytical Method: Chloride by EPA 300

Seq Number: 3149179
Parent Sample Id: 685962-003

Matrix: Soil
MS Sample Id: 685962-003 S

Prep Method: E300P
Date Prep: 01.27.2021
MSD Sample Id: 685962-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	88.2	250	346	103	346	103	90-110	0	20	mg/kg	01.27.2021 13:44	

Analytical Method: Chloride by EPA 300

Seq Number: 3149179
Parent Sample Id: 686113-001

Matrix: Soil
MS Sample Id: 686113-001 S

Prep Method: E300P
Date Prep: 01.27.2021
MSD Sample Id: 686113-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.3	251	290	103	290	103	90-110	0	20	mg/kg	01.27.2021 12:31	

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



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Analytical Method: TPH by SW8015 Mod

Seq Number: 3149651

MB Sample Id: 7720309-1-BLK

Matrix: Solid

LCS Sample Id: 7720309-1-BKS

Prep Method: SW8015P

Date Prep: 01.28.2021

LCSD Sample Id: 7720309-1-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	1000	100	946	95	70-130	6	20	mg/kg	01.28.2021 22:19	
Diesel Range Organics (DRO)	<50.0	1000	995	100	916	92	70-130	8	20	mg/kg	01.28.2021 22:19	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		105		103		70-130	%	01.28.2021 22:19
o-Terphenyl	146	**	133	**	126		70-130	%	01.28.2021 22:19

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149651

MB Sample Id: 7720309-1-BLK

Matrix: Solid

MB Sample Id: 7720309-1-BLK

Prep Method: SW8015P

Date Prep: 01.28.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.28.2021 21:58	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149651

Parent Sample Id: 685962-001

Matrix: Soil

MS Sample Id: 685962-001 S

Prep Method: SW8015P

Date Prep: 01.28.2021

MSD Sample Id: 685962-001 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	930	93	882	88	70-130	5	20	mg/kg	01.28.2021 23:23	
Diesel Range Organics (DRO)	<49.9	998	911	91	825	83	70-130	10	20	mg/kg	01.28.2021 23:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		87		70-130	%	01.28.2021 23:23
o-Terphenyl	107		98		70-130	%	01.28.2021 23:23

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149455

MB Sample Id: 7720382-1-BLK

Matrix: Solid

LCS Sample Id: 7720382-1-BKS

Prep Method: SW5035A

Date Prep: 01.29.2021

LCSD Sample Id: 7720382-1-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	0.104	104	0.102	102	70-130	2	35	mg/kg	01.30.2021 03:18	
Toluene	<0.00200	0.100	0.0988	99	0.0966	97	70-130	2	35	mg/kg	01.30.2021 03:18	
Ethylbenzene	<0.00200	0.100	0.0987	99	0.0967	97	70-130	2	35	mg/kg	01.30.2021 03:18	
m,p-Xylenes	<0.00400	0.200	0.192	96	0.188	94	70-130	2	35	mg/kg	01.30.2021 03:18	
o-Xylene	<0.00200	0.100	0.0951	95	0.0930	93	70-130	2	35	mg/kg	01.30.2021 03:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		102		100		70-130	%	01.30.2021 03:18
4-Bromofluorobenzene	101		95		93		70-130	%	01.30.2021 03:18

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 685962

Larson and Associates, Inc.

Talco 25 35 35

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149455

Parent Sample Id: 686141-001

Matrix: Solid

MS Sample Id: 686141-001 S

Prep Method: SW5035A

Date Prep: 01.29.2021

MSD Sample Id: 686141-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00179	0.0996	0.00662	5	0.00797	6	70-130	19	35	mg/kg	01.30.2021 03:59	X
Toluene	0.00465	0.0996	0.00809	3	0.00841	4	70-130	4	35	mg/kg	01.30.2021 03:59	X
Ethylbenzene	0.00148	0.0996	0.00590	4	0.00736	6	70-130	22	35	mg/kg	01.30.2021 03:59	X
m,p-Xylenes	0.00552	0.199	0.0130	4	0.0153	5	70-130	16	35	mg/kg	01.30.2021 03:59	X
o-Xylene	0.00171	0.0996	0.00733	6	0.00816	6	70-130	11	35	mg/kg	01.30.2021 03:59	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		98		70-130	%	01.30.2021 03:59
4-Bromofluorobenzene	111		97		70-130	%	01.30.2021 03:59

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



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

Data Reported to:

DATE: 1/26/2021 PAGE 1 OF 1
PO#: _____ LAB WORK ORDER#: 085902
PROJECT LOCATION OR NAME: TALCO AS 25 35
LAI PROJECT #: 20-0107-07 COLLECTOR: NU + DS

CHAIN-OF-CUSTODY

No 1411

TRRP report? Yes No

TIME ZONE: MST
Time zone/State:

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

Field Sample I.D. Lab # Date Time Matrix # of Containers

HCl HNO₃ H₂SO₄ NaOH ICE UNPRESSED PRESERVATION

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

FIELD NOTES

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO ₃	H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/>	ICE	UNPRESSED	ANALYSES	TURN AROUND TIME	LABORATORY USE ONLY
C-1		1/25/21	9:38	S	1				X		X	NORMAL <input checked="" type="checkbox"/>	RECEIVING TEMP: <u>32</u> THERM#: <u>128</u>
C-2			9:40								X		
C-3			9:42								X		
C-4			9:44								X		
C-5			14:48								X		
C-6			14:50								X		
C-7			14:52								X		
C-8			14:54								X		
Backfill-1			14:23								X		
TOTAL					9								

RELINQUISHED BY: (Signature) [Signature] DATE/TIME 1/26/21 8:50 RECEIVED BY: (Signature) [Signature]

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

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

LABORATORY: Xenco

TURN AROUND TIME
 NORMAL
 1 DAY
 2 DAY
 OTHER

LABORATORY USE ONLY:
 RECEIVING TEMP: 32 THERM#: 128
 CUSTODY SEALS - BROKEN INTACT NOT USED
 CARRIER BILL # _____
 HAND DELIVERED

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 01.26.2021 08.50.00 AM

Work Order #: 685962

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-3.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#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: 01.26.2021
 Brianna Teel

Checklist reviewed by: Holly Taylor Date: 01.28.2021
 Holly Taylor



Certificate of Analysis Summary 687437

Larson and Associates, Inc., Midland, TX

Project Name: Talco 25 25 35

Project Id: 20-0107-07

Date Received in Lab: Fri 02.05.2021 08:45

Contact: Mark Larson

Report Date: 02.10.2021 09:38

Project Location:

Project Manager: Holly Taylor

<i>Analysis Requested</i>	<i>Lab Id:</i>	687437-001	687437-002	687437-003	687437-004		
	<i>Field Id:</i>	C-2	C-4	C-5	C-6		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	02.04.2021 13:50	02.04.2021 11:20	02.04.2021 13:55	02.04.2021 14:00		
BTEX by EPA 8021B	<i>Extracted:</i>	02.05.2021 15:00	02.05.2021 15:00	02.05.2021 15:00	02.05.2021 15:00		
	<i>Analyzed:</i>	02.05.2021 21:49	02.05.2021 22:15	02.05.2021 22:42	02.05.2021 23:09		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00201 0.00201		
Ethylbenzene		0.166 0.00199	0.00205 0.00200	<0.00201 0.00201	<0.00201 0.00201		
m,p-Xylenes		0.488 D 0.0797	0.0168 0.00399	<0.00402 0.00402	<0.00402 0.00402		
o-Xylene		0.348 D 0.0398	0.0635 0.00200	0.00260 0.00201	<0.00201 0.00201		
Total Xylenes		0.836 0.0398	0.0803 0.00200	0.00260 0.00201	<0.00201 0.00201		
Total BTEX		1.00 0.00199	0.0824 0.00200	0.00260 0.00201	<0.00201 0.00201		
Chloride by EPA 300	<i>Extracted:</i>	02.08.2021 08:45	02.08.2021 08:45	02.08.2021 08:45	02.08.2021 08:45		
	<i>Analyzed:</i>	02.08.2021 09:28	02.08.2021 09:33	02.08.2021 09:39	02.08.2021 09:44		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		107 4.96	50.1 4.98	34.3 4.99	33.6 5.02		
TPH by SW8015 Mod	<i>Extracted:</i>	02.07.2021 10:00	02.07.2021 10:00	02.07.2021 10:00	02.07.2021 10:00		
	<i>Analyzed:</i>	02.08.2021 01:49	02.08.2021 02:10	02.08.2021 02:31	02.08.2021 02:53		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.9 49.9		
Diesel Range Organics (DRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.9 49.9		
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.9 49.9		
Total TPH		<49.9 49.9	<49.9 49.9	<49.8 49.8	<49.9 49.9		

BRL - Below Reporting Limit

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

Analytical Report 687437

for

Larson and Associates, Inc.

Project Manager: Mark Larson

Talco 25 25 35

20-0107-07

02.10.2021

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.10.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **687437**
Talco 25 25 35
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687437. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687437 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

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 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
C-2	S	02.04.2021 13:50		687437-001
C-4	S	02.04.2021 11:20		687437-002
C-5	S	02.04.2021 13:55		687437-003
C-6	S	02.04.2021 14:00		687437-004



CASE NARRATIVE

Client Name: Larson and Associates, Inc.

Project Name: Talco 25 25 35

Project ID: 20-0107-07
Work Order Number(s): 687437

Report Date: 02.10.2021
Date Received: 02.05.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3150223 BTEX by EPA 8021B

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

Samples affected are: 687297-012 S,687437-001.

Batch: LBA-3150338 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are:

7721029-1-BKS,7721029-1-BSD.



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-2** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-001 Date Collected: 02.04.2021 13:50
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 02.08.2021 08:45 % Moisture:
 Seq Number: 3150407 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	107	4.96	mg/kg	02.08.2021 09:28		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 02.07.2021 10:00 % Moisture:
 Seq Number: 3150338 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.08.2021 01:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.08.2021 01:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.08.2021 01:49	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.08.2021 01:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-130	02.08.2021 01:49	
o-Terphenyl	84-15-1	102	%	70-130	02.08.2021 01:49	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-2** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-001 Date Collected: 02.04.2021 13:50
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 02.05.2021 15:00 % Moisture:
 Seq Number: 3150223 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.05.2021 21:49	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.05.2021 21:49	U	1
Ethylbenzene	100-41-4	0.166	0.00199	mg/kg	02.05.2021 21:49		1
m,p-Xylenes	179601-23-1	0.488	0.0797	mg/kg	02.06.2021 19:47	D	20
o-Xylene	95-47-6	0.348	0.0398	mg/kg	02.06.2021 19:47	D	20
Total Xylenes	1330-20-7	0.836	0.0398	mg/kg	02.06.2021 19:47		20
Total BTEX		1.00	0.00199	mg/kg	02.06.2021 19:47		20
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.05.2021 21:49		
4-Bromofluorobenzene	460-00-4	149	%	70-130	02.05.2021 21:49	**	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-4** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-002 Date Collected: 02.04.2021 11:20
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 02.08.2021 08:45 % Moisture:
 Seq Number: 3150407 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.1	4.98	mg/kg	02.08.2021 09:33		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 02.07.2021 10:00 % Moisture:
 Seq Number: 3150338 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.08.2021 02:10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.08.2021 02:10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.08.2021 02:10	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.08.2021 02:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	02.08.2021 02:10	
o-Terphenyl	84-15-1	103	%	70-130	02.08.2021 02:10	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-4** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-002 Date Collected: 02.04.2021 11:20
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 02.05.2021 15:00 % Moisture:
 Seq Number: 3150223 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.05.2021 22:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.05.2021 22:15	U	1
Ethylbenzene	100-41-4	0.00205	0.00200	mg/kg	02.05.2021 22:15		1
m,p-Xylenes	179601-23-1	0.0168	0.00399	mg/kg	02.05.2021 22:15		1
o-Xylene	95-47-6	0.0635	0.00200	mg/kg	02.05.2021 22:15		1
Total Xylenes	1330-20-7	0.0803	0.00200	mg/kg	02.05.2021 22:15		1
Total BTEX		0.0824	0.00200	mg/kg	02.05.2021 22:15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	120	%	70-130	02.05.2021 22:15	
1,4-Difluorobenzene	540-36-3	111	%	70-130	02.05.2021 22:15	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-5** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-003 Date Collected: 02.04.2021 13:55
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 02.08.2021 08:45 % Moisture:
 Seq Number: 3150407 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.3	4.99	mg/kg	02.08.2021 09:39		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 02.07.2021 10:00 % Moisture:
 Seq Number: 3150338 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	02.08.2021 02:31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	02.08.2021 02:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	02.08.2021 02:31	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	02.08.2021 02:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	02.08.2021 02:31	
o-Terphenyl	84-15-1	102	%	70-130	02.08.2021 02:31	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-5** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-003 Date Collected: 02.04.2021 13:55
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 02.05.2021 15:00 % Moisture:
 Seq Number: 3150223 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.05.2021 22:42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.05.2021 22:42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.05.2021 22:42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.05.2021 22:42	U	1
o-Xylene	95-47-6	0.00260	0.00201	mg/kg	02.05.2021 22:42		1
Total Xylenes	1330-20-7	0.00260	0.00201	mg/kg	02.05.2021 22:42		1
Total BTEX		0.00260	0.00201	mg/kg	02.05.2021 22:42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	02.05.2021 22:42	
1,4-Difluorobenzene	540-36-3	113	%	70-130	02.05.2021 22:42	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-6** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-004 Date Collected: 02.04.2021 14:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE
 Analyst: CHE Date Prep: 02.08.2021 08:45 % Moisture:
 Seq Number: 3150407 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.6	5.02	mg/kg	02.08.2021 09:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: ARM
 Analyst: ARM Date Prep: 02.07.2021 10:00 % Moisture:
 Seq Number: 3150338 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	02.08.2021 02:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	02.08.2021 02:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	02.08.2021 02:53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	02.08.2021 02:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	02.08.2021 02:53	
o-Terphenyl	84-15-1	103	%	70-130	02.08.2021 02:53	



Certificate of Analytical Results 687437

Larson and Associates, Inc., Midland, TX

Talco 25 25 35

Sample Id: **C-6** Matrix: Soil Date Received: 02.05.2021 08:45
 Lab Sample Id: 687437-004 Date Collected: 02.04.2021 14:00
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A
 Tech: MNR
 Analyst: MNR Date Prep: 02.05.2021 15:00 % Moisture:
 Seq Number: 3150223 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.05.2021 23:09	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.05.2021 23:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	126	%	70-130	02.05.2021 23:09	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.05.2021 23:09	



Larson and Associates, Inc.
Talco 25 25 35

Analytical Method: Chloride by EPA 300

Seq Number: 3150407

MB Sample Id: 7720975-1-BLK

Matrix: Solid

LCS Sample Id: 7720975-1-BKS

Prep Method: E300P

Date Prep: 02.08.2021

LCSD Sample Id: 7720975-1-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	255	102	256	102	90-110	0	20	mg/kg	02.08.2021 09:01	

Analytical Method: Chloride by EPA 300

Seq Number: 3150407

Parent Sample Id: 687415-060

Matrix: Soil

MS Sample Id: 687415-060 S

Prep Method: E300P

Date Prep: 02.08.2021

MSD Sample Id: 687415-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	283	252	521	94	518	93	90-110	1	20	mg/kg	02.08.2021 09:17	

Analytical Method: Chloride by EPA 300

Seq Number: 3150407

Parent Sample Id: 687440-006

Matrix: Soil

MS Sample Id: 687440-006 S

Prep Method: E300P

Date Prep: 02.08.2021

MSD Sample Id: 687440-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.7	248	292	103	296	105	90-110	1	20	mg/kg	02.08.2021 10:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150338

MB Sample Id: 7721029-1-BLK

Matrix: Solid

LCS Sample Id: 7721029-1-BKS

Prep Method: SW8015P

Date Prep: 02.07.2021

LCSD Sample Id: 7721029-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1080	108	1060	106	70-130	2	20	mg/kg	02.07.2021 22:17	
Diesel Range Organics (DRO)	<50.0	1000	1150	115	1140	114	70-130	1	20	mg/kg	02.07.2021 22:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	96		126		126		70-130	%	02.07.2021 22:17
o-Terphenyl	111		134	**	150	**	70-130	%	02.07.2021 22:17

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150338

MB Sample Id: 7721029-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 02.07.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	02.07.2021 21:56	

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 687437

Larson and Associates, Inc.
Talco 25 25 35

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150338
Parent Sample Id: 687484-001

Matrix: Soil
MS Sample Id: 687484-001 S

Prep Method: SW8015P
Date Prep: 02.07.2021
MSD Sample Id: 687484-001 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	1060	106	943	95	70-130	12	20	mg/kg	02.07.2021 23:22	
Diesel Range Organics (DRO)	<49.9	998	1060	106	1000	100	70-130	6	20	mg/kg	02.07.2021 23:22	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		100		70-130	%	02.07.2021 23:22
o-Terphenyl	108		106		70-130	%	02.07.2021 23:22

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150223
MB Sample Id: 7720901-1-BLK

Matrix: Solid
LCS Sample Id: 7720901-1-BKS

Prep Method: SW5035A
Date Prep: 02.05.2021
LCSD Sample Id: 7720901-1-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	0.125	125	0.123	123	70-130	2	35	mg/kg	02.05.2021 16:13	
Toluene	<0.00200	0.100	0.120	120	0.117	117	70-130	3	35	mg/kg	02.05.2021 16:13	
Ethylbenzene	<0.00200	0.100	0.118	118	0.117	117	70-130	1	35	mg/kg	02.05.2021 16:13	
m,p-Xylenes	<0.00400	0.200	0.245	123	0.243	122	70-130	1	35	mg/kg	02.05.2021 16:13	
o-Xylene	<0.00200	0.100	0.117	117	0.118	118	70-130	1	35	mg/kg	02.05.2021 16:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		106		105		70-130	%	02.05.2021 16:13
4-Bromofluorobenzene	87		124		129		70-130	%	02.05.2021 16:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150223
Parent Sample Id: 687297-012

Matrix: Soil
MS Sample Id: 687297-012 S

Prep Method: SW5035A
Date Prep: 02.05.2021
MSD Sample Id: 687297-012 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	0.114	114	0.0888	88	70-130	25	35	mg/kg	02.05.2021 17:05	
Toluene	<0.00200	0.100	0.111	111	0.0736	73	70-130	41	35	mg/kg	02.05.2021 17:05	F
Ethylbenzene	<0.00200	0.100	0.109	109	0.0758	75	70-130	36	35	mg/kg	02.05.2021 17:05	F
m,p-Xylenes	<0.00401	0.200	0.225	113	0.156	78	70-130	36	35	mg/kg	02.05.2021 17:05	F
o-Xylene	<0.00200	0.100	0.110	110	0.0767	76	70-130	36	35	mg/kg	02.05.2021 17:05	F

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		111		70-130	%	02.05.2021 17:05
4-Bromofluorobenzene	135	**	83		70-130	%	02.05.2021 17:05

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



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

Data Reported to:

DATE: 2-5-21 PAGE 1 OF 1
PO#: _____ LAB WORK ORDER#: 087437
PROJECT LOCATION OR NAME: Talco 25 25 35
LAI PROJECT #: 20-0107-07 COLLECTOR: TT

CHAIN-OF-CUSTODY

No 1495

TRRP report?
 Yes No

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

TIME ZONE:
Time zone/State:
MST

Field Sample I.D.

Lab #

Date

Time

Matrix

of Containers

HCl

HNO₃

H₂SO₄ NaOH

ICE

UNPRESERVED

PRESERVATION

ANALYSES

BTEX MTBE

TRPH 418.1 TPH 1005 TPH 7006

GASOLINE MOD 8015

DIESEL - MOD 8015

OIL - MOD 8015

VOC 8260

SVOC 8270

8081 PESTICIDES

8082 PESTICIDES

TBLP - METALS

TCLP - METALS (RCRA)

TOTAL METALS (RCRA)

LEAD - TOTAL

RCI

TDS

TOX

TSS

PH

- HOLDPAH
- OTHER HERBICIDES
- OTHER LIST
- Semi-VOC
- TCLP
- FLASHPOINT
- % MOISTURE
- CYANIDE
- CHROMIUM
- PECHLORATE
- HEXAVALENT CHROMIUM
- ALKALINITY
- ANIONS
- CHLORIDES

FIELD NOTES

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO ₃	H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/>	ICE	UNPRESERVED	ANALYSES	TURN AROUND TIME	LABORATORY USE ONLY:
C-2		2-4-21	1350	S	1					X	BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> TRPH 418.1 <input checked="" type="checkbox"/> TPH 1005 <input checked="" type="checkbox"/> TPH 7006 <input checked="" type="checkbox"/> GASOLINE MOD 8015 <input checked="" type="checkbox"/> DIESEL - MOD 8015 <input checked="" type="checkbox"/> OIL - MOD 8015 <input checked="" type="checkbox"/> VOC 8260 <input checked="" type="checkbox"/> SVOC 8270 <input checked="" type="checkbox"/> 8081 PESTICIDES <input checked="" type="checkbox"/> 8082 PESTICIDES <input checked="" type="checkbox"/> TBLP - METALS <input checked="" type="checkbox"/> TCLP - METALS (RCRA) <input checked="" type="checkbox"/> TOTAL METALS (RCRA) <input checked="" type="checkbox"/> LEAD - TOTAL <input checked="" type="checkbox"/> RCI <input checked="" type="checkbox"/> TDS <input checked="" type="checkbox"/> TOX <input checked="" type="checkbox"/> TSS <input checked="" type="checkbox"/> PH <input checked="" type="checkbox"/>	1 DAY <input checked="" type="checkbox"/> 2 DAY <input type="checkbox"/> OTHER <input type="checkbox"/>	RECEIVING TEMP: <u>-1.3</u> THERM#: <u>128</u> CUSTODY SEALS - <input type="checkbox"/> BROKEN <input type="checkbox"/> INTACT <input type="checkbox"/> NOT USED <input type="checkbox"/> CARRIER BILL # _____ <input type="checkbox"/> HAND DELIVERED
C-4			1120										
C-5			1355										
C-6			1400										
TOTAL	4												

RELINQUISHED BY: (Signature)
[Signature]

DATE/TIME

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)
[Signature]

DATE/TIME

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

LABORATORY: XenCo

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Larson and Associates, Inc.

Date/ Time Received: 02.05.2021 08.45.00 AM

Work Order #: 687437

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-1.3
#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: 02.05.2021
 Brianna Teel

Checklist reviewed by: Holly Taylor Date: 02.08.2021
 Holly Taylor

Appendix E
Waste Manifests



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231

Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No.

20006.
586823

LEASE OPERATOR/SHIPPER/COMPANY: <u>Chevron</u>	DATE: <u>01-25-21</u>
LEASE NAME: <u>Talco 25 25 35 Fed #1</u>	TIME: <u>3:40</u> AM/PM
RIG NAME & NUMBER:	VEHICLE NO: <u>101</u>
TRANSPORTER COMPANY: <u>m. matu</u>	PHONE:
GENERATOR COMPANY MAN'S NAME: <u>Michael Moore</u>	PHONE:

CHARGE TO: Chevron

TYPE OF MATERIAL

<input type="checkbox"/> Tank Bottoms	<input type="checkbox"/> Drilling Fluids	<input type="checkbox"/> Rinsate	<input type="checkbox"/> BS&W Content:
<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Contaminated Soil	<input type="checkbox"/> Jet Out	_____

Description: _____ CD

VOLUME OF MATERIAL

<input type="checkbox"/> BBLs. _____ :	<input checked="" type="checkbox"/> YARD <u>20</u> :	<input type="checkbox"/> _____
--	--	--------------------------------

RRC or API # 30-025-42548 C-133# m.

STICKERS, CODES, NUMBERS, ETC.

cc: 06619104x

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: Jesur Romo
(SIGNATURE)

FACILITY REPRESENTATIVE: ACUP
(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231

Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No.

2529
586830

LEASE OPERATOR/SHIPPER/COMPANY: <u>Chevron</u>	DATE: <u>1-25-21</u>
LEASE NAME: <u>Talco 25-25-35 fed # 1</u>	TIME: <u>4:17</u> AM/PM
RIG NAME & NUMBER:	VEHICLE NO: <u>027</u>
TRANSPORTER COMPANY: <u>Ornelas Trucking</u>	PHONE:
GENERATOR COMPANY MAN'S NAME: <u>Michael Moore</u>	PHONE: <u>575-394-1219</u>

CHARGE TO: Chevron

TYPE OF MATERIAL

- Tank Bottoms
- Drilling Fluids
- Rinsate
- BS&W Content:
- Solids
- Contaminated Soil
- Jet Out

Description: OD

VOLUME OF MATERIAL

- BBLS. _____ :
- YARD 20 _____ :
- _____ :

RRC or API #

C-133#

N.M

STICKERS, CODES, NUMBERS, ETC.

UCL89304 X

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: _____

(SIGNATURE)

FACILITY REPRESENTATIVE: R Aguirre

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231
Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No. 586823

LEASE OPERATOR/SHIPPER/COMPANY: <u>Chevron</u>	DATE: <u>01-25-21</u>
LEASE NAME: <u>1010 25 25 35 Fed #1</u>	TIME: <u>3:40</u> AM/PM
RIG NAME & NUMBER:	VEHICLE NO: <u>101</u>
TRANSPORTER COMPANY: <u>M. Moore</u>	PHONE:
GENERATOR COMPANY MAN'S NAME: <u>Michael Moore</u>	PHONE:

CHARGE TO: Chevron

TYPE OF MATERIAL Tank Bottoms Drilling Fluids Rinsate BS&W Content:
 Solids Contaminated Soil Jet Out

Description: _____

VOLUME OF MATERIAL BBLs. _____ : YARD 20 : _____

RRC or API # 30-025-42548 C-133# m

STICKERS, CODES, NUMBERS, ETC.

cc: 06619047

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: Jesus Pineda

(SIGNATURE)

FACILITY REPRESENTATIVE: ACR

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter

CHEVRON MCBU

Eunice, NM

NO #EUN- **2328** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO. **T151**

G E N E R A T O R	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 1/25/21
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

a.	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
		No.	Type			
	Soil UCLG 9504X - Talco	1	TR	20 yds		
	Talco 25 25 35 Fed #1					
	API 30-025-42548					
	Cost Code UCLG 9504X					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
---------------------------------------	-----------------------

**In Case of Emergency or Spill, Contact
TROY COOLEY 281-881-6211
CHEMTREC 800-424-9300**

14.	24-HOUR EMERGENCY NO.
-----	-----------------------

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME Michael Moore	SIGNATURE <i>Michael Moore</i>	DATE 1/25/21
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16. TRANSPORTER (1) NAME M Mala Trucking LLC Jesol Mono IN CASE OF EMERGENCY CONTACT: Robert Nelson EMERGENCY PHONE: 432-664-4804	17. TRANSPORTER (2) NAME IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:
---	--

18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____
--	--

ADDRESS:	PHONE:
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PERMIT NO.	20. COMMENTS
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21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE AWP	CALL NO.	DATE 1-25-21	TIME 3:40pm
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Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231

CHEVRON MCBU

586830

Eunice, NM

NO #EUN- **2329** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO. **637**

G E N E R A T O R	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 1/25/21
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

N E R A T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
	a. Soil	1 TT	20 yds		
	b. Telco 25 25 35 Fed #1				
	c. API 30-025-42548				
	d. UCLG9504X				

A	12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
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**In Case of Emergency or Spill, Contact
TROY COOLEY 281-881-6211
CHEMTREC 800-424-9300**

T	14.	24-HOUR EMERGENCY NO.
----------	-----	-----------------------

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

R	PRINTED TYPED NAME Michael Moore	SIGNATURE <i>[Signature]</i>	DATE 1/25/21
----------	--	---------------------------------	------------------------

T R A N S P O R T E R S	16. TRANSPORTER (1) NAME Ornelas Trucking & Octavio Ornelas	17. TRANSPORTER (2) NAME
	IN CASE OF EMERGENCY CONTACT: Robert Nelson EMERGENCY PHONE: 432-661-4504	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

R	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE [Signature] DATE 1-25-21	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE
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D I S P O S I T I O N	ADDRESS: Sundance Services West, Inc. P.O. Box 1737 Eunice, NM 88231 575-390-7842	PHONE:
	PERMIT NO. Permit # NM 1-62	20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

L Y	AUTHORIZED SIGNATURE R Aguirre	CELL NO.	DATE 1-25-21	TIME 4:19 pm
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Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231

CHEVRON MCBU

Eunice, NM

NO #EUN- **2328** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO. **T151**

G E N E R A T O R	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 1/25/21
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

N E R T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
		No.	Type			
a.	Soil UCLG 9304X - Talco	1	TR	20 yds		
b.	Talco 25 25 35 6-1 #1					
c.	API 50-025-4254					
d.	Cost Code UCLG 9304X					

A T O R	12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
	14. In Case of Emergency or Spill, Contact TROY COOLEY 281-881-6211 CHEMTREC 800-424-9300	24-HOUR EMERGENCY NO.

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

R E S P O N S I B L E	PRINTED TYPED NAME Michael Moore	SIGNATURE <i>[Signature]</i>	DATE 1/25/21
--	--	---------------------------------	------------------------

T R A N S P O R T E R S	16. TRANSPORTER (1) NAME Robes Nelson	17. TRANSPORTER (2) NAME
	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE: 432-6611-4501	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

R E S P O N S I B L E	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____
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D I S P O S I T O R	ADDRESS:	PHONE:
	PERMIT NO.	20. COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

L I C E N S E D	AUTHORIZED SIGNATURE ACCP	CELL NO.	DATE 1-25-21	TIME 3:40pm
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Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231

CHEVRON MCBU

586830

Eunice, NM

NO #EUN- **2329** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO. **637**

G E N E R A T O R	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 1/25/21
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
a. Soil	1	TT	20 yds		
b. Telco 25 25 35 Fed #1					
c. API 30-025-42548					
d. UCLG9504X					

12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
---------------------------------------	-----------------------

**In Case of Emergency or Spill, Contact
TROY COOLEY 281-881-6211
CHEMTREC 800-424-9300**

14.	24-HOUR EMERGENCY NO.
-----	-----------------------

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

PRINTED TYPED NAME <i>M. Dale Moore</i>	SIGNATURE <i>M. Dale Moore</i>	DATE 1/25/21
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16. TRANSPORTER (1) NAME Ornelas Trucking & OCTAVIO Ornelas IN CASE OF EMERGENCY CONTACT: Robert Nelson EMERGENCY PHONE: 432-661-4504	17. TRANSPORTER (2) NAME _____ IN CASE OF EMERGENCY CONTACT: _____ EMERGENCY PHONE: _____
---	--

18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE <i>Ornelas</i> DATE 1-25-21	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____
--	--

	ADDRESS: Sundance Services West, Inc.	PHONE:
--	---	--------

PERMIT NO.	20. COMMENTS P.O. Box 1737 Eunice, NM 88231 575-390-7842
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21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE R. Aguirre	CELL NO.	DATE 1-25-21	TIME 4:19 pm
---	----------	------------------------	------------------------

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231
Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No. **587483**

LEASE OPERATOR/SHIPPER/COMPANY: <u>Chevron</u>	DATE: <u>02-04-21</u>
LEASE NAME: <u>Taico #25</u>	TIME: <u>3:38</u> AM/PM
RIG NAME & NUMBER:	VEHICLE NO: <u>1</u>
TRANSPORTER COMPANY: <u>Rocky Peke</u>	PHONE:
GENERATOR COMPANY MAN'S NAME: <u>Mike Nemanic</u>	PHONE: <u>832-294-4552</u>

CHARGE TO: Chevron

TYPE OF MATERIAL

Tank Bottoms Drilling Fluids Rinsate BS&W Content:
 Solids Contaminated Soil Jet Out

Description: OD

VOLUME OF MATERIAL

BBLs. _____ : YARD 12 : _____

RRC or API # C-133#

STICKERS, CODES, NUMBERS, ETC.

UCLG9J04X

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]
(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]
(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231
Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No.

2550
587491

LEASE OPERATOR/SHIPPER/COMPANY:

chevron

DATE: 02-04-21

LEASE NAME:

Taico #25

TIME: 4:55 AM/PM

RIG NAME & NUMBER:

VEHICLE NO: 027

TRANSPORTER COMPANY:

Ornelas Trucking

PHONE:

GENERATOR COMPANY MAN'S NAME:

Mike Nemanic

PHONE: 837-294-4558

CHARGE TO:

chevron

TYPE OF MATERIAL

- Tank Bottoms
- Drilling Fluids
- Rinsate
- BS&W Content:
- Solids
- Contaminated Soil
- Jet Out

Description:

OD

VOLUME OF MATERIAL

- BBLs. _____ :
- YARD 20 _____ :
- _____

RRC or API #

C-133#

STICKERS, CODES, NUMBERS, ETC.

UCUGAJ04X

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER:

[Signature]

FACILITY REPRESENTATIVE:

[Signature]

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231
Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No. **587483**

LEASE OPERATOR/SHIPPER/COMPANY: Chevron

DATE: 02-04-21

LEASE NAME: Taico #25

TIME: 3:38 AM/PM

RIG NAME & NUMBER:

VEHICLE NO: 1

TRANSPORTER COMPANY: Rocky Peke

PHONE:

GENERATOR COMPANY MAN'S NAME: Mike Nemanic

PHONE: 832-294-452

CHARGE TO: Chevron

TYPE OF MATERIAL

- Tank Bottoms
- Drilling Fluids
- Rinsate
- BS&W Content:
- Solids
- Contaminated Soil
- Jet Out

Description: OD

VOLUME OF MATERIAL

- BBLs. _____ :
- YARD 12 :
- _____ :

RRC or API #

C-133#

STICKERS, CODES, NUMBERS, ETC.

UCLG97047

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]

(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]

(SIGNATURE)

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter



SUNDANCE SERVICES WEST, INC.

P.O. Box 1737 Eunice, New Mexico 88231
Business: (575) 394-2511 • Disposal: (575) 390-7842

TICKET No.

8338
587491

LEASE OPERATOR/SHIPPER/COMPANY: <u>Chevron</u>	DATE: <u>02-04-21</u>
LEASE NAME: <u>Talco #25</u>	TIME: <u>4:55</u> AM/PM
RIG NAME & NUMBER:	VEHICLE NO: <u>027</u>
TRANSPORTER COMPANY: <u>Oriental Trucking</u>	PHONE:
GENERATOR COMPANY MAN'S NAME: <u>Mike Nemanic</u>	PHONE: <u>832-294-4558</u>

CHARGE TO: Chevron

TYPE OF MATERIAL

<input type="checkbox"/> Tank Bottoms	<input type="checkbox"/> Drilling Fluids	<input type="checkbox"/> Rinsate	<input type="checkbox"/> BS&W Content:
<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Contaminated Soil	<input type="checkbox"/> Jet Out	_____

Description: _____ OD

VOLUME OF MATERIAL

<input type="checkbox"/> BBLs. _____ :	<input checked="" type="checkbox"/> YARD <u>20</u> :	<input type="checkbox"/> _____ :
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RRC or API # C-133#

STICKERS, CODES, NUMBERS, ETC.

UCUGAJ04X

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]

FACILITY REPRESENTATIVE: [Signature]

White - Sundance

Canary - Sundance Acct #1

Pink - Transporter

CHEVRON MCBU

Eunice, NM

NO #EUN- **2331** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO.

G E	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 04 FEB 20
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
	a. Contaminated soil				
	b. Taico #25				
	c.				

A	12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
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T	14. In Case of Emergency or Spill, Contact PROF BOOLEY 221-924-8241 CHEMTREC 800-424-9300	MIKE NEMANIC 24-HOUR EMERGENCY NO. (832) 294-4558
---	--	---

O	15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.
---	---

R	PRINTED TYPED NAME YOUNG, JOSEPH	SIGNATURE 	DATE 04 FEB 20
---	--	---------------	--------------------------

T R A N S P O R T E R S	16. TRANSPORTER (1) NAME	17. TRANSPORTER (2) NAME
	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

T E R S	18. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____	19. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____
------------------	--	--

D F I A S C P I O L S I A T Y	ADDRESS:	PHONE:
	PERMIT NO.	20. COMMENTS

L Y	21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.		
	AUTHORIZED SIGNATURE ARP	CELL NO.	DATE 02/04/21

Sundance Services West, Inc.
P.O. Box 1797
Eunice, NM 88231
575-390-7822
Permit # NM-1-62

Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231

GENERATOR: COPY 1

TRANSPORTER: COPY 2

DISPOSAL SITE: COPY 3 & 4

CHEVRON MCBU

Eunice, NM

NO #EUN- **2332** NON-HAZARDOUS WASTE MANIFEST 1. PAGE ___ OF ___ 2. TRAILER NO.

G E	3. COMPANY NAME CHEVRON	4. ADDRESS 2401 Avenue 'O'	5. PICK-UP DATE 04 FEB 20
	PHONE NO. 575-394-1219	CITY STATE ZIP Eunice, NM 88231	6.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT WT/Vol.	11.
	a. Contaminated soil				
	b.				
	c.				

A	12. COMMENTS OR SPECIAL INSTRUCTIONS:	13. WASTE PROFILE NO.
---	---------------------------------------	-----------------------

T	14. In Case of Emergency or Spill, Contact XXXXXXXXXXXXXXXXXXXX CHEMTREC 800-424-9300	MIKE NEMANIC 24-HOUR EMERGENCY NO. (832) 294-4558
---	--	---

15. GENERATOR'S CERTIFICATION: Hereby declare that the contents of this consignment are fully and accurately described above.

R	PRINTED TYPED NAME YOUNG, JOSEPH	SIGNATURE 	DATE 04 FEB 20
---	--	---------------	--------------------------

T R A N S P O R T E R S	16. TRANSPORTER (1) NAME	17. TRANSPORTER (2) NAME
	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

R E S	18. TRANSPORTER (1): Acknowledgment of receipt of material	19. TRANSPORTER (2): Acknowledgment of receipt of material
	PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____	PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____

D I S C P I O L S I A T Y	ADDRESS:	PHONE:
	PERMIT NO.	COMMENTS

21. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

L Y	AUTHORIZED SIGNATURE AUP	CELL NO.	DATE 02-04-21	TIME 4:55 PM
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Disposal Site: Please complete Disposal Facility section at bottom of form and mail copy of completed form to Chevron Eunice PO Box 1949 Eunice, NM 88231

GENERATOR: COPY 1

TRANSPORTER: COPY 2

DISPOSAL SITE: COPY 3 & 4

69.704X

Appendix F
Photographs

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

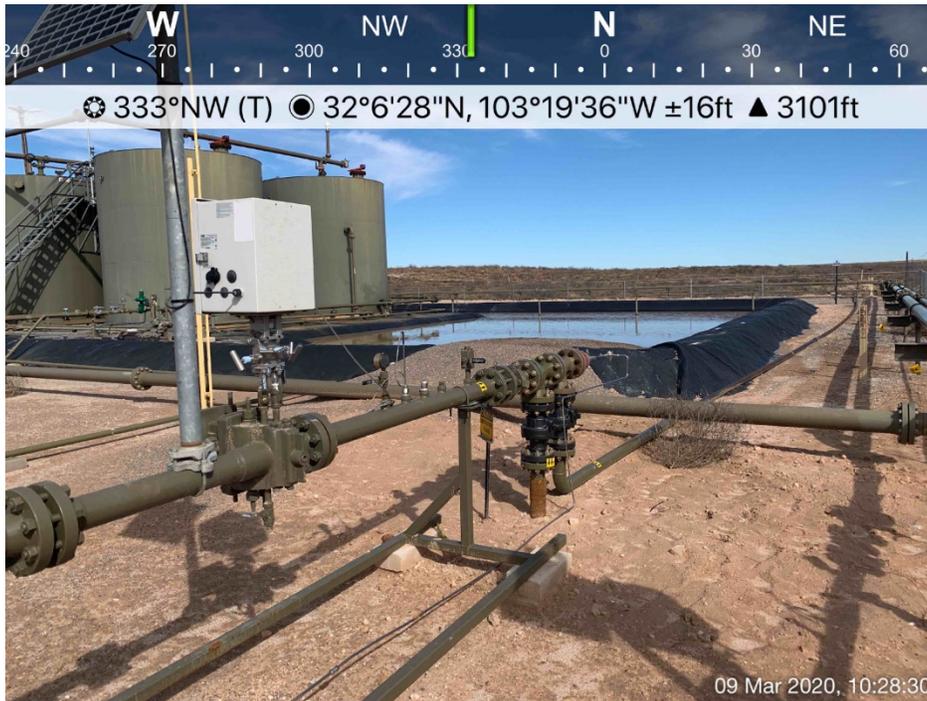


Stormwater contained within lined berm, viewing southeast



Stormwater contained within lined berm, viewing southwest

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020



Lined berm viewing northwest



Release source (load line) viewing north

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

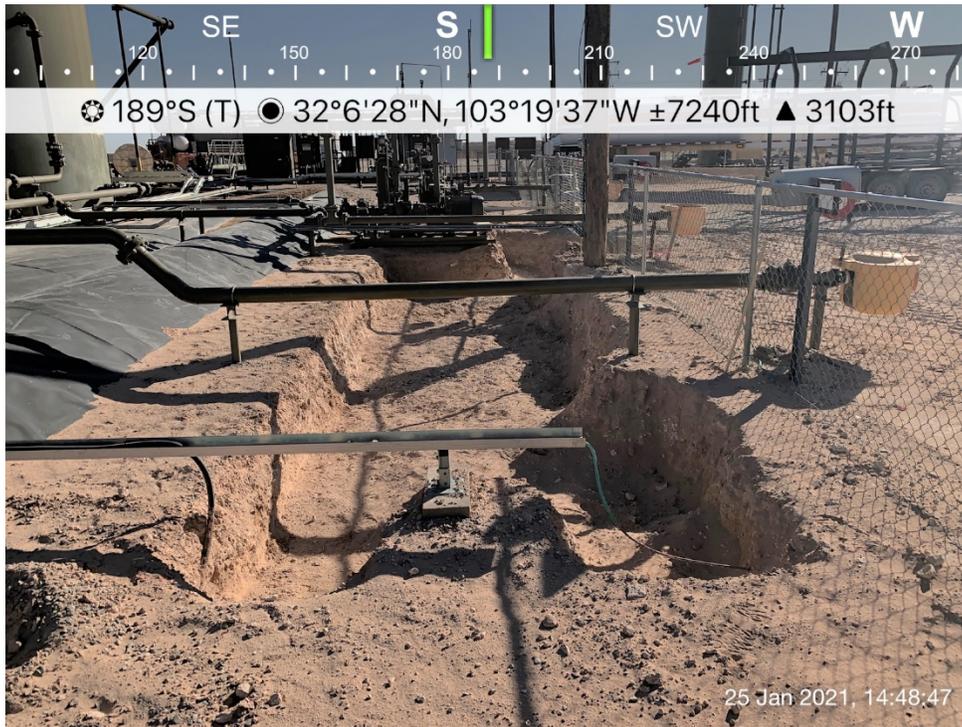


East area excavated to a depth of 2 feet bgs, January 25, 2021

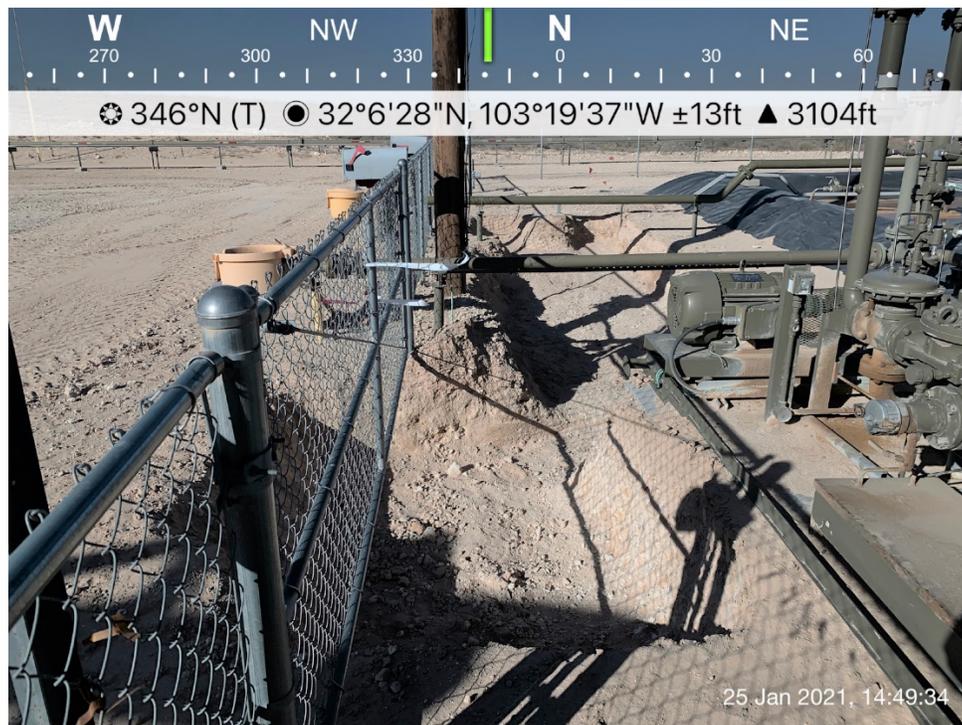


Soil stockpiled on liner prior to removal, January 25, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

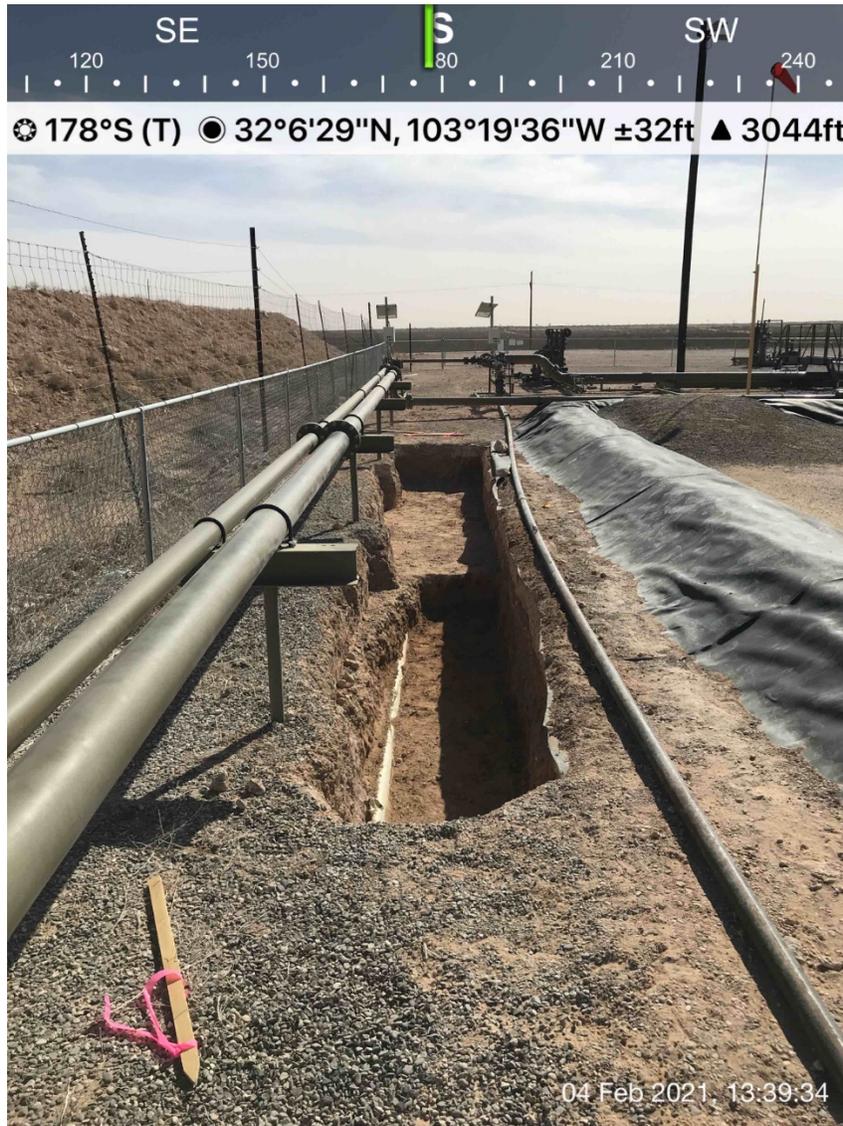


West area excavated to a depth of 2 feet bgs, January 25, 2021



West area excavated to a depth of 2 feet bgs, January 25, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020



Soil excavated encompassing C-2 to a depth of 3 feet bgs, February 4, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

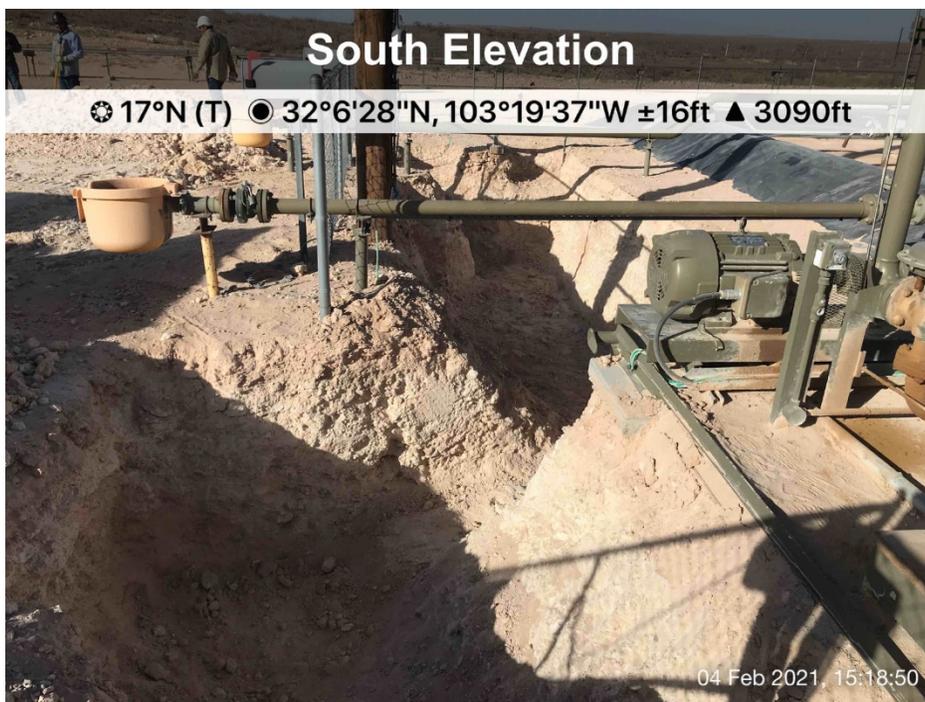


An additional 1 foot excavated from the sidewall of C-4, February 4, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

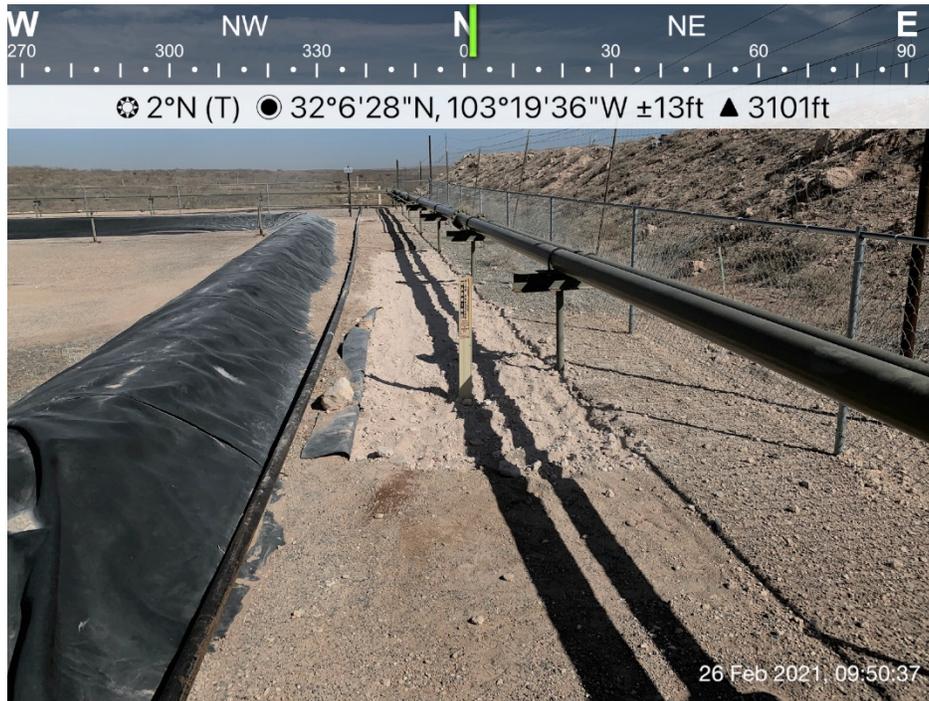


Soil excavated to a depth of 4.1 feet bgs encompassing C-5 and C-6, February 4, 2021



Soil excavated to a depth of 4.1 feet bgs encompassing C-5 and C-6, February 4, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020

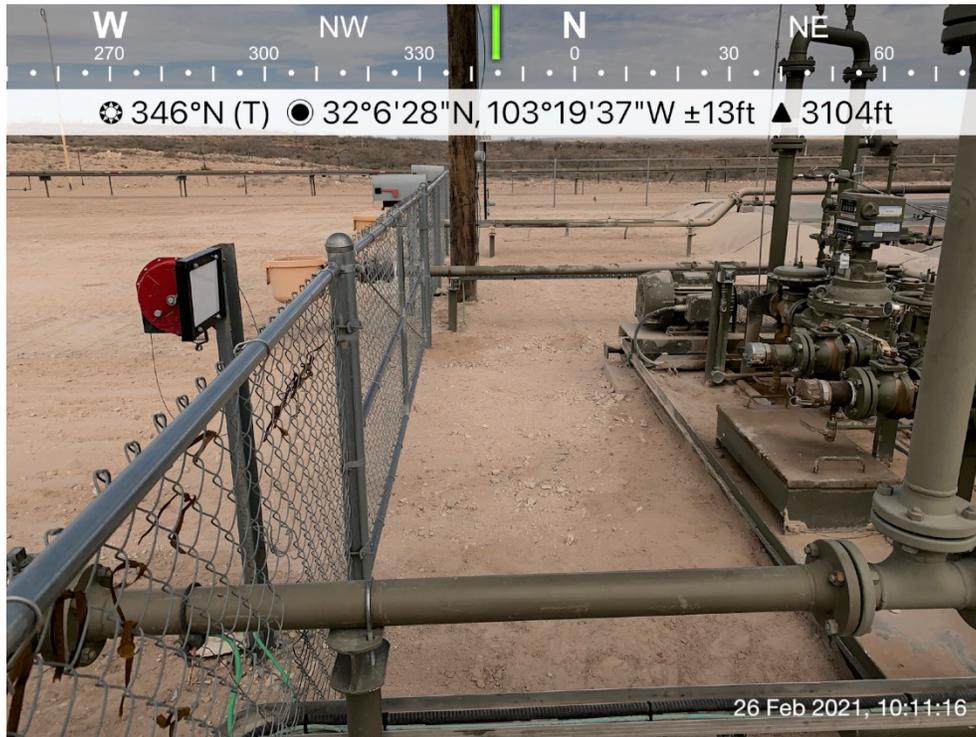


Backfilled eastern excavation area, February 26, 2021



Backfilled western excavation area, February 26, 2021

Tracking Number: nRM2006453458
Closure Report
Chevron USA, Inc., Talco 25 25 35 Federal #001H
Produced Water Release
March 3, 2020



Backfilled western area excavation, February 26, 2021

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 20713

CONDITIONS OF APPROVAL

Operator:	CHEVRON U S A INC	6301 Deauville Blvd	Midland, TX79706	OGRID:	4323	Action Number:	20713	Action Type:	C-141
OCD Reviewer				Condition					
chensley				Condition	None				