

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Unknown – Under Investigation	OGRID: Unknown
Contact Name: Braidy Moulder	Contact Telephone: 281-795-2286
Contact email: bmoulder@spurepllc.com	Incident # (assigned by OCD)
Contact mailing address: 920 Memorial City Way, Suite 1400, Houston TX 77024	

Location of Release Source

Latitude 32.801606 Longitude -104.088176
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: State I #16 – Brine Seep	Site Type: Pasture
Date Release Discovered: December 23, 2020	API# 30-015-03187

Unit Letter	Section	Township	Range	County
M	28	17S	29E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☒ Other (describe) Brine Water	Volume/Weight Released (provide units) Approximately 100,500bbls	Volume/Weight Recovered (provide units) Approximately 100,000bbls

Cause of Release: Unknown: Brine water was discovered seeping to surface by aerial investigation services.

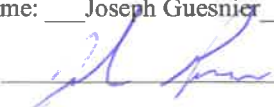
State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This release has a total volume of 25 bbls, consistent with the rule 19.15.29.7 this is classified as a major release
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, notice was emailed and phoned by Daniel Suniga a Spur Energy Partners representative to Dan Somilk who met Daniel on-site due to the nature of the unknown source of the release.	

Initial Response

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

☒ The source of the release has been stopped.	
☒ The impacted area has been secured to protect human health and the environment.	
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Joseph Guesnier</u>	Title: <u>Staff Scientist</u>
Signature: 	Date: <u>4/12/2021</u>
email: <u>jrguesnier@terracon.com</u>	Telephone: <u>806-544-9276</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
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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?

108 (ft bgs)

Did this release impact groundwater or surface water?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?

☐ Yes ☒ No

Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?

☐ Yes ☒ No

Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?

☐ Yes ☒ No

Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?

☐ Yes ☒ No

Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of a wetland?

☐ Yes ☒ No

Are the lateral extents of the release overlying a subsurface mine?

☐ Yes ☒ No

Are the lateral extents of the release overlying an unstable area such as karst geology?

☐ Yes ☒ No

Are the lateral extents of the release within a 100-year floodplain?

☐ Yes ☐ No

Did the release impact areas **not** on an exploration, development, production, or storage site?

☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

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Printed Name: Joseph L. Guadner Title: Staff Scientist
Signature: [Signature] Date: 12-29-21
email: JLGuadner@Terracon.com Telephone: 806-544-9276

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.

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Printed Name: Joseph Greenlee Title: Staff Scientist
Signature: [Signature] Date: 12-29-21
email: JGreenlee@Terracon.com Telephone: 866-544-9276

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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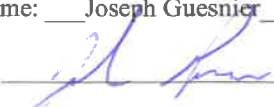
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Signature: [Signature] Date: 12-29-21
email: JGreenlee@Terracon.com Telephone: 866-544-9276

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Release Investigation and Remedial Action Plan

General Site Information:

State I #16 Brine Seep

Site Contact:

Braidy Moulder, Spur Energy Partners
920 Memorial City Way, Suite 1000, Houston, Texas 77024
(713) 264-2517

Depth to Ground Water

108 feet below grade surface

Distance to Nearest Surface Water

Lake McMillan (South-eastern Eddy County, NM), approximately 7.5 miles to the southwest

Driving Directions

From Hwy 82, and CR 210 go south 0.94 mi, then east onto lease road 0.17 mi., then 80 feet east. to release location.

Legal Description

Unit M, Section 28, T17S, R29E, Eddy County, New Mexico

December 10, 2021

Terracon Project No. AR217001

Prepared for:

Spur Energy Partners LLC
Houston, Texas

Prepared by:

Terracon Consultants, Inc.
Lubbock, Texas

Offices Nationwide
Employee-Owned

Established in 1965
terracon.com

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

December 10, 2021



Spur Energy Partners LLC
920 Memorial City Way, Suite 1000
Houston, Texas 77024

Attn: Mr. Braidy Moulder
P: 713-264-2517
E: bmoulder@spurepllc.com

RE: Release Investigation and Remedial Action Plan

State I #16 Brine Seep
Unit M, Section 28, Township 17 South, Range 29 East
Eddy County, New Mexico
Terracon Project No. AR217001

Dear Mr. Moulder,

Terracon Consultants, Inc. (Terracon) is pleased to submit our Release Investigation and Remedial Action Plan (RAP) for the site referenced above. The Release Investigation and RAP were developed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning clean-up actions required for releases of crude oil and produced water. Based on the release investigation assessment, Terracon recommends the following actions be taken to achieve protection of fresh water and the environment in accordance with NMOCD regulations. Terracon developed the Release Investigation and RAP in general accordance with our scope of work (AR17001) dated December 23, 2020.

- Based on the magnitude of chloride concentrations detected within the release margins to depths subject to NMOCD Reclamation requirements, approximately 5,000 cubic yards (cy) of chloride impacted material will be required to be excavated and disposed of at a permitted disposal facility under manifest.
- Following excavation to 4 ft. bgs, the depths of impacted material from 4 to 6 ft. bgs will be excavated to be treated and amended with Gypsum, hay, urea and imported backfill material, to achieve soil contaminant levels below the desired NMOCD remediation action levels (RAL).
- Following excavation to restrictive layer depths, vertical and horizontal delineation samples will be collected from the base and walls of the excavation to confirm the remaining levels of soil contaminants are below the desired NMOCD remediation action level (RAL).
- Following confirmation samples displaying that all remaining levels of soil contaminanats are below the desired NMOCD remediation action level (RAL), a 20 mil non-welded liner will be utilized to encapsulate the impacted materials below



Terracon Consultants, Inc. 5827 50th st. Suite 1 Lubbock, Texas 79424
P (806) 300 0140 F (806) 797 0947 terracon.com

Geotechnical

Environmental

Construction Materials

Facilities

Release Investigation and Remedial Action Plan

State I #16 Brine Seep ■ Eddy County, New Mexico

January 3, 2022 ■ Terracon Project No. AR217001

Terracon

the 4 ft. bgs. reclamation layer to ensure all remaining impacted soils will not impact the upper vasso zone of soils.

- Based on the anticipated depth to groundwater and low presence of Karst and pending the confirmed vertical delineation, it is anticipated that remediation at depths greater than 6 ft. bgs will not be required. Terracon will further delineate the vertical extent of chloride concentrations to ensure the protection of groundwater.
- Terracon will oversee backfilling activities and reseed the following submittal of the closure report in accordance with *NMOCD Re-vegetation guidelines (19.15.29.13)*

Terracon appreciates this opportunity to provide environmental services to Spur Energy Partners LLC (Spur). Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

Terracon Consultants, Inc.



Joseph Guesnier

Staff Scientist

Lubbock



Erin Loyd, P.G. (TX)

Principal

Office Manager – Lubbock



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APPENDIX B – TABLES & PROCEDURES

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Release Investigation and Remedial Action Plan
State I #16 Brine Seep
Unit M, Section 28, T17S, R29E
Eddy County, New Mexico
Terracon Project No. AR207115
December 10, 2021

1.0 SITE DESCRIPTION

The site is comprised of approximately 3 – acres of native pastureland impacted by a brine water seep, with the entire of the release extending into the pastureland. The site is within the Unit Letter M, Section 28, Township 17 South, Range 29 East, Eddy County, New Mexico.

The State I #16 Brine Seep cause is unknown and was discovered seeping to the surface by aerial investigation services. A Topographic Map illustrating the site location is included in Figure 1 and a Site Diagram illustrating soil sample locations is included as Figure 2 in Appendix A. A water well record search is also included as New Mexico Office of the State Engineer (NMOSE) Point of Diversion (POD) Location Map as Figure 6 in Appendix A. A map illustrating the site's location in reference to the NMOCD Karst mapping database is presented in Figure 8 in Appendix A.

2.0 SCOPE OF SERVICES

Terracon's scope of services is to investigate and remediate the magnitude and extent of the documented release and develop a Remedial Action Plan (RAP) in accordance with the NMOCD requirements that detail site closure activities to be completed. This RAP addresses the April 22, 2021 release of approximately 100,500 barrels (bbls) of produced water originating from an unknown seep.

3.0 INTRODUCTION AND NOTIFICATION

The following table provides detailed information regarding the December 23, 2020 brine seep at the State I #16 site in Eddy County, New Mexico:

Required Information	Site and Release information	
Responsible party	The facility is operated by Spur Energy Partners LLC	
Local contact	Contact: Mr. Braidy Moulder	P: (281) 795-2286 E: bmoulder@spurepllc.com
NMOCD Notification	Notice of the release was provided to the NMOCD District 2 Artesia Office by Braidy Moulder (Spur) on December 23, 2020.	

Responsive ■ Resourceful ■ Reliable

Release Investigation and Remedial Action Plan

State I #16 Brine Seep ■ Eddy County, New Mexico

December 10, 2021 ■ Terracon Project No. AR217001



Required Information	Site and Release information	
Facility description	State I #16 Brine Seep is in Eddy County, New Mexico. It is an approximate 3-acre area located within Unit M, Section 28, Township 17 South, Range 29 East, approximately 7.8 miles west of Loco Hills, New Mexico. The site is predominantly undeveloped native pastureland.	
Time of incident	December 23, 2020, discovered at 10:00 a.m.	
Discharge event	The cause of the brine leak is unknown and was discovered seeping to the surface by aerial investigation services. Site illustrated in Figure 2 of Appendix A	
Type of discharge	The documented fluids release occurred in open native pastureland adjacent to the State I #16 site and is affected at the surface to depth.	
Estimated Quantity of spilled material	Total Fluids: 100,500 bbls	Brine Water: 100,500 bbls
Site characteristics	Relatively flat with drainage following the native ground surface; very gently sloping to the southeast.	
Immediate corrective actions	Brine water was recovered utilizing vac trucks, and pumps to fill roll-off containers. A backhoe was utilized to open up the seep and discover the source of the release, and no source was discovered.	

4.0 INITIAL RESPONSE ACTIONS

4.1 Source Elimination

Initial source elimination was not able to be completed due to the unknown cause of the brine seep. Spur enlisted the services of Terracon to assess the impacted areas of the release and create a scope of work for the remediation of impacts above NMOCD regulatory limits.

- To Terracon's knowledge the seep began on December 23, 2020 and continued for approximately 45-60 days.
- High concentrations of H₂S gas were emitting from the seep along with black brine water. The high concentrations of H₂S gas limited the ability of crews to safely excavate or evaluate the release site.
- After discovery Spur utilized a sump to pump water from the seep into two roll-off containers and then had the water trucked to their GJ South SWD for disposal.
- After 10-15 days Spur had a poly line run directly from the seep to the SWD facility to reduce the cost of trucking.

Release Investigation and Remedial Action Plan

State I #16 Brine Seep ■ Eddy County, New Mexico

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- Once the seep concluded Terracon was able to safely enter the area to begin investigating the seep.

5.0 GENERAL SITE CHARACTERISTICS

Remediation Determining Information	Site Ranking Characteristics
<u>Facility description</u>	State I #16 Brine Seep is in Eddy County, New Mexico. It is an approximate 3-acre area located within Unit M, Section 28, Township 17 South, Range 29 East, approximately 7.8 miles west of Loco Hills, New Mexico. The site is predominantly undeveloped native pastureland.
<u>Site characteristics</u>	Relatively flat with drainage following the native ground surface; very gently sloping to the southeast.
<u>Groundwater</u> Appendix A – Figure 6 Appendix A – Figure 7	<u>POD Number:</u> (RA-08234) <u>Depth to Groundwater:</u> 108 ft. bgs <u>Distance to Well:</u> 0.25 miles to the southwest <u>Date Drilled:</u> Unknown <u>Date Measured:</u> July 24, 2019 <u>Groundwater Quality:</u> Groundwater quality at the site is predominately used for livestock production.
<u>Surface Water</u>	Lake McMillan (South-eastern Eddy County, NM), approximately 7.5 miles to the southwest.
<u>Soil Characteristics</u>	Soils at the site are mapped as Pajarito series soils, 0 to 15 percent slopes, well-drained, 0 to 4 inches loamy fine sand, 4 to 11 inches loam fine sand, 11 to 65 inches fine sandy loamy. This soil has a surface layer of loamy fine sand. Restrictive features are present at 21 inches bgs resulting in the formation being categorized with a very high runoff classification.
<u>Karst Characterization</u>	Terracon evaluated data from the NMOCD Public FTP Site, Karst map designations in reference to the site location. The site appears to be within a low-level Karst risk area.
<u>Depth of Remediation</u>	The full extent of release quantities and excavation activities are not to be greater than 72 inches bgs.

Release Investigation and Remedial Action Plan
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6.0 REGULATORY FRAMEWORK AND RESPONSE ACTION LEVELS

Oil and gas exploration and production facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). The NMOCD has issued the *Closure Criteria for Soils Impacted by a Release, June 21, 2018*, and *Restoration, Reclamation, and Re-vegetation (19.15.29.13) NMAC – D (Reclamation of areas no longer in use)* as guidance documents for the remediation and reclamation of sites impacted by releases from oil and gas exploration and production activities. Sections 6.1 and 6.2 below detail the applicability of these guidance documents to the site-specific characteristics associated with the State I #16 Brine Seep.

6.1 Reclamation Levels (Surface to 4 ft. bgs)

The below Reclamation Limits for chlorides, TPH (GRO+DRO+MRO), BTEX (includes benzene, toluene, ethylbenzene, and xylenes), and benzene are defined within New Mexico Administration Code (NMAC) *Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use)* for soils extending to 4 ft. bgs.:

Constituent	Remediation Limits
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

6.2 Remediation Levels (> 4 ft. bgs)

Based on the site-specific characteristics, the applicable NMOCD remediation levels for Total BTEX, chloride, and TPH within soils, exclusive of the Reclamation Zone (surface to 4 ft. bgs), are as follows:

Constituent	Remediation Limit
Chloride	20,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg

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Constituent	Remediation Limit
Benzene	10 mg/kg

7.0 SOIL SAMPLING PROCEDURES

Soil sampling procedures are detailed as detailed in Exhibit 1 of Appendix B:

8.0 RELEASE INVESTIGATION DATA EVALUATION

During Terracon's January 6th, 2020, April 1st, 2020, and May 3rd release investigation activities, a total of 67 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. Of the 67 soil samples collected 61 soil samples from within the release margins.

8.1 Release Margins Data Evaluation

During Terracon's January 6th, 2020, April 1st, 2020, and May 3rd release investigation activities, a total of 67 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. This evaluation accounts for all soil samples at depths from surface to 14 ft bgs.

Benzene was detected above applicable laboratory SDLs in one of the 61 soil samples analyzed within the release margins. The benzene concentration was 0.00261 mg/kg in soil sample T-2 (6.0 ft bgs). The detected benzene concentrations did not exceed the applicable NMOCD RAL for benzene of 10 mg/kg, as summarized in Table 2.

Total BTEX was detected above applicable laboratory SDLs in one of the 61 soil samples analyzed within the release margins. The Total BTEX concentration was 0.00261 mg/kg in soil sample T-2 (6.0 ft bgs). The detected Total BTEX concentrations did not exceed the applicable NMOCD RAL for Total BTEX of 50 mg/kg, as summarized in Table 2.

Chloride was detected above applicable laboratory SDLs in each of the 61 soil samples analyzed within the release margins. The chloride concentrations ranged from 12.8 mg/kg in soil sample HA1-3 (1.5-2.0 ft bgs) to 71,900 mg/kg in soil sample HA2-1 (0 to 0.5 ft bgs). Seventeen of the 61 soil samples analyzed within the release margins did exhibit chloride concentrations exceeding the applicable NMOCD RAL for chloride of 600 mg/kg and 20,000 mg/kg, as summarized in Table 2.

Total TPH was detected above applicable laboratory SDLs in eight of the 61 soil samples analyzed within the release margins. The Total TPH concentrations ranged from 51.4 mg/kg in soil sample HA1-5 (4.5 to 5 ft bgs) to 206 mg/kg in soil sample HA-1 (1.5 to 2.0 ft bgs). One of the 61 soil samples analyzed within the release margins did exhibit Total TPH concentrations above the NMOCD RAL of 100 mg/kg for Total TPH, as summarized in Table 2.

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8.2 Background Data Evaluation

Background samples were collected during the initial site investigations and will be collected during remediation activities. During Terracon's April 1st, 2020, release investigation activities, a total of 6 background soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH.

Benzene was detected above applicable laboratory SDLs in one of the six background soil samples analyzed. The benzene concentration was 0.00376 mg/kg in soil sample BG2-2 (0.5 to 1.0 ft bgs) The detected benzene concentrations did not exceed the applicable NMOCD RAL for benzene of 10 mg/kg, as summarized in Table 2.

Total BTEX was detected above applicable laboratory SDLs in one of the six background soil samples analyzed. The Total BTEX concentration was 0.00577 mg/kg in soil sample BG2-2 (0.5 to 1.0 ft bgs) the detected Total BTEX concentrations did not exceed the applicable NMOCD RAL for Total BTEX of 50 mg/kg, as summarized in Table 2.

Chloride was detected above applicable laboratory SDLs in five of the six background soil samples analyzed. The chloride concentrations ranged from 8.41 mg/kg in soil sample BG2-3 (1.5-2.0 ft bgs) to 49.0 mg/kg in soil sample BG1-1 (0 to 0.5 ft bgs). None of the background samples analyzed exhibited chloride concentrations exceeding the applicable NMOCD RAL for chloride of 600 mg/kg, as summarized in Table 2.

Total TPH was not detected above applicable laboratory SDLs in any of the six background soil samples analyzed. Total TPH concentrations were not detected above the NMOCD RAL of 100 mg/kg for Total TPH, as summarized in Table 2.

8.3 Release Investigation Data Summary

Based on the review of the above release investigation analytical results, the areas within the release margins exhibit concentrations of chloride in multiple locations. Based on these exceedances above NMOCD RALs, Sections 9.0 and subsequent detail recommended remedial response actions to be implemented at the site.

Based on the presence of some competent rock layers, further analytical evaluation of deeper horizons appears warranted at the time of remediation, with the exception being the area approximate to the release location.

9.0 SUPPLEMENTAL INVESTIGATION DATA EVALUATION

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During Terracon's January 6th, 2020, April 1st, 2020, and May 3rd release investigation activities, a total of 67 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. Of the 67 soil samples collected, 61 soil samples from within the release margins.

9.1 Release Margins Data Evaluation

During Terracon's October 5, 2021 and October 26, 2021 supplemental investigation activities, a total of 51 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. The supplemental investigation was undertaken to further evaluate the magnitude of constituents with the surface to 4 ft bgs soils.

Benzene was not detected above applicable laboratory SDLs in any of the 51 soil samples analyzed within the release margins. The detected benzene concentrations did not exceed the applicable NMOCD RAL for benzene of 10 mg/kg, as summarized in Table 2.

Total BTEX was not detected above applicable laboratory SDLs in any of the 51 soil samples analyzed within the release margins. Detected Total BTEX concentrations did not exceed the applicable NMOCD RAL for Total BTEX of 50 mg/kg, as summarized in Table 2.

Chloride was detected above applicable laboratory SDLs in 48 of the 51 soil samples analyzed within the release margins. The chloride concentrations ranged from 10.5 mg/kg in soil sample C6 (0.5-1.0 ft bgs) to 41,700 mg/kg in soil sample A5 (2.5 to 3.0 ft bgs). Twenty-one of the 51 soil samples analyzed within the release margins did exhibit chloride concentrations exceeding the applicable NMOCD RAL for chloride of 600 mg/kg, as summarized in Table 2.

Total TPH was detected above applicable laboratory SDLs in one of the 51 soil samples analyzed within the release margins. The Total TPH concentration was 143 mg/kg in soil sample A5 (1.5 to 2 ft bgs). The soil sample within the release margins did exhibit Total TPH concentrations above the NMOCD RAL of 100 mg/kg for Total TPH, as summarized in Table 2.

9.2 Supplemental Investigation Data Summary

Based on the review of the above release investigation analytical results, the areas within the release margins exhibit concentrations of chloride in multiple locations that have reduced over separate sampling events. Based on these exceedances above NMOCD RALs, Sections 9.0 and subsequent detail recommended remedial response actions to be implemented at the site.

10.0 SOIL RECLAMATION AND REMEDIATION

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Soil exhibiting concentrations above applicable NMOCD regulations will be remediated, reclaimed, and managed according to the criteria described below which is intended to protect freshwaters, public health, and the environment from exposure to the above constituents of concern.

10.1 Reclamation Response Objectives

Based on the magnitude of chloride concentrations detected within the release margins to depths subject to NMOCD Reclamation requirements, approximately 6,400 cy of chloride impacted material will be required to be excavated and disposed of at a permitted disposal facility under manifest. Following the excavation Horizontal confirmation samples will be collected from the wall of the excavation to confirm the remaining levels of soil contaminants are below the desired NMOCD RALs.

10.2 Remediation Response Objectives

Following excavation to recommended Reclamation depths, the remaining contaminants above the NMOCD RALs from 4 ft. bgs to 6 ft. bgs will be treated with Gypsum, Urea, Hay, and clean backfill. Following the treatment of the soils within the remediation zone horizontal delineation samples will be collected from the base and walls of the excavation to confirm the remaining levels of soil contaminants are below the desired NMOCD RALs.

10.3 Variance Requests

- Following the treatment of soils below 4 ft. bgs Terracon requests installing a 20 mil poly liner to encapsulate the soils that are elevated above the NMOCD Reclamation standard.
- Additionally, with the size of this remediation Terracon requests collecting confirmation samples along the base and walls of the excavation every 1,000 sq. ft.
- Due to the installation of a hydraulically restrictive liner along with the remediation of materials from 4 to 6 ft bgs, Terracon is requested that soils deeper than 6 ft bgs be provided a variance from remediation of chloride impacts below this interval pending vertical and horizontal delineation of deeper horizons.

Additionally, if competent rock is encountered a hydro-vac truck will be utilized to remove all remaining contaminants from the restrictive feature to wash out the residual presence of chlorides at any restrictive zone to ensure that concentrations are not elevated further at this restrictive interphase. Terracon will additionally include photo logs of the hydro-vacing activities with the closure report.

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Based on the anticipated depth to groundwater, it is anticipated that a remedial response will be warranted within the soils at depths greater than 4 ft. bgs, with the exception being any contaminants encountered outside of the obvious surface impacts.

10.4 Soil Management

The selected methods of soil management is removal and disposal at an NMOCD-approved facility, and treatment of soils utilizing Gypsum, Urea, Hay, and clean backfill. Soils to be disposed of will be transported by truck (20 cubic yard capacity) and disposed of at the Lea Land Disposal Facility located in Lea County, New Mexico.

11.0 TERMINATION OF REMEDIAL ACTIONS, FINAL CLOSURE AND REPORTING**11.1 Termination of Reclamation and Remedial Actions**

Reclamation and remedial actions at the site will be terminated when the confirmation samples indicate that the above objectives have been completed within the reclamation and remedial depth designations. The reclamation and remedial approaches intend to achieve compliance with NMOCD regulatory objectives in ensuring that any remaining contaminants will not pose a threat to present or foreseeable beneficial use of freshwater, public health, and the environment.

11.2 Final Closure

Upon termination of remedial actions (Sections 6 and 9), the area of the release will be closed by backfilling the excavated area, contouring to surrounding area topography, and reseeding the area with approved-native vegetative seed.

11.3 Final Report

Upon completion of remedial activities, a final report summarizing actions taken to mitigate environmental damage related to the release will be provided to NMOCD for approval.

APPENDIX A – FIGURES AND TABLES

Figure 1 – Topographic Map

Figure 2 – Site Diagram

Figure 3 – Initial Site Investigation Map

Figure 4 – Trenching Site Investigation Map

Figure 5 – Supplemental Investigation Map

Figure 6 – NMOSE POD Location Map

Figure 7 – Drilling and Pump Repair (Well Gauging Data)

Figure 8 – Cave Karst Public UCP



Site Location



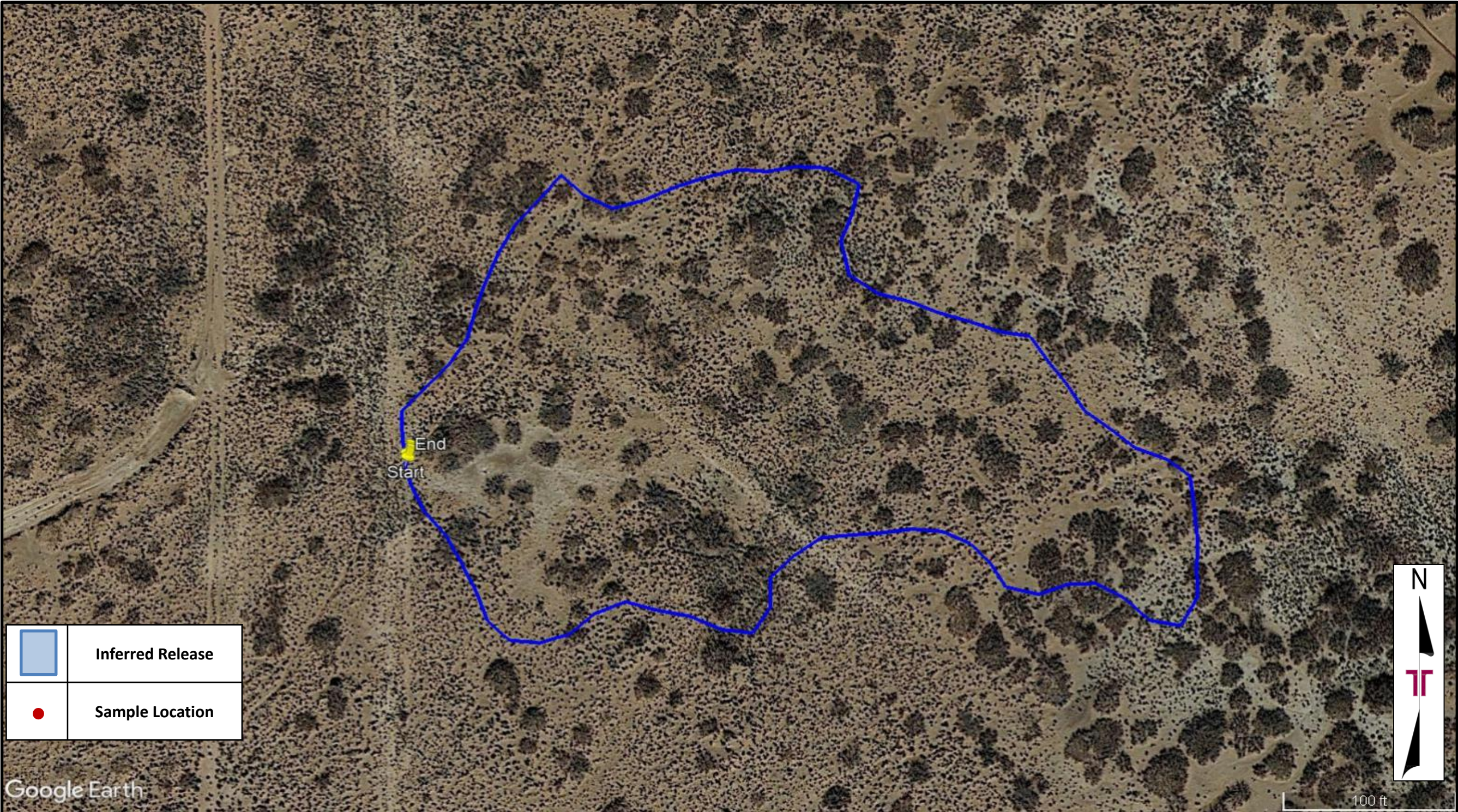
Project No.	A4217001
Scale:	1" = 1 mile
Source:	Google Earth
Date:	2020

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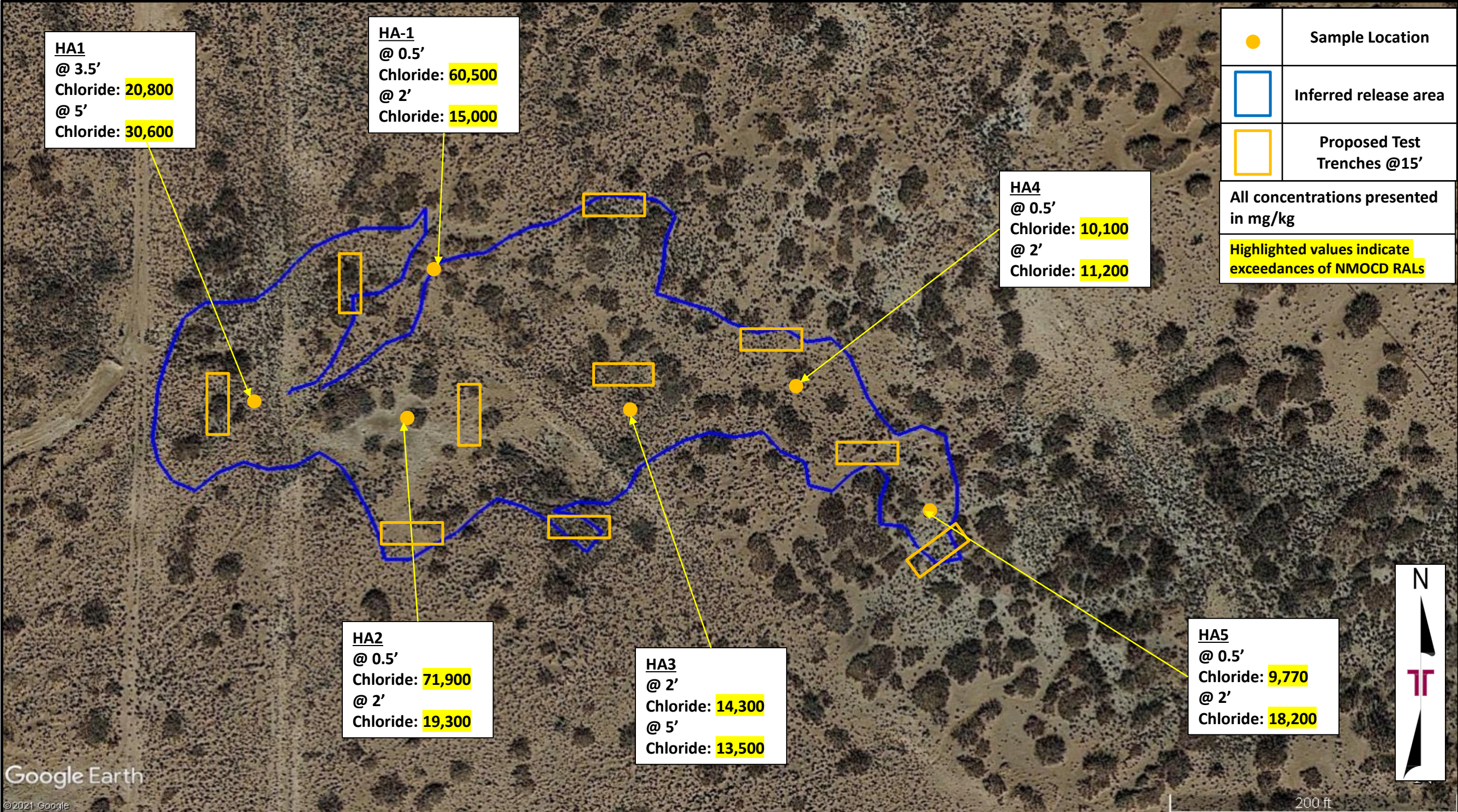
5847 50th Street Lubbock, Texas 79424
PH: (806) 300 - 0140 FAX: (806) 797 - 0947

Figure 1 - Topographic Map

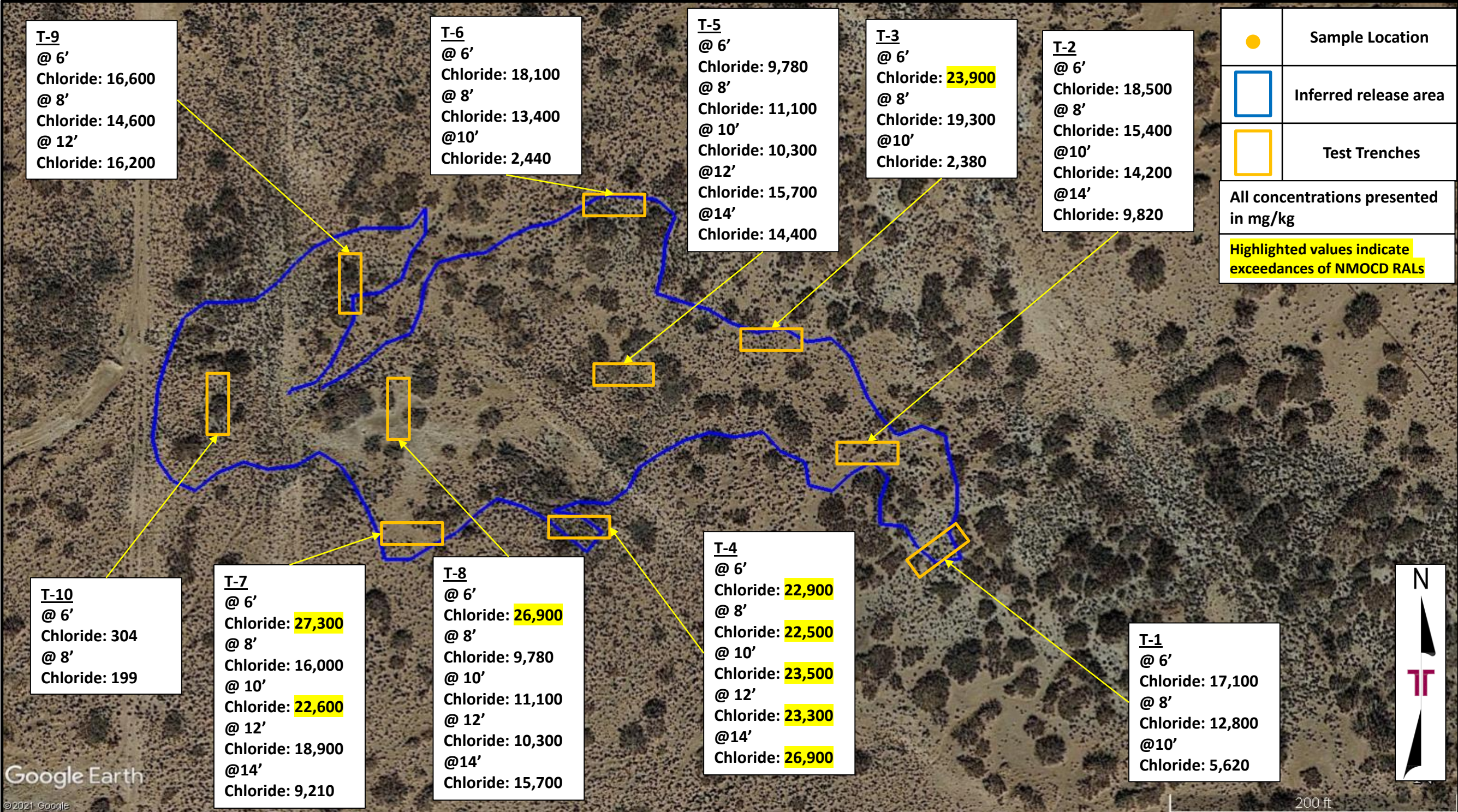
State I #16 Brine Seep
32.801613, -104.088177
Eddy County, New Mexico



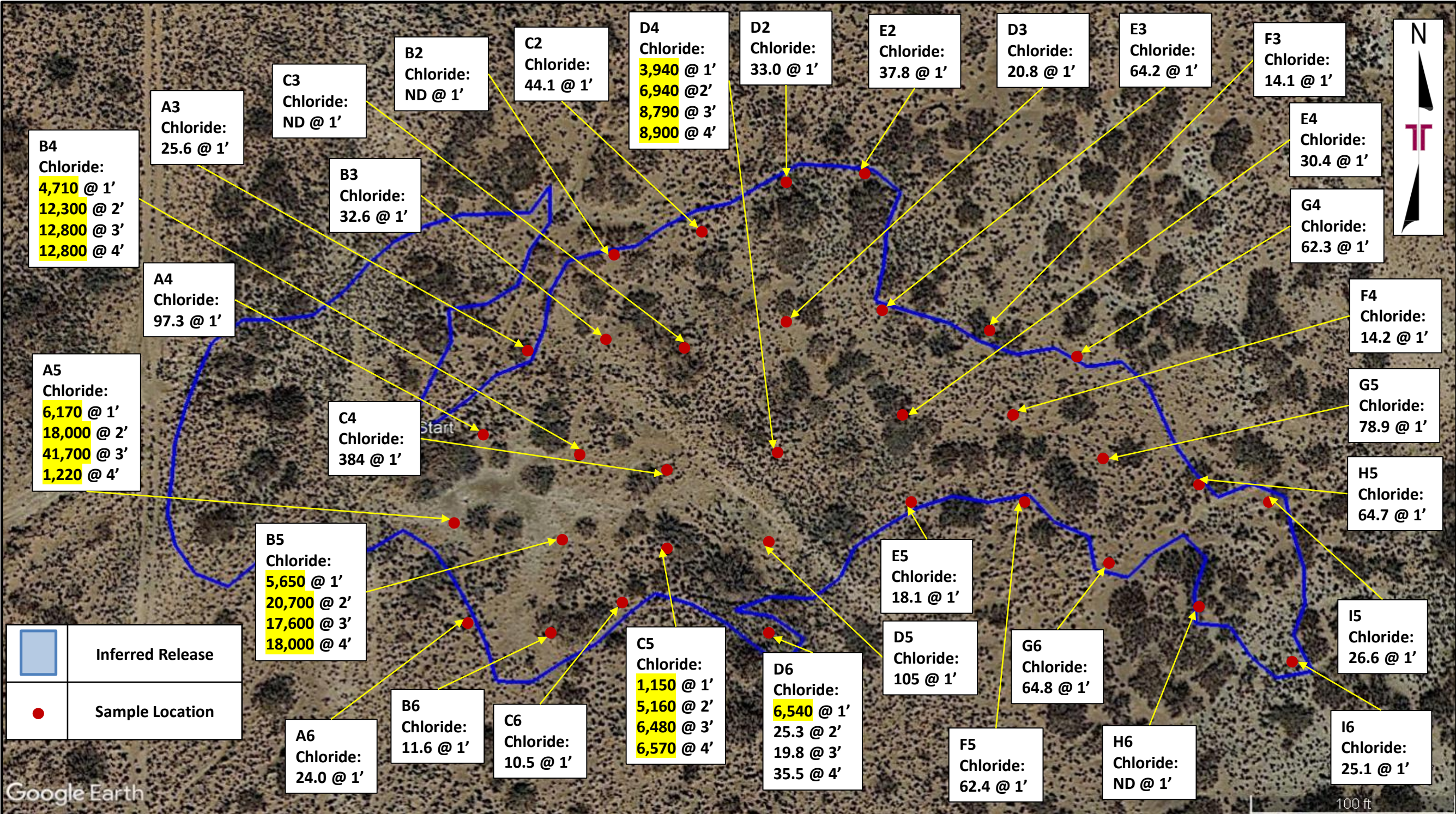
Project No.	AR217001	 Consulting Engineers & Scientists 5847 50 th St. Lubbock, Texas 79424 PH. (806) 300-0104 FAX. (806) 797 0947	Figure 2 – Site Diagram
Scale:	As Shown		State I #16 Brine Seep
Source:	Google Earth		32.801613°, -104.088177°
Image Date:	01/31/2020		Eddy County, New Mexico



Project No.	AR217001	Figure 3 - Initial Site Investigation Map State I 16 (Brine Seep) 32.801667°, -104.088134° Eddy County, New Mexico	
Scale:	As Shown		
Source:	Google Earth		
Image Date:	11/02/2017		
Terracon Consulting Engineers & Scientists 5827 50 th St. Suite 1 PH. (806) 300-0104		Lubbock, Texas 79424 FAX. (806) 797 0947	



Project No. AR217001	 5827 50th St. Suite 1 PH. (806) 300-0104 Lubbock, Texas 79424 FAX. (806) 797 0947	Figure 4 - Trenching Site Investigation Map	
Scale: As Shown		State I 16 (Brine Seep)	
Source: Google Earth		32.801667°, -104.088134°	
Image Date: 11/02/2017		Eddy County, New Mexico	



Project No.	AR217001	 5847 50th St. Lubbock, Texas 79424 PH. (806) 300-0104 FAX. (806) 797 0947	Figure 5 – Supplemental Investigation Map State I #16 Brine Seep 32.801613°, -104.088177° Eddy County, New Mexico
Scale:	As Shown		
Source:	Google Earth		
Image Date:	01/31/2020		



	Inferred Release
	Well Location

Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	2018

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5847 50th St.
PH. (806) 300-0104

Lubbock, Texas 79424
FAX. (806) 797 0947

Figure 6 – NMOSE POD Location Map

State I 16
32.801606°, -104.088176°
Eddy County, New Mexico

Figure 7 – Drilling and Pump Repair (Well Gauging Data)

Key's
Drilling & Pump Service, Inc.
1012 East 2nd Street • Roswell, New Mexico 88201
575-623-6537



Key Livestock
Owner Gary Key **ADDRESS** 19230

PHONE # _____ **DATE** _____

WELL NAME North solar **PUMP SIZE** _____

PROBLEM _____

HISTORY AND PROBLEM

DESCRIPTION OF WORK ORDER

Pulled solar pump, replaced with new 1 1/2 hp 230v 1ph, new wire, ran wire in conduit from well to power pole, left well pumping

ESTIMATE GIVEN _____ **DATE PROMISED** _____

RECORD OF WORK DONE

Date 7-24-19 **1st Day** 5 **HOURS** **3rd Day** _____

Work Done: _____ **2nd Day** _____ **4th Day** _____

REPLACED **L.E. Model #** 5FA05S4-3W230 **SER #** 18J14

PUMP YES ☒ NO _____ **BRAND** _____ **SER #** _____

MOTOR YES ☒ NO _____ **HP** 1 1/2 **VOLT** 230 **PH** 1 **SER #** _____

_____ **MTR. MODEL #** 18J14-04-06706A

CON. BOX YES ☒ NO _____ **HP** 3/4 **MAG STARTER?** _____ **REPAIR?** _____

WIRE YES ☒ NO _____ **SIZE** #12 **LENGTH** 190 Foot

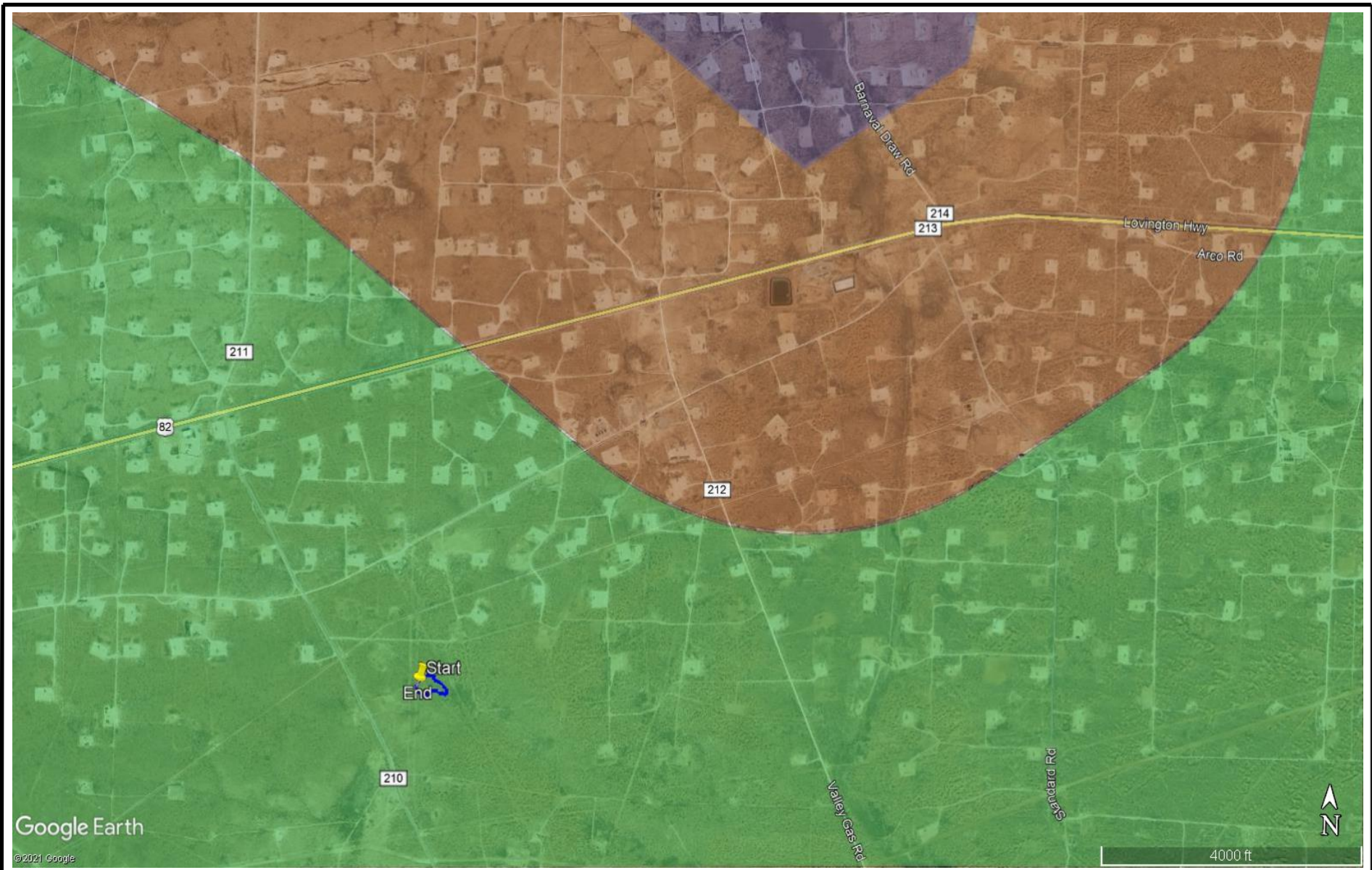
PIPE YES _____ NO _____ **SIZE** _____ **LENGTH** _____ **STEEL** _____ **PLASTIC** _____

COLLARS YES _____ NO _____ **SIZE** _____ **KIND** _____ **QUANTITY** _____

CHK VALVE YES _____ NO _____ **SIZE** _____ **# MXF** _____ **# FXF** _____

STACONS # <u>10</u>	<u>4-1" Fkx conduit</u>	<u>adapter's straight</u>
SCOTCH 33 # <u>1</u>	<u>non-metallic</u>	
GREEN TAPE # <u>1</u>	<u>2 Foot Mc cable</u>	
TOP SEAL _____	<u>2 Mc cable</u>	<u>adapter's straight</u>
GUAGE _____	<u>1 30 AMP Sq. D Breaker</u>	
PRES. SWITCH _____		
TANK & SIZE _____		
CYCLE STOP _____		
CYLINDER _____		
SUCKEROD _____		
HOLE _____		
DEPTH _____		
CASING SIZE _____		
H2O STATIC <u>108</u>		
PIPE SETTING <u>150</u>		

Work Done By: Ryan Ray



- Low Karst
- Medium Karst
- High Karst



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	06/04/2021

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PH. (806) 300-0140 FAX. (806) 797-0947

Figure 8 – Cave Karst Public UCP Map

State I 16 (Brine Seep)
32.801606°, -104.088176°
Eddy County, New Mexico

APPENDIX B – TABLES & PROCEDURES

Exhibit 1 – Soil Sampling Procedures

Table 1 – Closure Criteria for Soils Impacted by a Release

Table 2 – Soil Sample Analytical Results

EXHIBIT 1**SOIL SAMPLING PROCEDURES**Soil Sampling Procedures

Soil sampling for laboratory analysis was conducted according to NMOCD-approved industry standards or other NMOCD-approved procedures. Accepted NMOCD soil sampling procedures and laboratory analytical methods are as follows:

- Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis, or from a reliable laboratory equipment supplier.
- Label the samples with a unique code for each sample.
- Cool and store samples with cold packs or on ice.
- Promptly ship the sample to the lab for analysis following chain of custody procedures.
- All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

Analytical Methods

All soil samples must be analyzed using EPA methods, or by other NMOCD-approved methods and must be analyzed within the holding time specified by the method. Below are laboratory analytical methods the selected laboratory will use for analysis of soil samples analyzed for petroleum-related constituents.

- Chloride – EPA Method 300.0
- Total Petroleum Hydrocarbons – TPH (GRO+DRO+MRO) – EPA Method 8015M
- Benzene, toluene, ethylbenzene and total xylenes (BTEX) – EPA Method 8021B
- Benzene – EPA Method 8021B

Table 1			
Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/L TDS	Constituent	Method*	Limit**
≤50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015 M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet – 100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015 M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015 M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015 M	2,500 mg/kg
	TPH (GRO+DRO)	EPA SW-846 Method 8015 M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

*Or other methods approved by the division

**Numerical limits or natural background level, whichever is greater

***This applies to releases of produced water or other fluids, which may contain chloride

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-1	0 - 0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	84.4	ND	ND	ND	ND
	0.5 - 1'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	13.8	ND	ND	ND	ND
	1.5-2'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	12.8	ND	ND	ND	ND
	3.5 - 4'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	20,800	65	ND	ND	65
	4.5 - 5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	30,600	51.4	ND	ND	51.4
HA-2	0 - 0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	71,900	ND	ND	ND	ND
	0.5 - 1'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	23,600	ND	ND	ND	ND
	1.5-2'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	19,300	75.1	ND	ND	ND
HA-3	0 - 0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,600	52.4	ND	ND	54.7
	0.5 - 1'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	13,000	54.7	ND	ND	54.7
	1.5-2'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,300	52.9	ND	ND	52.9
	3.5 - 4'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	22,000	53.5	ND	ND	53.5
	4.5 - 5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	13,500	55	ND	ND	ND
HA-4	0-0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	10,100	71.8	ND	ND	71.8
	0.5 - 1'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,700	ND	ND	ND	ND
	1.5 - 2'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	11,200	54.3	ND	ND	ND
NMOCDD Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOCDD Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000		N/A	2,500

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/ORO)

* = NMOCD Remediation and Delineation Standards are proposed in 19.15.29.12 NMAR - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-5	0-0.5'	Composite	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9,770	ND	ND	ND	ND
	0.5 - 1'	Composite	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	10,900	ND	ND	ND	ND
	1.5-2'	Composite	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	18,200	ND	ND	ND	ND
HA-1 (0-0.5)	0-0.5'	Composite	01/06/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	60,500	ND	ND	ND	ND
HA-1 (1.5-2)	1.5 - 2'	Composite	01/06/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	15,000	ND	154	51.6	206
Trenching Samples									
T-1	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	17,100	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	12,800	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	5,620	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	7,650	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	5,620	ND	ND	ND	ND
T-2	6'	Grab	05/03/21	Benzene - 0.00261 Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - 0.00261	18,500	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	15,400	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,200	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9,820	ND	ND	ND	ND
T-3	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	23,900	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	19,300	ND	ND	ND	ND
NMOC Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOC Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000	N/A		2,500

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/ORO)

* = NMOC Remediation and Delineation Standards are proposed in 19.15.29.12 NMOC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOC) Remediation and Delineation Standards.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Trenching Samples									
T-3	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	2,380	ND	ND	ND	ND
T-4	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	22,900	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	22,500	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	23,500	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	23,300	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	26,900	ND	ND	ND	ND
	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9,780	ND	ND	ND	ND
T-5	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	11,100	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	10,300	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	15,700	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,400	ND	ND	ND	ND
T-6	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	18,100	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	13,400	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	2,440	ND	ND	ND	ND
NMOCDD Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOCDD Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000	N/A	2,500	

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/IORO)

* = NMOCD Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Trenching Samples									
T-7	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	27,300	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	16,000	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	22,600	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	18,900	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9,210	ND	ND	ND	ND
T-8	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	26,900	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9,780	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	11,100	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	10,300	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	15,700	ND	ND	ND	ND
T-9	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	16,600	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	14,600	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	16,200	ND	ND	ND	ND
T-10	6'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	304	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	199	ND	ND	ND	ND
NMOCd Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOCd Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000	N/A		2,500

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/ORO)

* = NMOCD Remediation and Delineation Standards are proposed in 19.15.29.12 NMOC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A: No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (ftgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Geoprobe Samples									
GP-1	14'-15'	Grab	05/21/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9.52	ND	ND	ND	ND
	15'-16'	Grab	05/21/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	ND	ND	ND	ND	ND
Background Samples									
BG1-1	0-0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	49.0	ND	ND	ND	ND
BG1-2	0.5-1.0'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	ND	ND	ND	ND	ND
BG1-3	1.5-2.0'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	9.67	ND	ND	ND	ND
BG2-1	0-0.5'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	109	ND	ND	ND	ND
BG2-2	0.5-1.0'	Grab	04/01/21	Benzene - 0.00376 Toluene - 0.00201 Ethylbenzene - ND Total Xylenes - ND Total BTEX - 0.00577	9.05	ND	ND	ND	ND
BG2-3	1.5-2.0'	Grab	04/01/21	Benzene - ND Toluene - ND Ethylbenzene - ND Total Xylenes - ND Total BTEX - ND	8.41	ND	ND	ND	ND
NMOC Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOC Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000	N/A		2,500

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/ORO)

* = NMOC Remediation and Delineation Standards are proposed in 19.15.29.12 NMOC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A= No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOC) Remediation and Delineation Standards.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS - BTEX ¹ , Chloride ² , and TPH ³ State I #016 - Brine Seep Terracon Project No. AR217001									
Sample I.D.	Sample Depth (bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Supplemental Investigation									
A3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	25.6	ND	ND	ND	ND
A4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	97.3	ND	ND	ND	ND
A5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	6,170	ND	ND	ND	ND
A6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	24	ND	ND	ND	ND
B2	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	ND	ND	ND	ND	ND
B3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	32.6	ND	ND	ND	ND
B4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	4,710	ND	ND	ND	ND
B5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	5,650	ND	ND	ND	ND
B6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	11.6	ND	ND	ND	ND
C2	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	44.1	ND	ND	ND	ND
C3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	ND	ND	ND	ND	ND
C4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	384	ND	ND	ND	ND
C5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	1,150	ND	ND	ND	ND
C6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	10.5	ND	ND	ND	ND
D2	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	33	ND	ND	ND	ND
D3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	20.8	ND	ND	ND	ND
D4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	3,940	ND	ND	ND	ND
D5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	105	ND	ND	ND	ND
D6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	6,540	ND	ND	ND	ND
E2	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	37.8	ND	ND	ND	ND
E3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	64.2	ND	ND	ND	ND
E4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	30.4	ND	ND	ND	ND
E5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	18.1	ND	ND	ND	ND
F3	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	14.1	ND	ND	ND	ND
F4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	14.2	ND	ND	ND	ND
F5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	62.4	ND	ND	ND	ND
G4	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	62.3	ND	ND	ND	ND
G5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	78.9	ND	ND	ND	ND
G6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	64.8	ND	ND	ND	ND
H5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	64.7	ND	ND	ND	ND
H6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	ND	ND	ND	ND	ND
I5	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	26.6	ND	ND	ND	ND
I6	1'	Grab	10/05/21	Benzene - ND Total BTEX - ND	25.1	ND	ND	ND	ND
NMOC Reclamation Standards ⁴ (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	600	N/A			100
NMOC Remediation and Delineation Standards ⁵ (Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)				Benzene - 10 Toluene - N/A Ethylbenzene - N/A Total Xylenes - N/A Total BTEX - 50	20,000	1,000	N/A		2,500

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/IRO)

* = NMOC Remediation and Delineation Standards are proposed in 19.15.29.12 NMOC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

N/A = Not Analyzed

N/A = No Applicable reporting standards

Bold denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOC) Remediation and Delineation Standards.

APPENDIX C – PHOTOGRAPHIC LOG

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 1: View of seep and sump



PHOTO 2: View of Seep impacts south

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 3: View of seep impacts east.



PHOTO 4: View of disposal setup at seep.

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 5: View of seep impacts north.



PHOTO 6: View of seep impacts

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 7: View of seep and sump



PHOTO 8: View of Seep impacts.

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 9: View of seep impacts.



PHOTO 10: View of seep impacts.

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 11: View of seep impacts.



PHOTO 12: View of seep impacts

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 13: View of seep after it had ceased.



PHOTO 14: View of delineating.

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon

PHOTO 15: View of trenching.



PHOTO 16: View of trenching.

Responsive ■ Resourceful ■ Reliable

State I #16 Brine Seep ■ Eddy County, New Mexico
December 10, 2021 ■ Terracon Project No. AR217001

Terracon



PHOTO 17: View of trenching.

Responsive ■ Resourceful ■ Reliable

APPENDIX D – ANALYTICAL REPORT AND CHAIN OF CUSTODY

Certificate of Analysis Summary 684148

Terracon-Lubbock, Lubbock, TX

Project Name: Spur-Brine Release

Project Id:

Contact: Joseph Guesnier

Project Location:

Date Received in Lab: Fri 01.08.2021 17:15

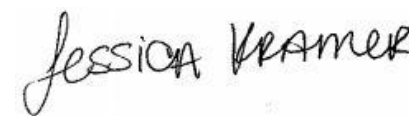
Report Date: 01.13.2021 15:50

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	684148-001	684148-002				
	Field Id:	HA-1 (0-0.5)	HA-1 (1.5-2)				
	Depth:	0-0.5 ft	1.5-2 ft				
	Matrix:	SOIL	SOIL				
	Sampled:	01.06.2021 13:00	01.06.2021 13:05				
BTEX by EPA 8021B SUB: T104704400-20-21	Extracted:	01.12.2021 12:00	01.12.2021 12:00				
	Analyzed:	01.12.2021 13:35	01.12.2021 13:55				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00201 0.00201	<0.00198 0.00198				
Toluene		<0.00201 0.00201	<0.00198 0.00198				
Ethylbenzene		<0.00201 0.00201	<0.00198 0.00198				
m,p-Xylenes		<0.00402 0.00402	<0.00397 0.00397				
o-Xylene		<0.00201 0.00201	<0.00198 0.00198				
Xylenes, Total		<0.00201 0.00201	<0.00198 0.00198				
Total BTEX		<0.00201 0.00201	<0.00198 0.00198				
Chloride by EPA 300 SUB: T104704400-20-21	Extracted:	01.12.2021 14:55	01.12.2021 14:55				
	Analyzed:	01.12.2021 16:13	01.12.2021 16:18				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		60500 248	15000 100				
TPH by SW8015 Mod SUB: T104704400-20-21	Extracted:	01.12.2021 12:00	01.12.2021 12:00				
	Analyzed:	01.12.2021 15:46	01.13.2021 06:58				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0				
Diesel Range Organics (DRO)		<50.0 50.0	154 50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	51.6 50.0				
Total TPH		<50.0 50.0	206 50.0				

BRL - Below Reporting Limit

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



Analytical Report 684148

for

Terracon-Lubbock

Project Manager: Joseph Guesnier

Spur-Brine Release

01.13.2021

Collected By: Client



6701 Aberdeen, Suite 9 Lubbock, TX 79424

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)



01.13.2021

Project Manager: **Joseph Guesnier**

Terracon-Lubbock

5827 50th st, Suite 1

Lubbock, TX 79424

Reference: Eurofins Xenco, LLC Report No(s): **684148**

Spur-Brine Release

Project Address:

Joseph Guesnier:

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) 684148. 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. 684148 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,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 684148

Terracon-Lubbock, Lubbock, TX

Spur-Brine Release

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
HA-1 (0-0.5)	S	01.06.2021 13:00	0 - 0.5 ft	684148-001
HA-1 (1.5-2)	S	01.06.2021 13:05	1.5 - 2 ft	684148-002



CASE NARRATIVE

Client Name: Terracon-Lubbock

Project Name: Spur-Brine Release

Project ID:

Work Order Number(s): 684148

Report Date: 01.13.2021

Date Received: 01.08.2021

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 684148

Terracon-Lubbock, Lubbock, TX Spur-Brine Release

Sample Id: **HA-1 (0-0.5)**

Matrix: Soil

Date Received: 01.08.2021 17:15

Lab Sample Id: 684148-001

Date Collected: 01.06.2021 13:00

Sample Depth: 0 - 0.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 14:55

% Moisture:

Basis: Wet Weight

Seq Number: 3147628

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	60500	248	mg/kg	01.12.2021 16:13		50

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Basis: Wet Weight

Seq Number: 3147666

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.12.2021 15:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	01.12.2021 15:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.12.2021 15:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.12.2021 15:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	01.12.2021 15:46	
o-Terphenyl	84-15-1	85	%	70-130	01.12.2021 15:46	



Certificate of Analytical Results 684148

Terracon-Lubbock, Lubbock, TX Spur-Brine Release

Sample Id: **HA-1 (0-0.5)**

Matrix: Soil

Date Received: 01.08.2021 17:15

Lab Sample Id: 684148-001

Date Collected: 01.06.2021 13:00

Sample Depth: 0 - 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.12.2021 13:35	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1
Xylenes, Total	1330-20-7	<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.12.2021 13:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.12.2021 13:35	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.12.2021 13:35	



Certificate of Analytical Results 684148

Terracon-Lubbock, Lubbock, TX Spur-Brine Release

Sample Id: **HA-1 (1.5-2)**

Matrix: Soil

Date Received: 01.08.2021 17:15

Lab Sample Id: 684148-002

Date Collected: 01.06.2021 13:05

Sample Depth: 1.5 - 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.12.2021 14:55

% Moisture:

Basis: Wet Weight

Seq Number: 3147628

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15000	100	mg/kg	01.12.2021 16:18		20

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.12.2021 12:00

% Moisture:

Basis: Wet Weight

Seq Number: 3147666

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	01.13.2021 06:58	U	1
Diesel Range Organics (DRO)	C10C28DRO	154	50.0	mg/kg	01.13.2021 06:58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	51.6	50.0	mg/kg	01.13.2021 06:58		1
Total TPH	PHC635	206	50.0	mg/kg	01.13.2021 06:58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	01.13.2021 06:58	
o-Terphenyl	84-15-1	85	%	70-130	01.13.2021 06:58	



Certificate of Analytical Results 684148

Terracon-Lubbock, Lubbock, TX Spur-Brine Release

Sample Id: **HA-1 (1.5-2)**

Matrix: Soil

Date Received: 01.08.2021 17:15

Lab Sample Id: 684148-002

Date Collected: 01.06.2021 13:05

Sample Depth: 1.5 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.12.2021 12:00

% Moisture:

Seq Number: 3147515

Basis: Wet Weight

SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.12.2021 13:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1
Xylenes, Total	1330-20-7	<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.12.2021 13:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.12.2021 13:55	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.12.2021 13:55	

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Terracon-Lubbock Spur-Brine Release

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

MB Sample Id: 7719000-1-BLK

Matrix: Solid

LCS Sample Id: 7719000-1-BKS

Prep Method: E300P

Date Prep: 01.12.2021

LCSD Sample Id: 7719000-1-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	247	99	247	99	90-110	0	20	mg/kg	01.12.2021 15:16	

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

Parent Sample Id: 684229-002

Matrix: Soil

MS Sample Id: 684229-002 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684229-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3360	1250	4600	99	4720	109	90-110	3	20	mg/kg	01.12.2021 16:44	

Analytical Method: Chloride by EPA 300

Seq Number: 3147628

Parent Sample Id: 684279-013

Matrix: Soil

MS Sample Id: 684279-013 S

Prep Method: E300P

Date Prep: 01.12.2021

MSD Sample Id: 684279-013 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	36.8	253	293	101	294	102	90-110	0	20	mg/kg	01.12.2021 15:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

MB Sample Id: 7719049-1-BLK

Matrix: Solid

LCS Sample Id: 7719049-1-BKS

Prep Method: SW8015P

Date Prep: 01.12.2021

LCSD Sample Id: 7719049-1-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	869	87	892	89	70-130	3	20	mg/kg	01.12.2021 12:21	
Diesel Range Organics (DRO)	<50.0	1000	829	83	894	89	70-130	8	20	mg/kg	01.12.2021 12:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		91		82		70-130	%	01.12.2021 12:21
o-Terphenyl	109		91		87		70-130	%	01.12.2021 12:21

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

Matrix: Solid

MB Sample Id: 7719049-1-BLK

Prep Method: SW8015P

Date Prep: 01.12.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.12.2021 12:03	

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



Terracon-Lubbock Spur-Brine Release

Analytical Method: TPH by SW8015 Mod

Seq Number: 3147666

Parent Sample Id: 684278-021

Matrix: Soil

MS Sample Id: 684278-021 S

Prep Method: SW8015P

Date Prep: 01.12.2021

MSD Sample Id: 684278-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	915	92	867	87	70-130	5	20	mg/kg	01.12.2021 13:17	
Diesel Range Organics (DRO)	<49.9	997	996	100	864	86	70-130	14	20	mg/kg	01.12.2021 13:17	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		84		70-130	%	01.12.2021 13:17
o-Terphenyl	99		80		70-130	%	01.12.2021 13:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147515

MB Sample Id: 7718974-1-BLK

Matrix: Solid

LCS Sample Id: 7718974-1-BKS

Prep Method: SW5035A

Date Prep: 01.12.2021

LCSD Sample Id: 7718974-1-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	0.0758	76	0.0788	79	70-130	4	35	mg/kg	01.12.2021 11:13	
Toluene	<0.00200	0.100	0.0787	79	0.0811	81	70-130	3	35	mg/kg	01.12.2021 11:13	
Ethylbenzene	<0.00200	0.100	0.0845	85	0.0870	87	70-130	3	35	mg/kg	01.12.2021 11:13	
m,p-Xylenes	<0.00400	0.200	0.170	85	0.175	88	70-130	3	35	mg/kg	01.12.2021 11:13	
o-Xylene	<0.00200	0.100	0.0868	87	0.0894	89	70-130	3	35	mg/kg	01.12.2021 11:13	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		95		96		70-130	%	01.12.2021 11:13
4-Bromofluorobenzene	104		98		96		70-130	%	01.12.2021 11:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147515

Parent Sample Id: 684278-001

Matrix: Soil

MS Sample Id: 684278-001 S

Prep Method: SW5035A

Date Prep: 01.12.2021

MSD Sample Id: 684278-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0707	71	0.0696	70	70-130	2	35	mg/kg	01.12.2021 11:54	
Toluene	<0.00200	0.100	0.0730	73	0.0709	71	70-130	3	35	mg/kg	01.12.2021 11:54	
Ethylbenzene	<0.00200	0.100	0.0784	78	0.0754	76	70-130	4	35	mg/kg	01.12.2021 11:54	
m,p-Xylenes	<0.00400	0.200	0.158	79	0.151	76	70-130	5	35	mg/kg	01.12.2021 11:54	
o-Xylene	<0.00200	0.100	0.0808	81	0.0777	78	70-130	4	35	mg/kg	01.12.2021 11:54	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		96		70-130	%	01.12.2021 11:54
4-Bromofluorobenzene	102		100		70-130	%	01.12.2021 11:54

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

68448-

[illegible]

Inter-Office Shipment

IOS Number : **76156**

Date/Time: 01.11.2021

Created by: Michael J Turner

Please send report to: Jessica Kramer

Lab# From: **Lubbock**

Delivery Priority:

Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424

Lab# To: **Midland**

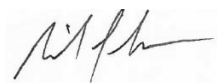
Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
684148-001	S	HA-1 (0-0.5)	01.06.2021 13:00	SW8015MOD_NM	TPH by SW8015 Mod	01.12.2021	01.20.2021	JKR	PHCC10C28 PHCC28C3	
684148-001	S	HA-1 (0-0.5)	01.06.2021 13:00	SW8021B	BTEX by EPA 8021B	01.12.2021	01.20.2021	JKR	BR4FBZ BZ BZME EBZ	
684148-001	S	HA-1 (0-0.5)	01.06.2021 13:00	E300_CL	Chloride by EPA 300	01.12.2021	02.03.2021	JKR	CL	
684148-002	S	HA-1 (1.5-2)	01.06.2021 13:05	SW8021B	BTEX by EPA 8021B	01.12.2021	01.20.2021	JKR	BR4FBZ BZ BZME EBZ	
684148-002	S	HA-1 (1.5-2)	01.06.2021 13:05	E300_CL	Chloride by EPA 300	01.12.2021	02.03.2021	JKR	CL	
684148-002	S	HA-1 (1.5-2)	01.06.2021 13:05	SW8015MOD_NM	TPH by SW8015 Mod	01.12.2021	01.20.2021	JKR	PHCC10C28 PHCC28C3	

Inter Office Shipment or Sample Comments:

Relinquished By:



Michael J Turner

Date Relinquished: 01.11.2021

Received By:



Brianna Teel

Date Received:

Cooler Temperature:



Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 76156

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Michael J Turner

Date Sent: 01.11.2021 12.03 PM

Received By:

Date Received:

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Brianna Teel

Date: _____



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-299-1

Client Project/Site: Spur Brine Release - AR217001

For:

Terracon Consulting Eng & Scientists
5827 50th St
Suite 1
Lubbock, Texas 79424

Attn: Bryant McBrayer

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
4/12/2021 3:42:14 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Laboratory Job ID: 820-299-1

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).



Jessica Kramer

Project Manager

4/12/2021 3:42:14 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Laboratory Job ID: 820-299-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Eurofins Xenco, Lubbock

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Job ID: 820-299-1**Laboratory: Eurofins Xenco, Lubbock****Narrative****Job Narrative
820-299-1****Receipt**

The samples were received on 4/1/2021 3:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C

Receipt Exceptions

Samples HA2-4 and HA2-5 were not received in the lab upon log in. The client was contacted. The samples were not taken in the field and removed from the COC.

HA5-1 (820-299-1), HA5-2 (820-299-2), HA5-3 (820-299-3), HA4-1 (820-299-4), HA4-2 (820-299-5), HA4-3 (820-299-6), HA3-1 (820-299-7), HA3-2 (820-299-8), HA3-3 (820-299-9), HA3-4 (820-299-10), HA2-1 (820-299-11), HA2-2 (820-299-12), HA2-3 (820-299-13), HA2-4 (820-299-14), HA2-5 (820-299-15), HA1-1 (820-299-16), HA1-2 (820-299-17), HA1-3 (820-299-18), HA1-4 (820-299-19), HA1-5 (820-299-20), BG1-1 (820-299-21), BG1-2 (820-299-22), BG1-3 (820-299-23), BG2-1 (820-299-24), BG2-2 (820-299-25), BG2-3 (820-299-26) and HA3-5 (820-299-27)

GC VOA

Method 8021B: Surrogate recovery for the following sample(s) was outside control limits: <comma>Me 4-Bromofluorobenzene (Surr)>. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA5-1

Lab Sample ID: 820-299-1

Date Collected: 04/01/21 12:00

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 00:05	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 00:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/05/21 15:32	04/06/21 00:05	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/05/21 15:32	04/06/21 00:05	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 15:04	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 15:04	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 15:04	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130	04/05/21 16:49	04/06/21 15:04	1
o-Terphenyl (Surr)	128		70 - 130	04/05/21 16:49	04/06/21 15:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9770		50.4		mg/Kg			04/08/21 12:25	10

Client Sample ID: HA5-2

Lab Sample ID: 820-299-2

Date Collected: 04/01/21 12:05

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 00:26	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	04/05/21 15:32	04/06/21 00:26	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/05/21 15:32	04/06/21 00:26	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 16:09	1
>C12-C28 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 16:09	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA5-2

Date Collected: 04/01/21 12:05

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-2

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 16:09	1
Total TPH 1005	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 16:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130				04/05/21 16:49	04/06/21 16:09	1
o-Terphenyl (Surr)	134	S1+	70 - 130				04/05/21 16:49	04/06/21 16:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10900		99.6		mg/Kg			04/08/21 12:42	20

Client Sample ID: HA5-3

Date Collected: 04/01/21 12:10

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 00:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				04/05/21 15:32	04/06/21 00:46	1
1,4-Difluorobenzene (Surr)	102		70 - 130				04/05/21 15:32	04/06/21 00:46	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 16:31	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 16:31	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 16:31	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130				04/05/21 16:49	04/06/21 16:31	1
o-Terphenyl (Surr)	119		70 - 130				04/05/21 16:49	04/06/21 16:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18200		99.8		mg/Kg			04/08/21 12:47	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA4-1

Lab Sample ID: 820-299-4

Date Collected: 04/01/21 12:15

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 01:07	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	04/05/21 15:32	04/06/21 01:07	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/05/21 15:32	04/06/21 01:07	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	71.8		49.9		mg/Kg		04/05/21 16:49	04/06/21 16:52	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 16:52	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 16:52	1
Total TPH 1005	71.8		49.9		mg/Kg		04/05/21 16:49	04/06/21 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	88		70 - 130	04/05/21 16:49	04/06/21 16:52	1
o-Terphenyl (Surr)	112		70 - 130	04/05/21 16:49	04/06/21 16:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10100		49.7		mg/Kg			04/08/21 12:53	10

Client Sample ID: HA4-2

Lab Sample ID: 820-299-5

Date Collected: 04/01/21 12:20

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/07/21 09:26	04/07/21 15:10	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/07/21 09:26	04/07/21 15:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	04/07/21 09:26	04/07/21 15:10	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/07/21 09:26	04/07/21 15:10	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:14	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:14	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA4-2

Date Collected: 04/01/21 12:20

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-5

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:14	1
Total TPH 1005	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130				04/05/21 16:49	04/06/21 17:14	1
o-Terphenyl (Surr)	123		70 - 130				04/05/21 16:49	04/06/21 17:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14700		99.4		mg/Kg			04/08/21 12:58	20

Client Sample ID: HA4-3

Date Collected: 04/01/21 12:25

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-6

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/05/21 15:32	04/06/21 01:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				04/05/21 15:32	04/06/21 01:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130				04/05/21 15:32	04/06/21 01:47	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	54.3		49.8		mg/Kg		04/05/21 16:49	04/06/21 17:36	1
>C12-C28 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 17:36	1
>C28-C35 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 17:36	1
Total TPH 1005	54.3		49.8		mg/Kg		04/05/21 16:49	04/06/21 17:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	101		70 - 130				04/05/21 16:49	04/06/21 17:36	1
o-Terphenyl (Surr)	126		70 - 130				04/05/21 16:49	04/06/21 17:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11200		99.2		mg/Kg			04/08/21 13:15	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-1

Lab Sample ID: 820-299-7

Date Collected: 04/01/21 12:30

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/05/21 15:32	04/06/21 02:08	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/05/21 15:32	04/06/21 02:08	1
1,4-Difluorobenzene (Surr)	103		70 - 130	04/05/21 15:32	04/06/21 02:08	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	52.4		49.9		mg/Kg		04/05/21 16:49	04/06/21 17:58	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:58	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 17:58	1
Total TPH 1005	52.4		49.9		mg/Kg		04/05/21 16:49	04/06/21 17:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	100		70 - 130	04/05/21 16:49	04/06/21 17:58	1
o-Terphenyl (Surr)	126		70 - 130	04/05/21 16:49	04/06/21 17:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14600		101		mg/Kg			04/08/21 13:20	20

Client Sample ID: HA3-2

Lab Sample ID: 820-299-8

Date Collected: 04/01/21 12:35

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 02:28	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 02:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	04/05/21 15:32	04/06/21 02:28	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/05/21 15:32	04/06/21 02:28	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	54.7		50.0		mg/Kg		04/05/21 16:49	04/06/21 18:19	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 18:19	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-2

Date Collected: 04/01/21 12:35

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-8

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 18:19	1
Total TPH 1005	54.7		50.0		mg/Kg		04/05/21 16:49	04/06/21 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	109		70 - 130				04/05/21 16:49	04/06/21 18:19	1
o-Terphenyl (Surr)	135	S1+	70 - 130				04/05/21 16:49	04/06/21 18:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13000		99.8		mg/Kg			04/10/21 20:08	20

Client Sample ID: HA3-3

Date Collected: 04/01/21 12:40

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-9

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 02:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				04/05/21 15:32	04/06/21 02:49	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/05/21 15:32	04/06/21 02:49	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	52.9		50.0		mg/Kg		04/05/21 16:49	04/06/21 18:41	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 18:41	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 18:41	1
Total TPH 1005	52.9		50.0		mg/Kg		04/05/21 16:49	04/06/21 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	99		70 - 130				04/05/21 16:49	04/06/21 18:41	1
o-Terphenyl (Surr)	123		70 - 130				04/05/21 16:49	04/06/21 18:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14300		99.2		mg/Kg			04/10/21 20:25	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-4

Lab Sample ID: 820-299-10

Date Collected: 04/01/21 12:45

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 3.5' - 4.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 03:09	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 03:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/05/21 15:32	04/06/21 03:09	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/05/21 15:32	04/06/21 03:09	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	53.5		49.9		mg/Kg		04/05/21 16:49	04/06/21 19:03	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 19:03	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 19:03	1
Total TPH 1005	53.5		49.9		mg/Kg		04/05/21 16:49	04/06/21 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130	04/05/21 16:49	04/06/21 19:03	1
o-Terphenyl (Surr)	113		70 - 130	04/05/21 16:49	04/06/21 19:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22000		248		mg/Kg			04/10/21 20:30	50

Client Sample ID: HA2-1

Lab Sample ID: 820-299-11

Date Collected: 04/01/21 12:50

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 04:30	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 04:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/05/21 15:32	04/06/21 04:30	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/05/21 15:32	04/06/21 04:30	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 19:46	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 19:46	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA2-1

Date Collected: 04/01/21 12:50

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Lab Sample ID: 820-299-11

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 19:46	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	109		70 - 130				04/05/21 16:49	04/06/21 19:46	1
o-Terphenyl (Surr)	133	S1+	70 - 130				04/05/21 16:49	04/06/21 19:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71900		249		mg/Kg			04/10/21 20:36	50

Client Sample ID: HA2-2

Date Collected: 04/01/21 12:55

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-12

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 04:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				04/05/21 15:32	04/06/21 04:51	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/05/21 15:32	04/06/21 04:51	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 20:08	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 20:08	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 20:08	1
Total TPH 1005	<49.9	U	49.9		mg/Kg		04/05/21 16:49	04/06/21 20:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	111		70 - 130				04/05/21 16:49	04/06/21 20:08	1
o-Terphenyl (Surr)	136	S1+	70 - 130				04/05/21 16:49	04/06/21 20:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23600		249		mg/Kg			04/10/21 20:41	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA2-3

Lab Sample ID: 820-299-13

Date Collected: 04/01/21 13:00

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/05/21 15:32	04/06/21 05:11	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/05/21 15:32	04/06/21 05:11	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/05/21 15:32	04/06/21 05:11	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	75.1		49.8		mg/Kg		04/05/21 16:49	04/06/21 20:30	1
>C12-C28 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 20:30	1
>C28-C35 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 20:30	1
Total TPH 1005	75.1		49.8		mg/Kg		04/05/21 16:49	04/06/21 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130	04/05/21 16:49	04/06/21 20:30	1
o-Terphenyl (Surr)	118		70 - 130	04/05/21 16:49	04/06/21 20:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19300		99.6		mg/Kg			04/10/21 20:58	20

Client Sample ID: HA1-1

Lab Sample ID: 820-299-16

Date Collected: 04/01/21 13:15

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 05:32	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/05/21 15:32	04/06/21 05:32	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/05/21 15:32	04/06/21 05:32	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 16:49	04/06/21 20:52	1
>C12-C28 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 16:49	04/06/21 20:52	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA1-1

Date Collected: 04/01/21 13:15

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Lab Sample ID: 820-299-16

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 16:49	04/06/21 20:52	1
Total TPH 1005	<50.1	U	50.1		mg/Kg		04/05/21 16:49	04/06/21 20:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	105		70 - 130				04/05/21 16:49	04/06/21 20:52	1
o-Terphenyl (Surr)	115		70 - 130				04/05/21 16:49	04/06/21 20:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.4		4.99		mg/Kg			04/10/21 21:03	1

Client Sample ID: HA1-2

Date Collected: 04/01/21 13:20

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-17

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/05/21 15:32	04/06/21 05:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				04/05/21 15:32	04/06/21 05:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130				04/05/21 15:32	04/06/21 05:52	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 21:13	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 21:13	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 21:13	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	121		70 - 130				04/05/21 16:49	04/06/21 21:13	1
o-Terphenyl (Surr)	130		70 - 130				04/05/21 16:49	04/06/21 21:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.8		4.99		mg/Kg			04/10/21 21:09	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA1-3

Lab Sample ID: 820-299-18

Date Collected: 04/01/21 13:25

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/05/21 15:32	04/06/21 06:13	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	04/05/21 15:32	04/06/21 06:13	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/05/21 15:32	04/06/21 06:13	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.6	U	49.6		mg/Kg		04/05/21 16:49	04/06/21 21:35	1
>C12-C28 Range Hydrocarbons	<49.6	U	49.6		mg/Kg		04/05/21 16:49	04/06/21 21:35	1
>C28-C35 Range Hydrocarbons	<49.6	U	49.6		mg/Kg		04/05/21 16:49	04/06/21 21:35	1
Total TPH 1005	<49.6	U	49.6		mg/Kg		04/05/21 16:49	04/06/21 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	120		70 - 130	04/05/21 16:49	04/06/21 21:35	1
o-Terphenyl (Surr)	115		70 - 130	04/05/21 16:49	04/06/21 21:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.8		4.99		mg/Kg			04/10/21 21:14	1

Client Sample ID: HA1-4

Lab Sample ID: 820-299-19

Date Collected: 04/01/21 13:30

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 3.5' - 4.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/05/21 15:32	04/06/21 06:33	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/05/21 15:32	04/06/21 06:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	04/05/21 15:32	04/06/21 06:33	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/05/21 15:32	04/06/21 06:33	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	65.0		49.7		mg/Kg		04/05/21 16:49	04/06/21 21:56	1
>C12-C28 Range Hydrocarbons	<49.7	U	49.7		mg/Kg		04/05/21 16:49	04/06/21 21:56	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA1-4

Date Collected: 04/01/21 13:30

Date Received: 04/01/21 15:43

Sample Depth: 3.5' - 4.0'

Lab Sample ID: 820-299-19

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<49.7	U	49.7		mg/Kg		04/05/21 16:49	04/06/21 21:56	1
Total TPH 1005	65.0		49.7		mg/Kg		04/05/21 16:49	04/06/21 21:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	114		70 - 130				04/05/21 16:49	04/06/21 21:56	1
o-Terphenyl (Surr)	122		70 - 130				04/05/21 16:49	04/06/21 21:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20800		252		mg/Kg			04/10/21 21:20	50

Client Sample ID: HA1-5

Date Collected: 04/01/21 13:35

Date Received: 04/01/21 15:43

Sample Depth: 4.5' - 5.0'

Lab Sample ID: 820-299-20

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 06:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/05/21 15:32	04/06/21 06:53	1
1,4-Difluorobenzene (Surr)	102		70 - 130				04/05/21 15:32	04/06/21 06:53	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	51.4		49.8		mg/Kg		04/05/21 16:49	04/06/21 22:18	1
>C12-C28 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 22:18	1
>C28-C35 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/05/21 16:49	04/06/21 22:18	1
Total TPH 1005	51.4		49.8		mg/Kg		04/05/21 16:49	04/06/21 22:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	118		70 - 130				04/05/21 16:49	04/06/21 22:18	1
o-Terphenyl (Surr)	118		70 - 130				04/05/21 16:49	04/06/21 22:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30600		251		mg/Kg			04/10/21 21:25	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: BG1-1

Lab Sample ID: 820-299-21

Date Collected: 04/01/21 13:40

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 15:32	04/06/21 07:14	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 15:32	04/06/21 07:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/05/21 15:32	04/06/21 07:14	1
1,4-Difluorobenzene (Surr)	101		70 - 130	04/05/21 15:32	04/06/21 07:14	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 15:13	04/06/21 23:01	1
>C12-C28 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 15:13	04/06/21 23:01	1
>C28-C35 Range Hydrocarbons	<50.1	U	50.1		mg/Kg		04/05/21 15:13	04/06/21 23:01	1
Total TPH 1005	<50.1	U	50.1		mg/Kg		04/05/21 15:13	04/06/21 23:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130	04/05/21 15:13	04/06/21 23:01	1
o-Terphenyl (Surr)	75		70 - 130	04/05/21 15:13	04/06/21 23:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.0		4.98		mg/Kg			04/10/21 21:42	1

Client Sample ID: BG1-2

Lab Sample ID: 820-299-22

Date Collected: 04/01/21 13:45

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/05/21 15:32	04/06/21 07:34	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/06/21 07:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/05/21 15:32	04/06/21 07:34	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/05/21 15:32	04/06/21 07:34	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 00:50	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 00:50	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: BG1-2

Date Collected: 04/01/21 13:45

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-22

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 00:50	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 00:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130				04/06/21 16:45	04/07/21 00:50	1
o-Terphenyl (Surr)	93		70 - 130				04/06/21 16:45	04/07/21 00:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			04/10/21 21:48	1

Client Sample ID: BG1-3

Date Collected: 04/01/21 13:50

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-23

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/05/21 16:11	04/06/21 01:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				04/05/21 16:11	04/06/21 01:26	1
1,4-Difluorobenzene (Surr)	98		70 - 130				04/05/21 16:11	04/06/21 01:26	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/06/21 16:45	04/07/21 01:55	1
>C12-C28 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/06/21 16:45	04/07/21 01:55	1
>C28-C35 Range Hydrocarbons	<49.8	U	49.8		mg/Kg		04/06/21 16:45	04/07/21 01:55	1
Total TPH 1005	<49.8	U	49.8		mg/Kg		04/06/21 16:45	04/07/21 01:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	102		70 - 130				04/06/21 16:45	04/07/21 01:55	1
o-Terphenyl (Surr)	99		70 - 130				04/06/21 16:45	04/07/21 01:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.67		4.95		mg/Kg			04/10/21 22:04	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: BG2-1

Lab Sample ID: 820-299-24

Date Collected: 04/01/21 13:55

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0' - 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/05/21 16:11	04/06/21 01:47	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	04/05/21 16:11	04/06/21 01:47	1
1,4-Difluorobenzene (Surr)	102		70 - 130	04/05/21 16:11	04/06/21 01:47	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 02:17	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 02:17	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 02:17	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	99		70 - 130	04/06/21 16:45	04/07/21 02:17	1
o-Terphenyl (Surr)	106		70 - 130	04/06/21 16:45	04/07/21 02:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.99		mg/Kg			04/10/21 22:10	1

Client Sample ID: BG2-2

Lab Sample ID: 820-299-25

Date Collected: 04/01/21 14:00

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00376		0.00198		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
Toluene	0.00201		0.00198		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/05/21 16:11	04/06/21 02:08	1
Total BTEX	0.00577		0.00198		mg/Kg		04/05/21 16:11	04/06/21 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	04/05/21 16:11	04/06/21 02:08	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/05/21 16:11	04/06/21 02:08	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 02:39	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 02:39	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: BG2-2

Date Collected: 04/01/21 14:00

Date Received: 04/01/21 15:43

Sample Depth: 0.5' - 1.0'

Lab Sample ID: 820-299-25

Matrix: Solid

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 02:39	1
Total TPH 1005	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 02:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	100		70 - 130				04/06/21 16:45	04/07/21 02:39	1
o-Terphenyl (Surr)	112		70 - 130				04/06/21 16:45	04/07/21 02:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.05		5.04		mg/Kg			04/10/21 22:15	1

Client Sample ID: BG2-3

Date Collected: 04/01/21 14:05

Date Received: 04/01/21 15:43

Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-26

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 02:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130				04/05/21 16:11	04/06/21 02:28	1
1,4-Difluorobenzene (Surr)	120		70 - 130				04/05/21 16:11	04/06/21 02:28	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 03:01	1
>C12-C28 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 03:01	1
>C28-C35 Range Hydrocarbons	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 03:01	1
Total TPH 1005	<49.9	U	49.9		mg/Kg		04/06/21 16:45	04/07/21 03:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	102		70 - 130				04/06/21 16:45	04/07/21 03:01	1
o-Terphenyl (Surr)	116		70 - 130				04/06/21 16:45	04/07/21 03:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.41		5.00		mg/Kg			04/10/21 22:21	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-5

Lab Sample ID: 820-299-27

Date Collected: 04/01/21 12:47

Matrix: Solid

Date Received: 04/01/21 15:43

Sample Depth: 4.5' - 5.0'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/05/21 16:11	04/06/21 02:49	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/05/21 16:11	04/06/21 02:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/05/21 16:11	04/06/21 02:49	1
1,4-Difluorobenzene (Surr)	113		70 - 130	04/05/21 16:11	04/06/21 02:49	1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	55.0		50.0		mg/Kg		04/06/21 16:45	04/07/21 03:23	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 03:23	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/07/21 03:23	1
Total TPH 1005	55.0		50.0		mg/Kg		04/06/21 16:45	04/07/21 03:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	103		70 - 130	04/06/21 16:45	04/07/21 03:23	1
o-Terphenyl (Surr)	115		70 - 130	04/06/21 16:45	04/07/21 03:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13500		100		mg/Kg			04/10/21 22:26	20

Eurofins Xenco, Lubbock

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
820-299-1	HA5-1	112	103
820-299-1 MS	HA5-1	129	110
820-299-1 MSD	HA5-1	133 S1+	111
820-299-2	HA5-2	116	101
820-299-3	HA5-3	114	102
820-299-4	HA4-1	115	98
820-299-5	HA4-2	92	109
820-299-6	HA4-3	116	99
820-299-7	HA3-1	110	103
820-299-8	HA3-2	114	99
820-299-9	HA3-3	111	101
820-299-10	HA3-4	112	99
820-299-11	HA2-1	106	101
820-299-12	HA2-2	110	103
820-299-13	HA2-3	112	100
820-299-16	HA1-1	110	101
820-299-17	HA1-2	113	100
820-299-18	HA1-3	113	99
820-299-19	HA1-4	114	102
820-299-20	HA1-5	109	102
820-299-21	BG1-1	108	101
820-299-22	BG1-2	106	100
820-299-23	BG1-3	96	98
820-299-23 MS	BG1-3	98	97
820-299-23 MSD	BG1-3	99	98
820-299-24	BG2-1	124	102
820-299-25	BG2-2	116	95
820-299-26	BG2-3	126	120
820-299-27	HA3-5	99	113
LCS 880-1334/1-A	Lab Control Sample	100	102
LCS 880-1341/1-A	Lab Control Sample	87	87
LCS 880-1421/1-A	Lab Control Sample	88	104
LCSD 880-1334/2-A	Lab Control Sample Dup	103	103
LCSD 880-1341/2-A	Lab Control Sample Dup	100	86
LCSD 880-1421/2-A	Lab Control Sample Dup	92	106
MB 880-1255/5-A	Method Blank	99	98
MB 880-1304/9	Method Blank	117	89
MB 880-1334/5-A	Method Blank	99	99
MB 880-1341/5-A	Method Blank	118	95
MB 880-1421/5-A	Method Blank	112	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Lubbock

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO (70-130)	OTPH (70-130)
820-299-1	HA5-1	118	128
820-299-1 MS	HA5-1	122	119
820-299-1 MSD	HA5-1	111	123
820-299-2	HA5-2	105	134 S1+
820-299-3	HA5-3	90	119
820-299-4	HA4-1	88	112
820-299-5	HA4-2	97	123
820-299-6	HA4-3	101	126
820-299-7	HA3-1	100	126
820-299-8	HA3-2	109	135 S1+
820-299-9	HA3-3	99	123
820-299-10	HA3-4	90	113
820-299-11	HA2-1	109	133 S1+
820-299-12	HA2-2	111	136 S1+
820-299-13	HA2-3	97	118
820-299-16	HA1-1	105	115
820-299-17	HA1-2	121	130
820-299-18	HA1-3	120	115
820-299-19	HA1-4	114	122
820-299-20	HA1-5	118	118
820-299-21	BG1-1	90	75
820-299-22	BG1-2	97	93
820-299-22 MS	BG1-2	112	92
820-299-22 MSD	BG1-2	117	97
820-299-23	BG1-3	102	99
820-299-24	BG2-1	99	106
820-299-25	BG2-2	100	112
820-299-26	BG2-3	102	116
820-299-27	HA3-5	103	115
LCS 880-1343/2-A	Lab Control Sample	117	125
LCS 880-1403/2-A	Lab Control Sample	112	98
LCSD 880-1343/3-A	Lab Control Sample Dup	116	113
LCSD 880-1403/3-A	Lab Control Sample Dup	105	93
MB 880-1343/1-A	Method Blank	108	123
MB 880-1403/1-A	Method Blank	107	107

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1255/5-A

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/02/21 14:26	04/05/21 12:52	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/02/21 14:26	04/05/21 12:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/02/21 14:26	04/05/21 12:52	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/02/21 14:26	04/05/21 12:52	1

Lab Sample ID: MB 880-1304/9

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			04/05/21 14:07	1
Toluene	<0.00200	U	0.00200		mg/Kg			04/05/21 14:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			04/05/21 14:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			04/05/21 14:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			04/05/21 14:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			04/05/21 14:07	1
Total BTEX	<0.00200	U	0.00200		mg/Kg			04/05/21 14:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130		04/05/21 14:07	1
1,4-Difluorobenzene (Surr)	89		70 - 130		04/05/21 14:07	1

Lab Sample ID: MB 880-1334/5-A

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1334

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/05/21 15:32	04/05/21 23:44	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 15:32	04/05/21 23:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	04/05/21 15:32	04/05/21 23:44	1
1,4-Difluorobenzene (Surr)	99		70 - 130	04/05/21 15:32	04/05/21 23:44	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

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

Lab Sample ID: LCS 880-1334/1-A

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08038		mg/Kg		80	70 - 130
Toluene	0.100	0.07633		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.08263		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1600		mg/Kg		80	70 - 130
o-Xylene	0.100	0.08111		mg/Kg		81	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-1334/2-A

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1334

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08563		mg/Kg		86	70 - 130	6	35
Toluene	0.100	0.08213		mg/Kg		82	70 - 130	7	35
Ethylbenzene	0.100	0.08842		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1736		mg/Kg		87	70 - 130	8	35
o-Xylene	0.100	0.09000		mg/Kg		90	70 - 130	10	35

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

Lab Sample ID: 820-299-1 MS

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: HA5-1

Prep Type: Total/NA

Prep Batch: 1334

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0990	0.1309	F1	mg/Kg		132	70 - 130
Toluene	<0.00200	U	0.0990	0.1151		mg/Kg		116	70 - 130
Ethylbenzene	<0.00200	U	0.0990	0.1133		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.198	0.2267		mg/Kg		114	70 - 130
o-Xylene	<0.00200	U	0.0990	0.1264		mg/Kg		127	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 820-299-1 MSD

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: HA5-1

Prep Type: Total/NA

Prep Batch: 1334

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0990	0.1292		mg/Kg		130	70 - 130	1	35
Toluene	<0.00200	U	0.0990	0.1157		mg/Kg		117	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.0990	0.1145		mg/Kg		116	70 - 130	1	35

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

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

Lab Sample ID: 820-299-1 MSD

Matrix: Solid

Analysis Batch: 1305

Client Sample ID: HA5-1

Prep Type: Total/NA

Prep Batch: 1334

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00399	U	0.198	0.2298		mg/Kg		116	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.1280		mg/Kg		129	70 - 130	1	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	111		70 - 130								

Lab Sample ID: MB 880-1341/5-A

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1341

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/05/21 16:11	04/06/21 01:05	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
4-Bromofluorobenzene (Surr)	118		70 - 130				04/05/21 16:11	04/06/21 01:05	1
1,4-Difluorobenzene (Surr)	95		70 - 130				04/05/21 16:11	04/06/21 01:05	1

Lab Sample ID: LCS 880-1341/1-A

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1341

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene			0.100	0.07564		mg/Kg		76	70 - 130		
Toluene			0.100	0.08525		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08450		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene			0.200	0.1724		mg/Kg		86	70 - 130		
o-Xylene			0.100	0.08688		mg/Kg		87	70 - 130		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	87		70 - 130								
1,4-Difluorobenzene (Surr)	87		70 - 130								

Lab Sample ID: LCSD 880-1341/2-A

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1341

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08118		mg/Kg		81	70 - 130	7	35
Toluene	0.100	0.09331		mg/Kg		93	70 - 130	9	35
Ethylbenzene	0.100	0.09864		mg/Kg		99	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.1920		mg/Kg		96	70 - 130	11	35

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

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

Lab Sample ID: LCSD 880-1341/2-A

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1341

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	0.100	0.09921		mg/Kg		99	70 - 130	13	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		70 - 130						
1,4-Difluorobenzene (Surr)	86		70 - 130						

Lab Sample ID: 820-299-23 MS

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: BG1-3

Prep Type: Total/NA

Prep Batch: 1341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.07774		mg/Kg		77	70 - 130		
Toluene	<0.00202	U	0.0998	0.09077		mg/Kg		91	70 - 130		
Ethylbenzene	<0.00202	U	0.0998	0.08381		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1714		mg/Kg		86	70 - 130		
o-Xylene	<0.00202	U	0.0998	0.08518		mg/Kg		85	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene (Surr)	98		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								

Lab Sample ID: 820-299-23 MSD

Matrix: Solid

Analysis Batch: 1304

Client Sample ID: BG1-3

Prep Type: Total/NA

Prep Batch: 1341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0990	0.07310		mg/Kg		73	70 - 130	6	35
Toluene	<0.00202	U	0.0990	0.09074		mg/Kg		92	70 - 130	0	35
Ethylbenzene	<0.00202	U	0.0990	0.08356		mg/Kg		84	70 - 130	0	35
m-Xylene & p-Xylene	<0.00404	U	0.198	0.1700		mg/Kg		86	70 - 130	1	35
o-Xylene	<0.00202	U	0.0990	0.08722		mg/Kg		88	70 - 130	2	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	99		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								

Lab Sample ID: MB 880-1421/5-A

Matrix: Solid

Analysis Batch: 1428

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
o-Xylene	0.002127		0.00200		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/07/21 09:26	04/07/21 11:43	1
Total BTEX	0.002127		0.00200		mg/Kg		04/07/21 09:26	04/07/21 11:43	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	04/07/21 09:26	04/07/21 11:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/07/21 09:26	04/07/21 11:43	1

Lab Sample ID: LCS 880-1421/1-A

Matrix: Solid

Analysis Batch: 1428

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07756		mg/Kg		78	70 - 130
Toluene	0.100	0.08327		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08557		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1696		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08357		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-1421/2-A

Matrix: Solid

Analysis Batch: 1428

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1421

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07595		mg/Kg		76	70 - 130	2	35
Toluene	0.100	0.08182		mg/Kg		82	70 - 130	2	35
Ethylbenzene	0.100	0.08503		mg/Kg		85	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1683		mg/Kg		84	70 - 130	1	35
o-Xylene	0.100	0.08319		mg/Kg		83	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-1343/1-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 13:58	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 13:58	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 13:58	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/05/21 16:49	04/06/21 13:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	04/05/21 16:49	04/06/21 13:58	1
o-Terphenyl (Surr)	123		70 - 130	04/05/21 16:49	04/06/21 13:58	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 880-1343/2-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1343

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12 Range Hydrocarbons			1000	1136		mg/Kg		114	75 - 125		
>C12-C28 Range Hydrocarbons			1000	1170		mg/Kg		117	75 - 125		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane (Surr)	117		70 - 130								
o-Terphenyl (Surr)	125		70 - 130								

Lab Sample ID: LCSD 880-1343/3-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1343

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12 Range Hydrocarbons			1000	1139		mg/Kg		114	75 - 125	0	25
>C12-C28 Range Hydrocarbons			1000	1087		mg/Kg		109	75 - 125	7	25
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane (Surr)	116		70 - 130								
o-Terphenyl (Surr)	113		70 - 130								

Lab Sample ID: 820-299-1 MS

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: HA5-1

Prep Type: Total/NA

Prep Batch: 1343

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12 Range Hydrocarbons	<50.0	U	999	1221		mg/Kg		117	75 - 125		
>C12-C28 Range Hydrocarbons	<50.0	U	999	1130		mg/Kg		111	75 - 125		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane (Surr)	122		70 - 130								
o-Terphenyl (Surr)	119		70 - 130								

Lab Sample ID: 820-299-1 MSD

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: HA5-1

Prep Type: Total/NA

Prep Batch: 1343

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12 Range Hydrocarbons	<50.0	U	1000	1067		mg/Kg		102	75 - 125	13	25
>C12-C28 Range Hydrocarbons	<50.0	U	1000	1142		mg/Kg		112	75 - 125	1	25
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane (Surr)	111		70 - 130								
o-Terphenyl (Surr)	123		70 - 130								

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: MB 880-1403/1-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 1403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/06/21 23:44	1
>C12-C28 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/06/21 23:44	1
>C28-C35 Range Hydrocarbons	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/06/21 23:44	1
Total TPH 1005	<50.0	U	50.0		mg/Kg		04/06/21 16:45	04/06/21 23:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130	04/06/21 16:45	04/06/21 23:44	1
o-Terphenyl (Surr)	107		70 - 130	04/06/21 16:45	04/06/21 23:44	1

Lab Sample ID: LCS 880-1403/2-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 1403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12 Range Hydrocarbons	1000	1179		mg/Kg		118	75 - 125
>C12-C28 Range Hydrocarbons	1000	971.0		mg/Kg		97	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	112		70 - 130
o-Terphenyl (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-1403/3-A

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 1403

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12 Range Hydrocarbons	1000	1092		mg/Kg		109	75 - 125	8	25
>C12-C28 Range Hydrocarbons	1000	920.5		mg/Kg		92	75 - 125	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	105		70 - 130
o-Terphenyl (Surr)	93		70 - 130

Lab Sample ID: 820-299-22 MS

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: BG1-2

Prep Type: Total/NA

Prep Batch: 1403

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12 Range Hydrocarbons	<50.0	U	999	1198		mg/Kg		118	75 - 125
>C12-C28 Range Hydrocarbons	<50.0	U	999	996.6		mg/Kg		98	75 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	112		70 - 130
o-Terphenyl (Surr)	92		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: 820-299-22 MSD

Matrix: Solid

Analysis Batch: 1372

Client Sample ID: BG1-2

Prep Type: Total/NA

Prep Batch: 1403

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C12 Range Hydrocarbons	<50.0	U	1000	1245		mg/Kg		122	75 - 125	4	25
>C12-C28 Range Hydrocarbons	<50.0	U	1000	1052		mg/Kg		103	75 - 125	5	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane (Surr)	117		70 - 130								
o-Terphenyl (Surr)	97		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1387/1-A

Matrix: Solid

Analysis Batch: 1515

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/08/21 12:08	1

Lab Sample ID: LCS 880-1387/2-A

Matrix: Solid

Analysis Batch: 1515

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.4		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-1387/3-A

Matrix: Solid

Analysis Batch: 1515

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	253.9		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 820-299-1 MS

Matrix: Solid

Analysis Batch: 1515

Client Sample ID: HA5-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9770		252	11630	4	mg/Kg		738	90 - 110

Lab Sample ID: 820-299-1 MSD

Matrix: Solid

Analysis Batch: 1515

Client Sample ID: HA5-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9770		252	11340	4	mg/Kg		622	90 - 110	3	20

Lab Sample ID: MB 880-1543/1-A

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/10/21 19:51	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-1543/2-A

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.7		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-1543/3-A

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	252.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 820-299-8 MS

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: HA3-2

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13000		250	18430	4	mg/Kg		2165	90 - 110

Lab Sample ID: 820-299-8 MSD

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: HA3-2

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13000		250	18450	4	mg/Kg		2175	90 - 110	0	20

Lab Sample ID: 820-299-20 MS

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: HA1-5

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30600		251	42070	4	mg/Kg		4553	90 - 110

Lab Sample ID: 820-299-20 MSD

Matrix: Solid

Analysis Batch: 1628

Client Sample ID: HA1-5

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30600		251	42120	4	mg/Kg		4572	90 - 110	0	20

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

GC VOA

Prep Batch: 1255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1255/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-23	BG1-3	Total/NA	Solid	8021B	1341
820-299-24	BG2-1	Total/NA	Solid	8021B	1341
820-299-25	BG2-2	Total/NA	Solid	8021B	1341
820-299-26	BG2-3	Total/NA	Solid	8021B	1341
820-299-27	HA3-5	Total/NA	Solid	8021B	1341
MB 880-1304/9	Method Blank	Total/NA	Solid	8021B	
MB 880-1341/5-A	Method Blank	Total/NA	Solid	8021B	1341
LCS 880-1341/1-A	Lab Control Sample	Total/NA	Solid	8021B	1341
LCSD 880-1341/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1341
820-299-23 MS	BG1-3	Total/NA	Solid	8021B	1341
820-299-23 MSD	BG1-3	Total/NA	Solid	8021B	1341

Analysis Batch: 1305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Total/NA	Solid	8021B	1334
820-299-2	HA5-2	Total/NA	Solid	8021B	1334
820-299-3	HA5-3	Total/NA	Solid	8021B	1334
820-299-4	HA4-1	Total/NA	Solid	8021B	1334
820-299-6	HA4-3	Total/NA	Solid	8021B	1334
820-299-7	HA3-1	Total/NA	Solid	8021B	1334
820-299-8	HA3-2	Total/NA	Solid	8021B	1334
820-299-9	HA3-3	Total/NA	Solid	8021B	1334
820-299-10	HA3-4	Total/NA	Solid	8021B	1334
820-299-11	HA2-1	Total/NA	Solid	8021B	1334
820-299-12	HA2-2	Total/NA	Solid	8021B	1334
820-299-13	HA2-3	Total/NA	Solid	8021B	1334
820-299-16	HA1-1	Total/NA	Solid	8021B	1334
820-299-17	HA1-2	Total/NA	Solid	8021B	1334
820-299-18	HA1-3	Total/NA	Solid	8021B	1334
820-299-19	HA1-4	Total/NA	Solid	8021B	1334
820-299-20	HA1-5	Total/NA	Solid	8021B	1334
820-299-21	BG1-1	Total/NA	Solid	8021B	1334
820-299-22	BG1-2	Total/NA	Solid	8021B	1334
MB 880-1255/5-A	Method Blank	Total/NA	Solid	8021B	1255
MB 880-1334/5-A	Method Blank	Total/NA	Solid	8021B	1334
LCS 880-1334/1-A	Lab Control Sample	Total/NA	Solid	8021B	1334
LCSD 880-1334/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1334
820-299-1 MS	HA5-1	Total/NA	Solid	8021B	1334
820-299-1 MSD	HA5-1	Total/NA	Solid	8021B	1334

Prep Batch: 1334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Total/NA	Solid	5035	
820-299-2	HA5-2	Total/NA	Solid	5035	
820-299-3	HA5-3	Total/NA	Solid	5035	
820-299-4	HA4-1	Total/NA	Solid	5035	
820-299-6	HA4-3	Total/NA	Solid	5035	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

GC VOA (Continued)

Prep Batch: 1334 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-7	HA3-1	Total/NA	Solid	5035	
820-299-8	HA3-2	Total/NA	Solid	5035	
820-299-9	HA3-3	Total/NA	Solid	5035	
820-299-10	HA3-4	Total/NA	Solid	5035	
820-299-11	HA2-1	Total/NA	Solid	5035	
820-299-12	HA2-2	Total/NA	Solid	5035	
820-299-13	HA2-3	Total/NA	Solid	5035	
820-299-16	HA1-1	Total/NA	Solid	5035	
820-299-17	HA1-2	Total/NA	Solid	5035	
820-299-18	HA1-3	Total/NA	Solid	5035	
820-299-19	HA1-4	Total/NA	Solid	5035	
820-299-20	HA1-5	Total/NA	Solid	5035	
820-299-21	BG1-1	Total/NA	Solid	5035	
820-299-22	BG1-2	Total/NA	Solid	5035	
MB 880-1334/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1334/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1334/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-299-1 MS	HA5-1	Total/NA	Solid	5035	
820-299-1 MSD	HA5-1	Total/NA	Solid	5035	

Prep Batch: 1341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-23	BG1-3	Total/NA	Solid	5035	
820-299-24	BG2-1	Total/NA	Solid	5035	
820-299-25	BG2-2	Total/NA	Solid	5035	
820-299-26	BG2-3	Total/NA	Solid	5035	
820-299-27	HA3-5	Total/NA	Solid	5035	
MB 880-1341/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1341/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1341/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-299-23 MS	BG1-3	Total/NA	Solid	5035	
820-299-23 MSD	BG1-3	Total/NA	Solid	5035	

Prep Batch: 1421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-5	HA4-2	Total/NA	Solid	5035	
MB 880-1421/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1421/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1421/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-5	HA4-2	Total/NA	Solid	8021B	1421
MB 880-1421/5-A	Method Blank	Total/NA	Solid	8021B	1421
LCS 880-1421/1-A	Lab Control Sample	Total/NA	Solid	8021B	1421
LCSD 880-1421/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1421

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

GC Semi VOA

Prep Batch: 1333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-21	BG1-1	Total/NA	Solid	TX_1005_S_Pre p	

Prep Batch: 1343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-2	HA5-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-3	HA5-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-4	HA4-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-5	HA4-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-6	HA4-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-7	HA3-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-8	HA3-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-9	HA3-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-10	HA3-4	Total/NA	Solid	TX_1005_S_Pre p	
820-299-11	HA2-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-12	HA2-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-13	HA2-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-16	HA1-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-17	HA1-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-18	HA1-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-19	HA1-4	Total/NA	Solid	TX_1005_S_Pre p	
820-299-20	HA1-5	Total/NA	Solid	TX_1005_S_Pre p	
MB 880-1343/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre p	
LCS 880-1343/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre p	
LCSD 880-1343/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre p	
820-299-1 MS	HA5-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-1 MSD	HA5-1	Total/NA	Solid	TX_1005_S_Pre p	

Analysis Batch: 1372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Total/NA	Solid	TX 1005	1343
820-299-2	HA5-2	Total/NA	Solid	TX 1005	1343
820-299-3	HA5-3	Total/NA	Solid	TX 1005	1343

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

GC Semi VOA (Continued)

Analysis Batch: 1372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-4	HA4-1	Total/NA	Solid	TX 1005	1343
820-299-5	HA4-2	Total/NA	Solid	TX 1005	1343
820-299-6	HA4-3	Total/NA	Solid	TX 1005	1343
820-299-7	HA3-1	Total/NA	Solid	TX 1005	1343
820-299-8	HA3-2	Total/NA	Solid	TX 1005	1343
820-299-9	HA3-3	Total/NA	Solid	TX 1005	1343
820-299-10	HA3-4	Total/NA	Solid	TX 1005	1343
820-299-11	HA2-1	Total/NA	Solid	TX 1005	1343
820-299-12	HA2-2	Total/NA	Solid	TX 1005	1343
820-299-13	HA2-3	Total/NA	Solid	TX 1005	1343
820-299-16	HA1-1	Total/NA	Solid	TX 1005	1343
820-299-17	HA1-2	Total/NA	Solid	TX 1005	1343
820-299-18	HA1-3	Total/NA	Solid	TX 1005	1343
820-299-19	HA1-4	Total/NA	Solid	TX 1005	1343
820-299-20	HA1-5	Total/NA	Solid	TX 1005	1343
820-299-22	BG1-2	Total/NA	Solid	TX 1005	1403
820-299-23	BG1-3	Total/NA	Solid	TX 1005	1403
820-299-24	BG2-1	Total/NA	Solid	TX 1005	1403
820-299-25	BG2-2	Total/NA	Solid	TX 1005	1403
820-299-26	BG2-3	Total/NA	Solid	TX 1005	1403
820-299-27	HA3-5	Total/NA	Solid	TX 1005	1403
MB 880-1343/1-A	Method Blank	Total/NA	Solid	TX 1005	1343
MB 880-1403/1-A	Method Blank	Total/NA	Solid	TX 1005	1403
LCS 880-1343/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	1343
LCS 880-1403/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	1403
LCSD 880-1343/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	1343
LCSD 880-1403/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	1403
820-299-1 MS	HA5-1	Total/NA	Solid	TX 1005	1343
820-299-1 MSD	HA5-1	Total/NA	Solid	TX 1005	1343
820-299-22 MS	BG1-2	Total/NA	Solid	TX 1005	1403
820-299-22 MSD	BG1-2	Total/NA	Solid	TX 1005	1403

Analysis Batch: 1374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-21	BG1-1	Total/NA	Solid	TX 1005	1333

Prep Batch: 1403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-22	BG1-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-23	BG1-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-24	BG2-1	Total/NA	Solid	TX_1005_S_Pre p	
820-299-25	BG2-2	Total/NA	Solid	TX_1005_S_Pre p	
820-299-26	BG2-3	Total/NA	Solid	TX_1005_S_Pre p	
820-299-27	HA3-5	Total/NA	Solid	TX_1005_S_Pre p	
MB 880-1403/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Pre p	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

GC Semi VOA (Continued)

Prep Batch: 1403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-1403/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Pre	
LCSD 880-1403/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Pre	
820-299-22 MS	BG1-2	Total/NA	Solid	TX_1005_S_Pre	
820-299-22 MSD	BG1-2	Total/NA	Solid	TX_1005_S_Pre	

HPLC/IC

Leach Batch: 1387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Soluble	Solid	DI Leach	
820-299-2	HA5-2	Soluble	Solid	DI Leach	
820-299-3	HA5-3	Soluble	Solid	DI Leach	
820-299-4	HA4-1	Soluble	Solid	DI Leach	
820-299-5	HA4-2	Soluble	Solid	DI Leach	
820-299-6	HA4-3	Soluble	Solid	DI Leach	
820-299-7	HA3-1	Soluble	Solid	DI Leach	
MB 880-1387/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1387/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1387/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-299-1 MS	HA5-1	Soluble	Solid	DI Leach	
820-299-1 MSD	HA5-1	Soluble	Solid	DI Leach	

Analysis Batch: 1515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-1	HA5-1	Soluble	Solid	300.0	1387
820-299-2	HA5-2	Soluble	Solid	300.0	1387
820-299-3	HA5-3	Soluble	Solid	300.0	1387
820-299-4	HA4-1	Soluble	Solid	300.0	1387
820-299-5	HA4-2	Soluble	Solid	300.0	1387
820-299-6	HA4-3	Soluble	Solid	300.0	1387
820-299-7	HA3-1	Soluble	Solid	300.0	1387
MB 880-1387/1-A	Method Blank	Soluble	Solid	300.0	1387
LCS 880-1387/2-A	Lab Control Sample	Soluble	Solid	300.0	1387
LCSD 880-1387/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1387
820-299-1 MS	HA5-1	Soluble	Solid	300.0	1387
820-299-1 MSD	HA5-1	Soluble	Solid	300.0	1387

Leach Batch: 1543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-8	HA3-2	Soluble	Solid	DI Leach	
820-299-9	HA3-3	Soluble	Solid	DI Leach	
820-299-10	HA3-4	Soluble	Solid	DI Leach	
820-299-11	HA2-1	Soluble	Solid	DI Leach	
820-299-12	HA2-2	Soluble	Solid	DI Leach	
820-299-13	HA2-3	Soluble	Solid	DI Leach	
820-299-16	HA1-1	Soluble	Solid	DI Leach	
820-299-17	HA1-2	Soluble	Solid	DI Leach	
820-299-18	HA1-3	Soluble	Solid	DI Leach	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

HPLC/IC (Continued)

Leach Batch: 1543 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-19	HA1-4	Soluble	Solid	DI Leach	
820-299-20	HA1-5	Soluble	Solid	DI Leach	
820-299-21	BG1-1	Soluble	Solid	DI Leach	
820-299-22	BG1-2	Soluble	Solid	DI Leach	
820-299-23	BG1-3	Soluble	Solid	DI Leach	
820-299-24	BG2-1	Soluble	Solid	DI Leach	
820-299-25	BG2-2	Soluble	Solid	DI Leach	
820-299-26	BG2-3	Soluble	Solid	DI Leach	
820-299-27	HA3-5	Soluble	Solid	DI Leach	
MB 880-1543/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1543/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1543/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-299-8 MS	HA3-2	Soluble	Solid	DI Leach	
820-299-8 MSD	HA3-2	Soluble	Solid	DI Leach	
820-299-20 MS	HA1-5	Soluble	Solid	DI Leach	
820-299-20 MSD	HA1-5	Soluble	Solid	DI Leach	

Analysis Batch: 1628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-299-8	HA3-2	Soluble	Solid	300.0	1543
820-299-9	HA3-3	Soluble	Solid	300.0	1543
820-299-10	HA3-4	Soluble	Solid	300.0	1543
820-299-11	HA2-1	Soluble	Solid	300.0	1543
820-299-12	HA2-2	Soluble	Solid	300.0	1543
820-299-13	HA2-3	Soluble	Solid	300.0	1543
820-299-16	HA1-1	Soluble	Solid	300.0	1543
820-299-17	HA1-2	Soluble	Solid	300.0	1543
820-299-18	HA1-3	Soluble	Solid	300.0	1543
820-299-19	HA1-4	Soluble	Solid	300.0	1543
820-299-20	HA1-5	Soluble	Solid	300.0	1543
820-299-21	BG1-1	Soluble	Solid	300.0	1543
820-299-22	BG1-2	Soluble	Solid	300.0	1543
820-299-23	BG1-3	Soluble	Solid	300.0	1543
820-299-24	BG2-1	Soluble	Solid	300.0	1543
820-299-25	BG2-2	Soluble	Solid	300.0	1543
820-299-26	BG2-3	Soluble	Solid	300.0	1543
820-299-27	HA3-5	Soluble	Solid	300.0	1543
MB 880-1543/1-A	Method Blank	Soluble	Solid	300.0	1543
LCS 880-1543/2-A	Lab Control Sample	Soluble	Solid	300.0	1543
LCSD 880-1543/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1543
820-299-8 MS	HA3-2	Soluble	Solid	300.0	1543
820-299-8 MSD	HA3-2	Soluble	Solid	300.0	1543
820-299-20 MS	HA1-5	Soluble	Solid	300.0	1543
820-299-20 MSD	HA1-5	Soluble	Solid	300.0	1543

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA5-1

Lab Sample ID: 820-299-1

Date Collected: 04/01/21 12:00

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 00:05	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 15:04	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		10	1515	04/08/21 12:25	CH	XM

Client Sample ID: HA5-2

Lab Sample ID: 820-299-2

Date Collected: 04/01/21 12:05

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 00:26	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 16:09	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		20	1515	04/08/21 12:42	CH	XM

Client Sample ID: HA5-3

Lab Sample ID: 820-299-3

Date Collected: 04/01/21 12:10

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 00:46	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 16:31	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		20	1515	04/08/21 12:47	CH	XM

Client Sample ID: HA4-1

Lab Sample ID: 820-299-4

Date Collected: 04/01/21 12:15

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 01:07	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 16:52	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		10	1515	04/08/21 12:53	CH	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA4-2

Date Collected: 04/01/21 12:20

Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1421	04/07/21 09:26	MR	XM
Total/NA	Analysis	8021B		1	1428	04/07/21 15:10	KL	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 17:14	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		20	1515	04/08/21 12:58	CH	XM

Client Sample ID: HA4-3

Date Collected: 04/01/21 12:25

Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 01:47	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 17:36	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		20	1515	04/08/21 13:15	CH	XM

Client Sample ID: HA3-1

Date Collected: 04/01/21 12:30

Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 02:08	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 17:58	AJ	XM
Soluble	Leach	DI Leach			1387	04/06/21 14:54	CH	XM
Soluble	Analysis	300.0		20	1515	04/08/21 13:20	CH	XM

Client Sample ID: HA3-2

Date Collected: 04/01/21 12:35

Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 02:28	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 18:19	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		20	1628	04/10/21 20:08	CH	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-3

Lab Sample ID: 820-299-9

Date Collected: 04/01/21 12:40

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 02:49	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 18:41	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		20	1628	04/10/21 20:25	CH	XM

Client Sample ID: HA3-4

Lab Sample ID: 820-299-10

Date Collected: 04/01/21 12:45

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 03:09	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 19:03	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		50	1628	04/10/21 20:30	CH	XM

Client Sample ID: HA2-1

Lab Sample ID: 820-299-11

Date Collected: 04/01/21 12:50

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 04:30	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 19:46	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		50	1628	04/10/21 20:36	CH	XM

Client Sample ID: HA2-2

Lab Sample ID: 820-299-12

Date Collected: 04/01/21 12:55

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 04:51	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 20:08	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		50	1628	04/10/21 20:41	CH	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA2-3**Date Collected: 04/01/21 13:00****Date Received: 04/01/21 15:43****Lab Sample ID: 820-299-13****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 05:11	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 20:30	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		20	1628	04/10/21 20:58	CH	XM

Client Sample ID: HA1-1**Date Collected: 04/01/21 13:15****Date Received: 04/01/21 15:43****Lab Sample ID: 820-299-16****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 05:32	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 20:52	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 21:03	CH	XM

Client Sample ID: HA1-2**Date Collected: 04/01/21 13:20****Date Received: 04/01/21 15:43****Lab Sample ID: 820-299-17****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 05:52	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 21:13	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 21:09	CH	XM

Client Sample ID: HA1-3**Date Collected: 04/01/21 13:25****Date Received: 04/01/21 15:43****Lab Sample ID: 820-299-18****Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 06:13	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 21:35	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 21:14	CH	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA1-4

Lab Sample ID: 820-299-19

Date Collected: 04/01/21 13:30

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 06:33	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 21:56	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		50	1628	04/10/21 21:20	CH	XM

Client Sample ID: HA1-5

Lab Sample ID: 820-299-20

Date Collected: 04/01/21 13:35

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 06:53	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1343	04/05/21 16:49	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/06/21 22:18	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		50	1628	04/10/21 21:25	CH	XM

Client Sample ID: BG1-1

Lab Sample ID: 820-299-21

Date Collected: 04/01/21 13:40

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 07:14	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1333	04/05/21 15:13	DM	XM
Total/NA	Analysis	TX 1005		1	1374	04/06/21 23:01	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 21:42	CH	XM

Client Sample ID: BG1-2

Lab Sample ID: 820-299-22

Date Collected: 04/01/21 13:45

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1334	04/05/21 15:32	MR	XM
Total/NA	Analysis	8021B		1	1305	04/06/21 07:34	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 00:50	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 21:48	CH	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: BG1-3

Lab Sample ID: 820-299-23

Date Collected: 04/01/21 13:50

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1341	04/05/21 16:11	MR	XM
Total/NA	Analysis	8021B		1	1304	04/06/21 01:26	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 01:55	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 22:04	CH	XM

Client Sample ID: BG2-1

Lab Sample ID: 820-299-24

Date Collected: 04/01/21 13:55

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1341	04/05/21 16:11	MR	XM
Total/NA	Analysis	8021B		1	1304	04/06/21 01:47	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 02:17	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 22:10	CH	XM

Client Sample ID: BG2-2

Lab Sample ID: 820-299-25

Date Collected: 04/01/21 14:00

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1341	04/05/21 16:11	MR	XM
Total/NA	Analysis	8021B		1	1304	04/06/21 02:08	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 02:39	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 22:15	CH	XM

Client Sample ID: BG2-3

Lab Sample ID: 820-299-26

Date Collected: 04/01/21 14:05

Matrix: Solid

Date Received: 04/01/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1341	04/05/21 16:11	MR	XM
Total/NA	Analysis	8021B		1	1304	04/06/21 02:28	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 03:01	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		1	1628	04/10/21 22:21	CH	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Client Sample ID: HA3-5
Date Collected: 04/01/21 12:47
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1341	04/05/21 16:11	MR	XM
Total/NA	Analysis	8021B		1	1304	04/06/21 02:49	MR	XM
Total/NA	Prep	TX_1005_S_Prep			1403	04/06/21 16:45	DM	XM
Total/NA	Analysis	TX 1005		1	1372	04/07/21 03:23	AJ	XM
Soluble	Leach	DI Leach			1543	04/08/21 15:29	SC	XM
Soluble	Analysis	300.0		20	1628	04/10/21 22:26	CH	XM

Laboratory References:
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8021B	5035	Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Lubbock

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Spur Brine Release - AR217001

Job ID: 820-299-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-299-1	HA5-1	Solid	04/01/21 12:00	04/01/21 15:43	0' - 0.5'
820-299-2	HA5-2	Solid	04/01/21 12:05	04/01/21 15:43	0.5' - 1.0'
820-299-3	HA5-3	Solid	04/01/21 12:10	04/01/21 15:43	1.5' - 2.0'
820-299-4	HA4-1	Solid	04/01/21 12:15	04/01/21 15:43	0' - 0.5'
820-299-5	HA4-2	Solid	04/01/21 12:20	04/01/21 15:43	0.5' - 1.0'
820-299-6	HA4-3	Solid	04/01/21 12:25	04/01/21 15:43	1.5' - 2.0'
820-299-7	HA3-1	Solid	04/01/21 12:30	04/01/21 15:43	0' - 0.5'
820-299-8	HA3-2	Solid	04/01/21 12:35	04/01/21 15:43	0.5' - 1.0'
820-299-9	HA3-3	Solid	04/01/21 12:40	04/01/21 15:43	1.5' - 2.0'
820-299-10	HA3-4	Solid	04/01/21 12:45	04/01/21 15:43	3.5' - 4.0'
820-299-11	HA2-1	Solid	04/01/21 12:50	04/01/21 15:43	0' - 0.5'
820-299-12	HA2-2	Solid	04/01/21 12:55	04/01/21 15:43	0.5' - 1.0'
820-299-13	HA2-3	Solid	04/01/21 13:00	04/01/21 15:43	1.5' - 2.0'
820-299-16	HA1-1	Solid	04/01/21 13:15	04/01/21 15:43	0' - 0.5'
820-299-17	HA1-2	Solid	04/01/21 13:20	04/01/21 15:43	0.5' - 1.0'
820-299-18	HA1-3	Solid	04/01/21 13:25	04/01/21 15:43	1.5' - 2.0'
820-299-19	HA1-4	Solid	04/01/21 13:30	04/01/21 15:43	3.5' - 4.0'
820-299-20	HA1-5	Solid	04/01/21 13:35	04/01/21 15:43	4.5' - 5.0'
820-299-21	BG1-1	Solid	04/01/21 13:40	04/01/21 15:43	0' - 0.5'
820-299-22	BG1-2	Solid	04/01/21 13:45	04/01/21 15:43	0.5' - 1.0'
820-299-23	BG1-3	Solid	04/01/21 13:50	04/01/21 15:43	1.5' - 2.0'
820-299-24	BG2-1	Solid	04/01/21 13:55	04/01/21 15:43	0' - 0.5'
820-299-25	BG2-2	Solid	04/01/21 14:00	04/01/21 15:43	0.5' - 1.0'
820-299-26	BG2-3	Solid	04/01/21 14:05	04/01/21 15:43	1.5' - 2.0'
820-299-27	HA3-5	Solid	04/01/21 12:47	04/01/21 15:43	4.5' - 5.0'

Eurofins Xenco, Lubbock

[illegible]

Loc: 820
299

3270-299-01 Chain of Custody

CHAIN OF CUSTODY RECORD									
LAB USE ONLY									
DUE DATE:									
TEMP OF COOLER WHEN RECEIVED (°C)									
Page 2 of 2									
Office Location		Lubbock		Laboratory:		Xenco		6701 Aberdeen Lubbock, Texas 79424	
Project Manager		Joseph Guesnier		Phone:		(806) 544-9276			
Sampler's Name		Bryant McBrayer		Contact:		SRS #:			
Project Number		AR217001		Project Name		Spur Brine Release			
Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers	40 ml VOA
S	4/1/2021	14:00	X	X	BG2-2	5"	1'	X	X
S	4/1/2021	14:05	X	X	BG2-3	1.5'	2'	X	X
S	4/1/2021	14:10	X	X	BG2-4	0'	5'	X	X
S	4/1/2021	14:15	X	X	BG2-5	5'	1'	X	X
S	4/1/2021	12:47	X	X	BG2-6	1.5'	2'	X	X
S	4/1/2021	12:47	X	X	HAB-5	4.5'	5'	X	X
ANALYSIS REQUESTED									
Chloride (EPA Method 300)									
TPH (TCED Method TX1005)									
BTEX (EPA Method 8021B)									
Lab Sample ID									
820-299-25									
820-299-26									
820-299-27									
TURNAROUND TIME									
Normal									
48-Hour Rush									
24-Hour Rush									
TRRP Laboratory Review Checklist									
By: 4/1/21 15:43									
NOTES: Client: Spur									
e-mail results to:									
bryant.mcbrayer@terracon.com									
erin.lord@terracon.com									
jguesnier@terracon.com									

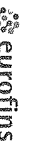
Loc: 820
299

820-299-02 Chain of Custody

Lubbock Office ■ 5827 50th Street, Suite 1 ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable

Chain of Custody Record

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No.
Client Contact:		Kramer, Jessica			820-329-1
Shipping/Receiving	Phone	E-Mail:	State of Origin	Page	Page 1 of 3
Eurofins Xenco		jessica.kramer@eurofins.com	New Mexico	Job #:	820-299-1
Address		Accreditations Required (See note):		Preservation Codes	
1211 W Florida Ave.		NELAP - Texas		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ammonia H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
City	Midland	Due Date Requested	Analysis Requested		
State Zip:	TX 79701	4/7/2021	Perform MS/MSD (Yes or No)		
Phone	432-704-5440(Tel)	TAT Requested (days)	8021B/5035FP_Calc BTEX		
Email			300_ORGFMM_28D/DI_LEACH Chloride		
Project Name:	Spur Brine Release - AR217001		TX_1005/TX_1005_S_Prep Standard List		
Site			Total Number of containers		
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Sludge, Other)
HA5-1 (820-299-1)	4/1/21	12 00			Solid
HA5-2 (820-299-2)	4/1/21	12 03			Solid
HA5-3 (820-299-3)	4/1/21	12 10			Solid
HA4-1 (820-299-4)	4/1/21	12 15			Solid
HA4-2 (820-299-5)	4/1/21	12 20			Solid
HA4-3 (820-299-6)	4/1/21	12 25			Solid
HA3-1 (820-299-7)	4/1/21	12 30			Solid
HA3-2 (820-299-8)	4/1/21	12 35			Solid
HA3-3 (820-299-9)	4/1/21	12 40			Solid
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested I, II, III, IV Other (specify)					
Primary Deliverable Rank 2					
Empty Kit Relinquished by					
Relinquished by					
Relinquished by					
Relinquished by					
Custody Seals Intact: Custody Seal No					
Delta Yes Delta No					

Chain of Custody Record



Client Information (Sub Contract Lab)										Sampler	Lab PM:	Carrier Tracking No(s)	COC No:								
Client Contact:										Phone:	Kramer, Jessica		820-329 3								
Shipping/Receiving											E-Mail:	State of Origin:	Page:								
Company:											Jessica.kramer@eurofinsnet.com	New Mexico	Page 3 of 3								
Address:											Accreditations Required (See note):	Job #:									
1211 W Florida Ave.											NELAP - Texas	820-299-1									
City:										Due Date Requested											
Midland										4/7/2021											
State, Zip:										TAT Requested (days):											
TX, 79701																					
Phone:										PO #:											
432-704-5440(Tel)																					
Email:										WO #:											
Project Name:										Project #:											
Spur Brine Release - AR217001										82000340											
Site:										SSOW#:											
Sample Identification - Client ID (Lab ID)										Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (I=water, S=solid, O=oil, B=brine, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5035FP_Calc BTEX	300_ORGFM_28D/DI_LEACH Chloride	TX_1005/TX_1005_S_Prep Standard List	Total Number of containers	Special Instructions/Note:	
BG1-1 (820-299-21)										4/1/21	13:40	Mountain	Solid	X	X	X				1	
BG1-2 (820-299-22)										4/1/21	13:45	Mountain	Solid	X	X	X				1	
BG1-3 (820-299-23)										4/1/21	13:50	Mountain	Solid	X	X	X				1	
BG2-1 (820-299-24)										4/1/21	13:55	Mountain	Solid	X	X	X				1	
BG2-2 (820-299-25)										4/1/21	14:00	Mountain	Solid	X	X	X				1	
BG2-3 (820-299-26)										4/1/21	14:05	Mountain	Solid	X	X	X				1	
HA3-5 (820-299-27)										4/1/21	12:47	Mountain	Solid	X	X	X				1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.																					
Possible Hazard Identification																					
Unconfirmed																					
Deliverable Requested I, II, III, IV, Other (specify)										Primary Deliverable Rank: 2											
Empty Kit Relinquished by										Date	Time		Method of Shipment:								
Relinquished by										Date/Time:	4/6/21 11:35		Company	Received by	Date/Time:	4-5-21 11:00 AM		Company			
Relinquished by										Date/Time:			Company	Received by	Date/Time:			Company			
Relinquished by										Date/Time:			Company	Received by	Date/Time:			Company			
Custody Seals Intact:										Custody Seal No		Cooler Temperature(s) °C and Other Remarks:									
Δ Yes Δ No																					

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Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-299-1

SDG Number:

Login Number: 299**List Number: 1****Creator: Turner, Michael****List Source: Eurofins Lubbock**

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

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-299-1

SDG Number:

Login Number: 299**List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 04/05/21 11:41 AM**

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-596-1

Laboratory Sample Delivery Group: AR217001
Client Project/Site: State I 16 (Brine Seep)

For:

Terracon Consulting Eng & Scientists
5827 50th St
Suite 1
Lubbock, Texas 79424

Attn: Erin Lloyd

A handwritten signature in black ink that reads "J. Kramer".

Authorized for release by:
5/7/2021 3:17:46 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Laboratory Job ID: 820-596-1
SDG: AR217001

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).



Jessica Kramer
Project Manager
5/7/2021 3:17:46 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Laboratory Job ID: 820-596-1
SDG: AR217001

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Job ID: 820-596-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

**Job Narrative
820-596-1**

Receipt

The samples were received on 5/4/2021 9:32 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-2733 and 880-2733 and analytical batch 880-2750 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(6')

Lab Sample ID: 820-596-1

Date Collected: 05/03/21 13:00

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/05/21 10:30	05/05/21 13:53	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/05/21 10:30	05/05/21 13:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/05/21 10:30	05/05/21 13:53	1
1,4-Difluorobenzene (Surr)	116		70 - 130	05/05/21 10:30	05/05/21 13:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 13:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 13:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 13:11	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	05/05/21 11:37	05/05/21 13:11	1
o-Terphenyl	124		70 - 130	05/05/21 11:37	05/05/21 13:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17100	F1	101		mg/Kg			05/05/21 18:57	20

Client Sample ID: T-1(8')

Lab Sample ID: 820-596-2

Date Collected: 05/03/21 13:05

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/05/21 10:30	05/05/21 14:14	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/05/21 10:30	05/05/21 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/05/21 10:30	05/05/21 14:14	1
1,4-Difluorobenzene (Surr)	121		70 - 130	05/05/21 10:30	05/05/21 14:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 14:13	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(8')

Lab Sample ID: 820-596-2

Date Collected: 05/03/21 13:05

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 14:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 14:13	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				05/05/21 11:37	05/05/21 14:13	1
o-Terphenyl	122		70 - 130				05/05/21 11:37	05/05/21 14:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12800		99.8		mg/Kg			05/05/21 19:13	20

Client Sample ID: T-1(10')

Lab Sample ID: 820-596-3

Date Collected: 05/03/21 13:10

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				05/05/21 10:30	05/05/21 14:35	1
1,4-Difluorobenzene (Surr)	130		70 - 130				05/05/21 10:30	05/05/21 14:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/05/21 11:37	05/05/21 14:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/05/21 11:37	05/05/21 14:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/05/21 11:37	05/05/21 14:34	1
Total TPH	<49.8	U	49.8		mg/Kg		05/05/21 11:37	05/05/21 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/05/21 11:37	05/05/21 14:34	1
o-Terphenyl	108		70 - 130				05/05/21 11:37	05/05/21 14:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5620		49.6		mg/Kg			05/05/21 19:18	10

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(12')

Lab Sample ID: 820-596-4

Date Collected: 05/03/21 13:15

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:56	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/05/21 10:30	05/05/21 14:56	1
1,4-Difluorobenzene (Surr)	129		70 - 130	05/05/21 10:30	05/05/21 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 15:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 15:00	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	05/05/21 11:37	05/05/21 15:00	1
o-Terphenyl	123		70 - 130	05/05/21 11:37	05/05/21 15:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7650		49.6		mg/Kg			05/05/21 19:23	10

Client Sample ID: T-1(14')

Lab Sample ID: 820-596-5

Date Collected: 05/03/21 13:20

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:16	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/05/21 10:30	05/05/21 15:16	1
1,4-Difluorobenzene (Surr)	127		70 - 130	05/05/21 10:30	05/05/21 15:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:21	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(14')

Lab Sample ID: 820-596-5

Date Collected: 05/03/21 13:20

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:21	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				05/05/21 11:37	05/05/21 15:21	1
o-Terphenyl	128		70 - 130				05/05/21 11:37	05/05/21 15:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2720		25.0		mg/Kg			05/05/21 19:28	5

Client Sample ID: T-3(6')

Lab Sample ID: 820-596-6

Date Collected: 05/03/21 13:30

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/05/21 10:30	05/05/21 15:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				05/05/21 10:30	05/05/21 15:37	1
1,4-Difluorobenzene (Surr)	123		70 - 130				05/05/21 10:30	05/05/21 15:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:42	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				05/05/21 11:37	05/05/21 15:42	1
o-Terphenyl	120		70 - 130				05/05/21 11:37	05/05/21 15:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23900		253		mg/Kg			05/05/21 19:44	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-3(8')

Lab Sample ID: 820-596-7

Date Collected: 05/03/21 13:35

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/05/21 10:30	05/05/21 15:58	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/05/21 10:30	05/05/21 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	05/05/21 10:30	05/05/21 15:58	1
1,4-Difluorobenzene (Surr)	119		70 - 130	05/05/21 10:30	05/05/21 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 16:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 16:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 16:02	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/05/21 11:37	05/05/21 16:02	1
o-Terphenyl	109		70 - 130	05/05/21 11:37	05/05/21 16:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19300		252		mg/Kg			05/05/21 19:49	50

Client Sample ID: T-3(10')

Lab Sample ID: 820-596-8

Date Collected: 05/03/21 13:40

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 16:19	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 10:30	05/05/21 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/05/21 10:30	05/05/21 16:19	1
1,4-Difluorobenzene (Surr)	127		70 - 130	05/05/21 10:30	05/05/21 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:23	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-3(10')

Lab Sample ID: 820-596-8

Date Collected: 05/03/21 13:40

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:23	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				05/05/21 11:37	05/05/21 16:23	1
o-Terphenyl	113		70 - 130				05/05/21 11:37	05/05/21 16:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2380		25.1		mg/Kg			05/05/21 19:54	5

Client Sample ID: T-2(6')

Lab Sample ID: 820-596-9

Date Collected: 05/03/21 13:45

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00261		0.00201		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/05/21 10:30	05/05/21 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				05/05/21 10:30	05/05/21 16:40	1
1,4-Difluorobenzene (Surr)	124		70 - 130				05/05/21 10:30	05/05/21 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:44	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/05/21 11:37	05/05/21 16:44	1
o-Terphenyl	114		70 - 130				05/05/21 11:37	05/05/21 16:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18500		250		mg/Kg			05/05/21 19:59	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-2(8')

Lab Sample ID: 820-596-10

Date Collected: 05/03/21 13:50

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/05/21 10:30	05/05/21 17:00	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/05/21 10:30	05/05/21 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	05/05/21 10:30	05/05/21 17:00	1
1,4-Difluorobenzene (Surr)	122		70 - 130	05/05/21 10:30	05/05/21 17:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:05	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	05/05/21 11:37	05/05/21 17:05	1
o-Terphenyl	112		70 - 130	05/05/21 11:37	05/05/21 17:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15400		99.6		mg/Kg			05/05/21 20:05	20

Client Sample ID: T-2(10')

Lab Sample ID: 820-596-11

Date Collected: 05/03/21 13:55

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 12:16	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	05/06/21 08:25	05/06/21 12:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/06/21 08:25	05/06/21 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:48	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-2(10')

Lab Sample ID: 820-596-11

Date Collected: 05/03/21 13:55

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:48	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 17:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				05/05/21 11:37	05/05/21 17:48	1
o-Terphenyl	113		70 - 130				05/05/21 11:37	05/05/21 17:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14200	F1	99.0		mg/Kg			05/05/21 20:10	20

Client Sample ID: T-2(14')

Lab Sample ID: 820-596-12

Date Collected: 05/03/21 14:00

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/06/21 08:25	05/06/21 12:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				05/06/21 08:25	05/06/21 12:37	1
1,4-Difluorobenzene (Surr)	97		70 - 130				05/06/21 08:25	05/06/21 12:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:09	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				05/05/21 11:37	05/05/21 18:09	1
o-Terphenyl	115		70 - 130				05/05/21 11:37	05/05/21 18:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9820		100		mg/Kg			05/05/21 20:25	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(6')

Lab Sample ID: 820-596-13

Date Collected: 05/03/21 14:10

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 16:42	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	05/06/21 08:25	05/06/21 16:42	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/06/21 08:25	05/06/21 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:30	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	05/05/21 11:37	05/05/21 18:30	1
o-Terphenyl	116		70 - 130	05/05/21 11:37	05/05/21 18:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22900		252		mg/Kg			05/05/21 20:31	50

Client Sample ID: T-4(8')

Lab Sample ID: 820-596-14

Date Collected: 05/03/21 14:15

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 17:02	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/06/21 08:25	05/06/21 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/06/21 08:25	05/06/21 17:02	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/06/21 08:25	05/06/21 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 18:51	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(8')

Lab Sample ID: 820-596-14

Date Collected: 05/03/21 14:15

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 18:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 18:51	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				05/05/21 11:37	05/05/21 18:51	1
o-Terphenyl	105		70 - 130				05/05/21 11:37	05/05/21 18:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22500		252		mg/Kg			05/05/21 20:46	50

Client Sample ID: T-4(10')

Lab Sample ID: 820-596-15

Date Collected: 05/03/21 14:20

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130				05/06/21 08:25	05/06/21 17:23	1
1,4-Difluorobenzene (Surr)	95		70 - 130				05/06/21 08:25	05/06/21 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:12	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/05/21 11:37	05/05/21 19:12	1
o-Terphenyl	114		70 - 130				05/05/21 11:37	05/05/21 19:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23500		252		mg/Kg			05/05/21 20:51	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(12')

Lab Sample ID: 820-596-16

Date Collected: 05/03/21 14:25

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/06/21 08:25	05/06/21 17:43	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/06/21 08:25	05/06/21 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/06/21 08:25	05/06/21 17:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/06/21 08:25	05/06/21 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 19:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 19:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 19:33	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	05/05/21 11:37	05/05/21 19:33	1
o-Terphenyl	112		70 - 130	05/05/21 11:37	05/05/21 19:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23300		252		mg/Kg			05/05/21 20:56	50

Client Sample ID: T-4(14')

Lab Sample ID: 820-596-17

Date Collected: 05/03/21 14:30

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/06/21 08:25	05/06/21 18:04	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/06/21 08:25	05/06/21 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	05/06/21 08:25	05/06/21 18:04	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/06/21 08:25	05/06/21 18:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:54	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(14')

Lab Sample ID: 820-596-17

Date Collected: 05/03/21 14:30

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:54	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 19:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				05/05/21 11:37	05/05/21 19:54	1
o-Terphenyl	111		70 - 130				05/05/21 11:37	05/05/21 19:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26900		249		mg/Kg			05/05/21 21:02	50

Client Sample ID: T-5(6')

Lab Sample ID: 820-596-18

Date Collected: 05/03/21 14:35

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/06/21 08:25	05/06/21 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				05/06/21 08:25	05/06/21 18:24	1
1,4-Difluorobenzene (Surr)	95		70 - 130				05/06/21 08:25	05/06/21 18:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:15	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				05/05/21 11:37	05/05/21 20:15	1
o-Terphenyl	112		70 - 130				05/05/21 11:37	05/05/21 20:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9780		49.5		mg/Kg			05/05/21 21:07	10

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-5(8')

Lab Sample ID: 820-596-19

Date Collected: 05/03/21 14:40

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 18:44	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	05/06/21 08:25	05/06/21 18:44	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/06/21 08:25	05/06/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 20:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 20:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 20:36	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:37	05/05/21 20:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	05/05/21 11:37	05/05/21 20:36	1
o-Terphenyl	115		70 - 130	05/05/21 11:37	05/05/21 20:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11100		100		mg/Kg			05/05/21 21:12	20

Client Sample ID: T-5(10')

Lab Sample ID: 820-596-20

Date Collected: 05/03/21 14:45

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 19:05	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		05/06/21 08:25	05/06/21 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	05/06/21 08:25	05/06/21 19:05	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/06/21 08:25	05/06/21 19:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:57	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-5(10')

Lab Sample ID: 820-596-20

Date Collected: 05/03/21 14:45

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:57	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				05/05/21 11:37	05/05/21 20:57	1
o-Terphenyl	116		70 - 130				05/05/21 11:37	05/05/21 20:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10300		50.1		mg/Kg			05/05/21 21:17	10

Client Sample ID: T-5(12')

Lab Sample ID: 820-596-21

Date Collected: 05/03/21 14:50

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				05/05/21 11:00	05/06/21 12:17	1
1,4-Difluorobenzene (Surr)	112		70 - 130				05/05/21 11:00	05/06/21 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 13:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 13:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 13:11	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				05/05/21 11:47	05/05/21 13:11	1
o-Terphenyl	114		70 - 130				05/05/21 11:47	05/05/21 13:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15700		100		mg/Kg			05/05/21 21:59	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-5(14')

Lab Sample ID: 820-596-22

Date Collected: 05/03/21 14:55

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:38	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/05/21 11:00	05/06/21 12:38	1
1,4-Difluorobenzene (Surr)	123		70 - 130	05/05/21 11:00	05/06/21 12:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 14:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 14:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 14:13	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 14:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	05/05/21 11:47	05/05/21 14:13	1
o-Terphenyl	122		70 - 130	05/05/21 11:47	05/05/21 14:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14400		101		mg/Kg			05/05/21 22:14	20

Client Sample ID: T-6(6')

Lab Sample ID: 820-596-23

Date Collected: 05/03/21 15:00

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 16:47	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 16:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	05/05/21 11:00	05/06/21 16:47	1
1,4-Difluorobenzene (Surr)	115		70 - 130	05/05/21 11:00	05/06/21 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/05/21 11:47	05/05/21 14:34	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-6(6')

Lab Sample ID: 820-596-23

Date Collected: 05/03/21 15:00

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/05/21 11:47	05/05/21 14:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/05/21 11:47	05/05/21 14:34	1
Total TPH	<49.8	U	49.8		mg/Kg		05/05/21 11:47	05/05/21 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				05/05/21 11:47	05/05/21 14:34	1
o-Terphenyl	124		70 - 130				05/05/21 11:47	05/05/21 14:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18100		253		mg/Kg			05/05/21 22:19	50

Client Sample ID: T-6(8')

Lab Sample ID: 820-596-24

Date Collected: 05/03/21 15:05

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/05/21 11:00	05/06/21 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				05/05/21 11:00	05/06/21 17:08	1
1,4-Difluorobenzene (Surr)	114		70 - 130				05/05/21 11:00	05/06/21 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 15:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 15:00	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				05/05/21 11:47	05/05/21 15:00	1
o-Terphenyl	115		70 - 130				05/05/21 11:47	05/05/21 15:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13400		101		mg/Kg			05/05/21 22:24	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-6(10')

Lab Sample ID: 820-596-25

Date Collected: 05/03/21 15:10

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/05/21 11:00	05/06/21 17:28	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		05/05/21 11:00	05/06/21 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/05/21 11:00	05/06/21 17:28	1
1,4-Difluorobenzene (Surr)	110		70 - 130	05/05/21 11:00	05/06/21 17:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:57	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	05/05/21 11:47	05/05/21 20:57	1
o-Terphenyl	117		70 - 130	05/05/21 11:47	05/05/21 20:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2440		24.9		mg/Kg			05/05/21 22:30	5

Client Sample ID: T-7(6')

Lab Sample ID: 820-596-26

Date Collected: 05/03/21 15:15

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 17:49	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	05/05/21 11:00	05/06/21 17:49	1
1,4-Difluorobenzene (Surr)	118		70 - 130	05/05/21 11:00	05/06/21 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 15:42	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-7(6')

Lab Sample ID: 820-596-26

Date Collected: 05/03/21 15:15

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 15:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 15:42	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				05/05/21 11:47	05/05/21 15:42	1
o-Terphenyl	116		70 - 130				05/05/21 11:47	05/05/21 15:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27300		248		mg/Kg			05/05/21 22:45	50

Client Sample ID: T-7(8')

Lab Sample ID: 820-596-27

Date Collected: 05/03/21 15:20

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				05/05/21 11:00	05/06/21 18:10	1
1,4-Difluorobenzene (Surr)	113		70 - 130				05/05/21 11:00	05/06/21 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 16:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 16:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 16:02	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				05/05/21 11:47	05/05/21 16:02	1
o-Terphenyl	124		70 - 130				05/05/21 11:47	05/05/21 16:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16000		99.2		mg/Kg			05/05/21 22:50	20

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-7(10')

Lab Sample ID: 820-596-28

Date Collected: 05/03/21 15:25

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 18:30	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/05/21 11:00	05/06/21 18:30	1
1,4-Difluorobenzene (Surr)	119		70 - 130	05/05/21 11:00	05/06/21 18:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:23	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	05/05/21 11:47	05/05/21 16:23	1
o-Terphenyl	123		70 - 130	05/05/21 11:47	05/05/21 16:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23600		250		mg/Kg			05/05/21 22:56	50

Client Sample ID: T-7(12')

Lab Sample ID: 820-596-29

Date Collected: 05/03/21 15:30

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/05/21 11:00	05/06/21 18:51	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/05/21 11:00	05/06/21 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/05/21 11:00	05/06/21 18:51	1
1,4-Difluorobenzene (Surr)	116		70 - 130	05/05/21 11:00	05/06/21 18:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:44	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-7(12')

Lab Sample ID: 820-596-29

Date Collected: 05/03/21 15:30

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:44	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				05/05/21 11:47	05/05/21 16:44	1
o-Terphenyl	112		70 - 130				05/05/21 11:47	05/05/21 16:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18900		99.8		mg/Kg			05/05/21 23:01	20

Client Sample ID: T-7(14')

Lab Sample ID: 820-596-30

Date Collected: 05/03/21 15:35

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				05/05/21 11:00	05/06/21 19:12	1
1,4-Difluorobenzene (Surr)	110		70 - 130				05/05/21 11:00	05/06/21 19:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:05	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				05/05/21 11:47	05/05/21 17:05	1
o-Terphenyl	109		70 - 130				05/05/21 11:47	05/05/21 17:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9210		49.9		mg/Kg			05/05/21 23:06	10

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-8(6')

Lab Sample ID: 820-596-31

Date Collected: 05/03/21 15:40

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 19:33	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/05/21 11:00	05/06/21 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/05/21 11:00	05/06/21 19:33	1
1,4-Difluorobenzene (Surr)	114		70 - 130	05/05/21 11:00	05/06/21 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:48	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 17:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	05/05/21 11:47	05/05/21 17:48	1
o-Terphenyl	118		70 - 130	05/05/21 11:47	05/05/21 17:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21700		250		mg/Kg			05/05/21 23:11	50

Client Sample ID: T-8(8')

Lab Sample ID: 820-596-32

Date Collected: 05/03/21 15:45

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:53	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/05/21 11:00	05/06/21 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/05/21 11:00	05/06/21 19:53	1
1,4-Difluorobenzene (Surr)	113		70 - 130	05/05/21 11:00	05/06/21 19:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:09	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-8(8')

Lab Sample ID: 820-596-32

Date Collected: 05/03/21 15:45

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:09	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				05/05/21 11:47	05/05/21 18:09	1
o-Terphenyl	118		70 - 130				05/05/21 11:47	05/05/21 18:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22700		252		mg/Kg			05/05/21 23:27	50

Client Sample ID: T-8(10')

Lab Sample ID: 820-596-33

Date Collected: 05/03/21 15:50

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				05/06/21 12:54	05/06/21 20:18	1
1,4-Difluorobenzene (Surr)	106		70 - 130				05/06/21 12:54	05/06/21 20:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:30	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 18:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				05/05/21 11:47	05/05/21 18:30	1
o-Terphenyl	114		70 - 130				05/05/21 11:47	05/05/21 18:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24100		251		mg/Kg			05/05/21 23:32	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-8(12')

Lab Sample ID: 820-596-34

Date Collected: 05/03/21 15:55

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 20:39	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/06/21 12:54	05/06/21 20:39	1
1,4-Difluorobenzene (Surr)	108		70 - 130	05/06/21 12:54	05/06/21 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 18:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 18:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 18:51	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/05/21 11:47	05/05/21 18:51	1
o-Terphenyl	108		70 - 130	05/05/21 11:47	05/05/21 18:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18800		101		mg/Kg			05/05/21 23:47	20

Client Sample ID: T-8(14')

Lab Sample ID: 820-596-35

Date Collected: 05/03/21 16:00

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:59	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/06/21 12:54	05/06/21 20:59	1
1,4-Difluorobenzene (Surr)	106		70 - 130	05/06/21 12:54	05/06/21 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:12	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-8(14')

Lab Sample ID: 820-596-35

Date Collected: 05/03/21 16:00

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:12	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/05/21 11:47	05/05/21 19:12	1
o-Terphenyl	106		70 - 130				05/05/21 11:47	05/05/21 19:12	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16400		101		mg/Kg			05/05/21 23:52	20

Client Sample ID: T-9(6')

Lab Sample ID: 820-596-36

Date Collected: 05/03/21 16:10

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		05/06/21 12:54	05/06/21 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				05/06/21 12:54	05/06/21 21:19	1
1,4-Difluorobenzene (Surr)	107		70 - 130				05/06/21 12:54	05/06/21 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 19:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 19:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 19:33	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				05/05/21 11:47	05/05/21 19:33	1
o-Terphenyl	118		70 - 130				05/05/21 11:47	05/05/21 19:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16600		249		mg/Kg			05/05/21 23:58	50

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-9(8')

Lab Sample ID: 820-596-37

Date Collected: 05/03/21 16:15

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/06/21 12:54	05/06/21 21:40	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		05/06/21 12:54	05/06/21 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	05/06/21 12:54	05/06/21 21:40	1
1,4-Difluorobenzene (Surr)	106		70 - 130	05/06/21 12:54	05/06/21 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:54	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/05/21 11:47	05/05/21 19:54	1
o-Terphenyl	105		70 - 130	05/05/21 11:47	05/05/21 19:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14900		99.8		mg/Kg			05/06/21 00:03	20

Client Sample ID: T-9(12')

Lab Sample ID: 820-596-38

Date Collected: 05/03/21 16:20

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/06/21 12:54	05/06/21 22:00	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		05/06/21 12:54	05/06/21 22:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/06/21 12:54	05/06/21 22:00	1
1,4-Difluorobenzene (Surr)	105		70 - 130	05/06/21 12:54	05/06/21 22:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:15	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-9(12')

Lab Sample ID: 820-596-38

Date Collected: 05/03/21 16:20

Matrix: Solid

Date Received: 05/04/21 09:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:15	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				05/05/21 11:47	05/05/21 20:15	1
o-Terphenyl	107		70 - 130				05/05/21 11:47	05/05/21 20:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16200		99.2		mg/Kg			05/06/21 00:08	20

Client Sample ID: T-10(6')

Lab Sample ID: 820-596-39

Date Collected: 05/03/21 16:25

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		05/06/21 12:54	05/06/21 22:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				05/06/21 12:54	05/06/21 22:21	1
1,4-Difluorobenzene (Surr)	108		70 - 130				05/06/21 12:54	05/06/21 22:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 20:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 20:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 20:36	1
Total TPH	<49.9	U	49.9		mg/Kg		05/05/21 11:47	05/05/21 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/05/21 11:47	05/05/21 20:36	1
o-Terphenyl	113		70 - 130				05/05/21 11:47	05/05/21 20:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	304		5.00		mg/Kg			05/06/21 00:13	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-10(8')

Lab Sample ID: 820-596-40

Date Collected: 05/03/21 16:40

Matrix: Solid

Date Received: 05/04/21 09:32

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 22:41	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/06/21 12:54	05/06/21 22:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/06/21 12:54	05/06/21 22:41	1
1,4-Difluorobenzene (Surr)	104		70 - 130	05/06/21 12:54	05/06/21 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 04:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 04:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 04:36	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 04:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/05/21 09:09	05/06/21 04:36	1
o-Terphenyl	111		70 - 130	05/05/21 09:09	05/06/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	199		5.05		mg/Kg			05/06/21 00:18	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
 Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
 SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-596-1	T-1(6')	91	116
820-596-2	T-1(8')	98	121
820-596-3	T-1(10')	97	130
820-596-4	T-1(12')	98	129
820-596-5	T-1(14')	104	127
820-596-6	T-3(6')	102	123
820-596-7	T-3(8')	90	119
820-596-8	T-3(10')	99	127
820-596-9	T-2(6')	93	124
820-596-10	T-2(8')	86	122
820-596-11	T-2(10')	95	97
820-596-11 MS	T-2(10')	108	108
820-596-11 MSD	T-2(10')	106	105
820-596-12	T-2(14')	103	97
820-596-13	T-4(6')	95	97
820-596-14	T-4(8')	99	97
820-596-15	T-4(10')	92	95
820-596-16	T-4(12')	98	94
820-596-17	T-4(14')	96	95
820-596-18	T-5(6')	93	95
820-596-19	T-5(8')	97	94
820-596-20	T-5(10')	96	95
820-596-21	T-5(12')	98	112
820-596-21 MS	T-5(12')	93	109
820-596-21 MSD	T-5(12')	89	112
820-596-22	T-5(14')	103	123
820-596-23	T-6(6')	93	115
820-596-24	T-6(8')	101	114
820-596-25	T-6(10')	101	110
820-596-26	T-7(6')	97	118
820-596-27	T-7(8')	93	113
820-596-28	T-7(10')	108	119
820-596-29	T-7(12')	94	116
820-596-30	T-7(14')	101	110
820-596-31	T-8(6')	94	114
820-596-32	T-8(8')	99	113
820-596-33	T-8(10')	102	106
820-596-33 MS	T-8(10')	104	107
820-596-33 MSD	T-8(10')	104	104
820-596-34	T-8(12')	108	108
820-596-35	T-8(14')	105	106
820-596-36	T-9(6')	106	107
820-596-37	T-9(8')	107	106
820-596-38	T-9(12')	106	105
820-596-39	T-10(6')	106	108
820-596-40	T-10(8')	106	104
LCS 880-2706/1-A	Lab Control Sample	92	118
LCS 880-2707/1-A	Lab Control Sample	92	111
LCS 880-2756/1-A	Lab Control Sample	110	107

Eurofins Xenco, Lubbock

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
LCS 880-2780/1-A	Lab Control Sample	97	105
LCSD 880-2706/2-A	Lab Control Sample Dup	80	111
LCSD 880-2707/2-A	Lab Control Sample Dup	89	110
LCSD 880-2756/2-A	Lab Control Sample Dup	108	109
LCSD 880-2780/2-A	Lab Control Sample Dup	97	105
MB 880-2706/5-A	Method Blank	108	113
MB 880-2707/5-A	Method Blank	106	98
MB 880-2756/5-A	Method Blank	91	93
MB 880-2780/5-A	Method Blank	100	99
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
820-596-1 MS	T-1(6')		
820-596-1 MSD	T-1(6')		
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
820-596-1	T-1(6')	120	124
820-596-1 MS	T-1(6')	105	96
820-596-1 MSD	T-1(6')	107	100
820-596-2	T-1(8')	116	122
820-596-3	T-1(10')	108	108
820-596-4	T-1(12')	120	123
820-596-5	T-1(14')	121	128
820-596-6	T-3(6')	115	120
820-596-7	T-3(8')	107	109
820-596-8	T-3(10')	110	113
820-596-9	T-2(6')	108	114
820-596-10	T-2(8')	111	112
820-596-11	T-2(10')	109	113
820-596-12	T-2(14')	111	115
820-596-13	T-4(6')	109	116
820-596-14	T-4(8')	101	105
820-596-15	T-4(10')	108	114
820-596-16	T-4(12')	111	112
820-596-17	T-4(14')	106	111

Eurofins Xenco, Lubbock

Surrogate Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-596-1

Project/Site: State I 16 (Brine Seep)

SDG: AR217001

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
820-596-18	T-5(6')	106	112
820-596-19	T-5(8')	110	115
820-596-20	T-5(10')	112	116
820-596-21	T-5(12')	110	114
820-596-21 MS	T-5(12')	101	100
820-596-21 MSD	T-5(12')	104	100
820-596-22	T-5(14')	117	122
820-596-23	T-6(6')	121	124
820-596-24	T-6(8')	114	115
820-596-25	T-6(10')	116	117
820-596-26	T-7(6')	117	116
820-596-27	T-7(8')	126	124
820-596-28	T-7(10')	117	123
820-596-29	T-7(12')	110	112
820-596-30	T-7(14')	104	109
820-596-31	T-8(6')	110	118
820-596-32	T-8(8')	112	118
820-596-33	T-8(10')	112	114
820-596-34	T-8(12')	103	108
820-596-35	T-8(14')	102	106
820-596-36	T-9(6')	119	118
820-596-37	T-9(8')	100	105
820-596-38	T-9(12')	103	107
820-596-39	T-10(6')	108	113
820-596-40	T-10(8')	107	111
LCS 880-2705/2-A	Lab Control Sample	111	107
LCS 880-2724/2-A	Lab Control Sample	100	96
LCS 880-2725/2-A	Lab Control Sample	105	101
LCSD 880-2705/3-A	Lab Control Sample Dup	112	107
LCSD 880-2724/3-A	Lab Control Sample Dup	104	97
LCSD 880-2725/3-A	Lab Control Sample Dup	105	102
MB 880-2705/1-A	Method Blank	107	110
MB 880-2724/1-A	Method Blank	96	100
MB 880-2725/1-A	Method Blank	105	108

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-2706/5-A

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/05/21 10:30	05/05/21 13:31	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/05/21 10:30	05/05/21 13:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/05/21 10:30	05/05/21 13:31	1
1,4-Difluorobenzene (Surr)	113		70 - 130	05/05/21 10:30	05/05/21 13:31	1

Lab Sample ID: LCS 880-2706/1-A

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1134		mg/Kg		113	70 - 130
Toluene	0.100	0.1067		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1008		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2019		mg/Kg		101	70 - 130
o-Xylene	0.100	0.09687		mg/Kg		97	70 - 130

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

Lab Sample ID: LCSD 880-2706/2-A

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2706

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1012		mg/Kg		101	70 - 130	11	35
Toluene	0.100	0.09913		mg/Kg		99	70 - 130	7	35
Ethylbenzene	0.100	0.08961		mg/Kg		90	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1798		mg/Kg		90	70 - 130	12	35
o-Xylene	0.100	0.08656		mg/Kg		87	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 820-596-1 MS

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: T-1(6')

Prep Type: Total/NA

Prep Batch: 2706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0996	0.1037		mg/Kg			

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: 820-596-1 MS

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: T-1(6')

Prep Type: Total/NA

Prep Batch: 2706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.0996	0.1053		mg/Kg			
Ethylbenzene	<0.00200	U	0.0996	0.09924		mg/Kg			
m-Xylene & p-Xylene	<0.00399	U	0.199	0.1947		mg/Kg			
o-Xylene	<0.00200	U	0.0996	0.09166		mg/Kg			

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: 820-596-1 MSD

Matrix: Solid

Analysis Batch: 2708

Client Sample ID: T-1(6')

Prep Type: Total/NA

Prep Batch: 2706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.08939		mg/Kg					
Toluene	<0.00200	U	0.100	0.08349		mg/Kg					
Ethylbenzene	<0.00200	U	0.100	0.07813		mg/Kg					
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1539		mg/Kg					
o-Xylene	<0.00200	U	0.100	0.07295		mg/Kg					

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)			
1,4-Difluorobenzene (Surr)			

Lab Sample ID: MB 880-2707/5-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2707

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/05/21 11:00	05/06/21 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/05/21 11:00	05/06/21 11:55	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/05/21 11:00	05/06/21 11:55	1

Lab Sample ID: LCS 880-2707/1-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09929		mg/Kg		99	70 - 130
Toluene	0.100	0.1024		mg/Kg		102	70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: LCS 880-2707/1-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	0.100	0.09811		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2006		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09570		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2707/2-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2707

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09172		mg/Kg		92	70 - 130	8	35
Toluene	0.100	0.09860		mg/Kg		99	70 - 130	4	35
Ethylbenzene	0.100	0.09572		mg/Kg		96	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1923		mg/Kg		96	70 - 130	4	35
o-Xylene	0.100	0.09321		mg/Kg		93	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 820-596-21 MS

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: T-5(12')

Prep Type: Total/NA

Prep Batch: 2707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.100	0.06713	F1	mg/Kg		66	70 - 130
Toluene	<0.00199	U	0.100	0.07270		mg/Kg		73	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.07319		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1390	F1	mg/Kg		69	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.06924	F1	mg/Kg		69	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 820-596-21 MSD

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: T-5(12')

Prep Type: Total/NA

Prep Batch: 2707

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U F1	0.0996	0.06946	F1	mg/Kg		69	70 - 130	3	35
Toluene	<0.00199	U	0.0996	0.07500		mg/Kg		75	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.0996	0.07077		mg/Kg		71	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1478		mg/Kg		74	70 - 130	6	35
o-Xylene	<0.00199	U F1	0.0996	0.07404		mg/Kg		74	70 - 130	7	35

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-2756/5-A

Matrix: Solid

Analysis Batch: 2758

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2756

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/06/21 08:25	05/06/21 11:55	1	

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				05/06/21 08:25	05/06/21 11:55	1	
1,4-Difluorobenzene (Surr)	93		70 - 130				05/06/21 08:25	05/06/21 11:55	1	

Lab Sample ID: LCS 880-2756/1-A

Matrix: Solid

Analysis Batch: 2758

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2756

	Spike	LCS	LCS							
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits		
Benzene	0.100	0.1079		mg/Kg		108		70 - 130		
Toluene	0.100	0.1028		mg/Kg		103		70 - 130		
Ethylbenzene	0.100	0.1049		mg/Kg		105		70 - 130		
m-Xylene & p-Xylene	0.200	0.2250		mg/Kg		112		70 - 130		
o-Xylene	0.100	0.1130		mg/Kg		113		70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-2756/2-A

Matrix: Solid

Analysis Batch: 2758

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2756

	Spike	LCSD	LCSD								
Analyte	Added	Result	Qualifier	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
Benzene	0.100	0.1057		mg/Kg		106		70 - 130	2		35
Toluene	0.100	0.1002		mg/Kg		100		70 - 130	3		35
Ethylbenzene	0.100	0.1010		mg/Kg		101		70 - 130	4		35
m-Xylene & p-Xylene	0.200	0.2169		mg/Kg		108		70 - 130	4		35
o-Xylene	0.100	0.1095		mg/Kg		110		70 - 130	3		35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: 820-596-11 MS

Matrix: Solid

Analysis Batch: 2758

Client Sample ID: T-2(10')

Prep Type: Total/NA

Prep Batch: 2756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.101	0.09843		mg/Kg		97	70 - 130
Toluene	<0.00202	U	0.101	0.09332		mg/Kg		92	70 - 130
Ethylbenzene	<0.00202	U	0.101	0.09401		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.202	0.2016		mg/Kg		100	70 - 130
o-Xylene	<0.00202	U	0.101	0.1011		mg/Kg		100	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		70 - 130						
1,4-Difluorobenzene (Surr)	108		70 - 130						

Lab Sample ID: 820-596-11 MSD

Matrix: Solid

Analysis Batch: 2758

Client Sample ID: T-2(10')

Prep Type: Total/NA

Prep Batch: 2756

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08866		mg/Kg		88	70 - 130	10	35
Toluene	<0.00202	U	0.100	0.08524		mg/Kg		85	70 - 130	9	35
Ethylbenzene	<0.00202	U	0.100	0.08718		mg/Kg		87	70 - 130	8	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1868		mg/Kg		93	70 - 130	8	35
o-Xylene	<0.00202	U	0.100	0.09274		mg/Kg		93	70 - 130	9	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	106		70 - 130								
1,4-Difluorobenzene (Surr)	105		70 - 130								

Lab Sample ID: MB 880-2780/5-A

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/06/21 12:54	05/06/21 19:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				05/06/21 12:54	05/06/21 19:49	1
1,4-Difluorobenzene (Surr)	99		70 - 130				05/06/21 12:54	05/06/21 19:49	1

Lab Sample ID: LCS 880-2780/1-A

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08101		mg/Kg		81	70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: LCS 880-2780/1-A

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.100	0.08695		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.09459		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1919		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09476		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-2780/2-A

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08109		mg/Kg		81	70 - 130	0	35
Toluene	0.100	0.08685		mg/Kg		87	70 - 130	0	35
Ethylbenzene	0.100	0.09427		mg/Kg		94	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1899		mg/Kg		95	70 - 130	1	35
o-Xylene	0.100	0.09348		mg/Kg		93	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 820-596-33 MS

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: T-8(10')

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0998	0.07185		mg/Kg		72	70 - 130
Toluene	<0.00199	U	0.0998	0.07620		mg/Kg		76	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.08347		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1692		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08392		mg/Kg		84	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 820-596-33 MSD

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: T-8(10')

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07100		mg/Kg		71	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.07605		mg/Kg		76	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.100	0.08374		mg/Kg		84	70 - 130	0	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1701		mg/Kg		85	70 - 130	1	35

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: 820-596-33 MSD

Matrix: Solid

Analysis Batch: 2786

Client Sample ID: T-8(10')

Prep Type: Total/NA

Prep Batch: 2780

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	<0.00199	U	0.100	0.08507		mg/Kg		85	70 - 130	1	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	104		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-2705/1-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 09:09	05/06/21 00:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				05/05/21 09:09	05/06/21 00:46	1
o-Terphenyl	110		70 - 130				05/05/21 09:09	05/06/21 00:46	1

Lab Sample ID: LCS 880-2705/2-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	976.9		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	827.9		mg/Kg		83	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
o-Terphenyl	107		70 - 130						

Lab Sample ID: LCSD 880-2705/3-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	908.1		mg/Kg		91	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	838.9		mg/Kg		84	70 - 130	1	20

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: LCSD 880-2705/3-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2705

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: MB 880-2724/1-A

Matrix: Solid

Analysis Batch: 2713

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2724

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 12:08	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 12:08	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 12:08	1	
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:37	05/05/21 12:08	1	

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
1-Chlorooctane	96		70 - 130	05/05/21 11:37	05/05/21 12:08	1				
o-Terphenyl	100		70 - 130	05/05/21 11:37	05/05/21 12:08	1				

Lab Sample ID: LCS 880-2724/2-A

Matrix: Solid

Analysis Batch: 2713

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2724

		Spike	LCS	LCS					%Rec.		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10		1000	864.7		mg/Kg		86	70 - 130			
Diesel Range Organics (Over C10-C28)		1000	782.3		mg/Kg		78	70 - 130			

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-2724/3-A

Matrix: Solid

Analysis Batch: 2713

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2724

		Spike	LCSD	LCSD					%Rec.		RPD
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10		1000	834.7		mg/Kg		83	70 - 130	4	20	
Diesel Range Organics (Over C10-C28)		1000	805.2		mg/Kg		81	70 - 130	3	20	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	97		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: 820-596-1 MS

Matrix: Solid

Analysis Batch: 2713

Client Sample ID: T-1(6')

Prep Type: Total/NA

Prep Batch: 2724

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1050		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	958.9		mg/Kg		96	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	96		70 - 130						

Lab Sample ID: 820-596-1 MSD

Matrix: Solid

Analysis Batch: 2713

Client Sample ID: T-1(6')

Prep Type: Total/NA

Prep Batch: 2724

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1082		mg/Kg		106	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1002		mg/Kg		100	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	107		70 - 130								
o-Terphenyl	100		70 - 130								

Lab Sample ID: MB 880-2725/1-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 12:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 12:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 12:08	1
Total TPH	<50.0	U	50.0		mg/Kg		05/05/21 11:47	05/05/21 12:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				05/05/21 11:47	05/05/21 12:08	1
o-Terphenyl	108		70 - 130				05/05/21 11:47	05/05/21 12:08	1

Lab Sample ID: LCS 880-2725/2-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	939.0		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	781.3		mg/Kg		78	70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

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

Lab Sample ID: LCS 880-2725/2-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2725

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-2725/3-A

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2725

	Spike	LCSD	LCSD						%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	1000	901.6		mg/Kg		90	70 - 130	4	20		
Diesel Range Organics (Over C10-C28)	1000	788.3		mg/Kg		79	70 - 130	1	20		

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 820-596-21 MS

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: T-5(12')

Prep Type: Total/NA

Prep Batch: 2725

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	989.0		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	947.9		mg/Kg		95	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 820-596-21 MSD

Matrix: Solid

Analysis Batch: 2715

Client Sample ID: T-5(12')

Prep Type: Total/NA

Prep Batch: 2725

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1051		mg/Kg		103	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	952.4		mg/Kg		95	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	100		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2733/1-A

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/05/21 18:42	1

Lab Sample ID: LCS 880-2733/2-A

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	255.0		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-2733/3-A

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	271.7		mg/Kg		109	90 - 110	6	20

Lab Sample ID: 820-596-1 MS

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: T-1(6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	17100	F1	5040	22740	F1	mg/Kg		113	90 - 110

Lab Sample ID: 820-596-1 MSD

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: T-1(6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17100	F1	5040	22690	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: 820-596-11 MS

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: T-2(10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	14200	F1	4950	19840	F1	mg/Kg		113	90 - 110

Lab Sample ID: 820-596-11 MSD

Matrix: Solid

Analysis Batch: 2750

Client Sample ID: T-2(10')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14200	F1	4950	19790	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: MB 880-2734/1-A

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: Method Blank

Prep Type: Soluble

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

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-2734/2-A

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.1		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-2734/3-A

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	249.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 820-596-21 MS

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: T-5(12')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	15700		5000	20390		mg/Kg		94	90 - 110		

Lab Sample ID: 820-596-21 MSD

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: T-5(12')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15700		5000	20390		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 820-596-31 MS

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: T-8(6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	21700		12500	33500		mg/Kg		94	90 - 110		

Lab Sample ID: 820-596-31 MSD

Matrix: Solid

Analysis Batch: 2754

Client Sample ID: T-8(6')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21700		12500	33510		mg/Kg		94	90 - 110	0	20

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC VOA

Prep Batch: 2706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Total/NA	Solid	5035	
820-596-2	T-1(8')	Total/NA	Solid	5035	
820-596-3	T-1(10')	Total/NA	Solid	5035	
820-596-4	T-1(12')	Total/NA	Solid	5035	
820-596-5	T-1(14')	Total/NA	Solid	5035	
820-596-6	T-3(6')	Total/NA	Solid	5035	
820-596-7	T-3(8')	Total/NA	Solid	5035	
820-596-8	T-3(10')	Total/NA	Solid	5035	
820-596-9	T-2(6')	Total/NA	Solid	5035	
820-596-10	T-2(8')	Total/NA	Solid	5035	
MB 880-2706/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2706/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2706/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-596-1 MS	T-1(6')	Total/NA	Solid	5035	
820-596-1 MSD	T-1(6')	Total/NA	Solid	5035	

Prep Batch: 2707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Total/NA	Solid	5035	
820-596-22	T-5(14')	Total/NA	Solid	5035	
820-596-23	T-6(6')	Total/NA	Solid	5035	
820-596-24	T-6(8')	Total/NA	Solid	5035	
820-596-25	T-6(10')	Total/NA	Solid	5035	
820-596-26	T-7(6')	Total/NA	Solid	5035	
820-596-27	T-7(8')	Total/NA	Solid	5035	
820-596-28	T-7(10')	Total/NA	Solid	5035	
820-596-29	T-7(12')	Total/NA	Solid	5035	
820-596-30	T-7(14')	Total/NA	Solid	5035	
820-596-31	T-8(6')	Total/NA	Solid	5035	
820-596-32	T-8(8')	Total/NA	Solid	5035	
MB 880-2707/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2707/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2707/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-596-21 MS	T-5(12')	Total/NA	Solid	5035	
820-596-21 MSD	T-5(12')	Total/NA	Solid	5035	

Analysis Batch: 2708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Total/NA	Solid	8021B	2706
820-596-2	T-1(8')	Total/NA	Solid	8021B	2706
820-596-3	T-1(10')	Total/NA	Solid	8021B	2706
820-596-4	T-1(12')	Total/NA	Solid	8021B	2706
820-596-5	T-1(14')	Total/NA	Solid	8021B	2706
820-596-6	T-3(6')	Total/NA	Solid	8021B	2706
820-596-7	T-3(8')	Total/NA	Solid	8021B	2706
820-596-8	T-3(10')	Total/NA	Solid	8021B	2706
820-596-9	T-2(6')	Total/NA	Solid	8021B	2706
820-596-10	T-2(8')	Total/NA	Solid	8021B	2706
MB 880-2706/5-A	Method Blank	Total/NA	Solid	8021B	2706
LCS 880-2706/1-A	Lab Control Sample	Total/NA	Solid	8021B	2706
LCSD 880-2706/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2706

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC VOA (Continued)

Analysis Batch: 2708 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1 MS	T-1(6')	Total/NA	Solid	8021B	2706
820-596-1 MSD	T-1(6')	Total/NA	Solid	8021B	2706

Prep Batch: 2756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-11	T-2(10')	Total/NA	Solid	5035	
820-596-12	T-2(14')	Total/NA	Solid	5035	
820-596-13	T-4(6')	Total/NA	Solid	5035	
820-596-14	T-4(8')	Total/NA	Solid	5035	
820-596-15	T-4(10')	Total/NA	Solid	5035	
820-596-16	T-4(12')	Total/NA	Solid	5035	
820-596-17	T-4(14')	Total/NA	Solid	5035	
820-596-18	T-5(6')	Total/NA	Solid	5035	
820-596-19	T-5(8')	Total/NA	Solid	5035	
820-596-20	T-5(10')	Total/NA	Solid	5035	
MB 880-2756/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2756/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2756/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-596-11 MS	T-2(10')	Total/NA	Solid	5035	
820-596-11 MSD	T-2(10')	Total/NA	Solid	5035	

Analysis Batch: 2757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Total/NA	Solid	8021B	2707
820-596-22	T-5(14')	Total/NA	Solid	8021B	2707
820-596-23	T-6(6')	Total/NA	Solid	8021B	2707
820-596-24	T-6(8')	Total/NA	Solid	8021B	2707
820-596-25	T-6(10')	Total/NA	Solid	8021B	2707
820-596-26	T-7(6')	Total/NA	Solid	8021B	2707
820-596-27	T-7(8')	Total/NA	Solid	8021B	2707
820-596-28	T-7(10')	Total/NA	Solid	8021B	2707
820-596-29	T-7(12')	Total/NA	Solid	8021B	2707
820-596-30	T-7(14')	Total/NA	Solid	8021B	2707
820-596-31	T-8(6')	Total/NA	Solid	8021B	2707
820-596-32	T-8(8')	Total/NA	Solid	8021B	2707
MB 880-2707/5-A	Method Blank	Total/NA	Solid	8021B	2707
LCS 880-2707/1-A	Lab Control Sample	Total/NA	Solid	8021B	2707
LCSD 880-2707/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2707
820-596-21 MS	T-5(12')	Total/NA	Solid	8021B	2707
820-596-21 MSD	T-5(12')	Total/NA	Solid	8021B	2707

Analysis Batch: 2758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-11	T-2(10')	Total/NA	Solid	8021B	2756
820-596-12	T-2(14')	Total/NA	Solid	8021B	2756
820-596-13	T-4(6')	Total/NA	Solid	8021B	2756
820-596-14	T-4(8')	Total/NA	Solid	8021B	2756
820-596-15	T-4(10')	Total/NA	Solid	8021B	2756
820-596-16	T-4(12')	Total/NA	Solid	8021B	2756
820-596-17	T-4(14')	Total/NA	Solid	8021B	2756
820-596-18	T-5(6')	Total/NA	Solid	8021B	2756

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC VOA (Continued)

Analysis Batch: 2758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-19	T-5(8')	Total/NA	Solid	8021B	2756
820-596-20	T-5(10')	Total/NA	Solid	8021B	2756
MB 880-2756/5-A	Method Blank	Total/NA	Solid	8021B	2756
LCS 880-2756/1-A	Lab Control Sample	Total/NA	Solid	8021B	2756
LCSD 880-2756/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2756
820-596-11 MS	T-2(10')	Total/NA	Solid	8021B	2756
820-596-11 MSD	T-2(10')	Total/NA	Solid	8021B	2756

Prep Batch: 2780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-33	T-8(10')	Total/NA	Solid	5035	
820-596-34	T-8(12')	Total/NA	Solid	5035	
820-596-35	T-8(14')	Total/NA	Solid	5035	
820-596-36	T-9(6')	Total/NA	Solid	5035	
820-596-37	T-9(8')	Total/NA	Solid	5035	
820-596-38	T-9(12')	Total/NA	Solid	5035	
820-596-39	T-10(6')	Total/NA	Solid	5035	
820-596-40	T-10(8')	Total/NA	Solid	5035	
MB 880-2780/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2780/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2780/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-596-33 MS	T-8(10')	Total/NA	Solid	5035	
820-596-33 MSD	T-8(10')	Total/NA	Solid	5035	

Analysis Batch: 2786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-33	T-8(10')	Total/NA	Solid	8021B	2780
820-596-34	T-8(12')	Total/NA	Solid	8021B	2780
820-596-35	T-8(14')	Total/NA	Solid	8021B	2780
820-596-36	T-9(6')	Total/NA	Solid	8021B	2780
820-596-37	T-9(8')	Total/NA	Solid	8021B	2780
820-596-38	T-9(12')	Total/NA	Solid	8021B	2780
820-596-39	T-10(6')	Total/NA	Solid	8021B	2780
820-596-40	T-10(8')	Total/NA	Solid	8021B	2780
MB 880-2780/5-A	Method Blank	Total/NA	Solid	8021B	2780
LCS 880-2780/1-A	Lab Control Sample	Total/NA	Solid	8021B	2780
LCSD 880-2780/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2780
820-596-33 MS	T-8(10')	Total/NA	Solid	8021B	2780
820-596-33 MSD	T-8(10')	Total/NA	Solid	8021B	2780

GC Semi VOA

Prep Batch: 2705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-40	T-10(8')	Total/NA	Solid	8015NM Prep	
MB 880-2705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC Semi VOA

Analysis Batch: 2713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Total/NA	Solid	8015B NM	2724
820-596-2	T-1(8')	Total/NA	Solid	8015B NM	2724
820-596-3	T-1(10')	Total/NA	Solid	8015B NM	2724
820-596-4	T-1(12')	Total/NA	Solid	8015B NM	2724
820-596-5	T-1(14')	Total/NA	Solid	8015B NM	2724
820-596-6	T-3(6')	Total/NA	Solid	8015B NM	2724
820-596-7	T-3(8')	Total/NA	Solid	8015B NM	2724
820-596-8	T-3(10')	Total/NA	Solid	8015B NM	2724
820-596-9	T-2(6')	Total/NA	Solid	8015B NM	2724
820-596-10	T-2(8')	Total/NA	Solid	8015B NM	2724
820-596-11	T-2(10')	Total/NA	Solid	8015B NM	2724
820-596-12	T-2(14')	Total/NA	Solid	8015B NM	2724
820-596-13	T-4(6')	Total/NA	Solid	8015B NM	2724
820-596-14	T-4(8')	Total/NA	Solid	8015B NM	2724
820-596-15	T-4(10')	Total/NA	Solid	8015B NM	2724
820-596-16	T-4(12')	Total/NA	Solid	8015B NM	2724
820-596-17	T-4(14')	Total/NA	Solid	8015B NM	2724
820-596-18	T-5(6')	Total/NA	Solid	8015B NM	2724
820-596-19	T-5(8')	Total/NA	Solid	8015B NM	2724
820-596-20	T-5(10')	Total/NA	Solid	8015B NM	2724
MB 880-2724/1-A	Method Blank	Total/NA	Solid	8015B NM	2724
LCS 880-2724/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2724
LCSD 880-2724/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2724
820-596-1 MS	T-1(6')	Total/NA	Solid	8015B NM	2724
820-596-1 MSD	T-1(6')	Total/NA	Solid	8015B NM	2724

Analysis Batch: 2715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Total/NA	Solid	8015B NM	2725
820-596-22	T-5(14')	Total/NA	Solid	8015B NM	2725
820-596-23	T-6(6')	Total/NA	Solid	8015B NM	2725
820-596-24	T-6(8')	Total/NA	Solid	8015B NM	2725
820-596-25	T-6(10')	Total/NA	Solid	8015B NM	2725
820-596-26	T-7(6')	Total/NA	Solid	8015B NM	2725
820-596-27	T-7(8')	Total/NA	Solid	8015B NM	2725
820-596-28	T-7(10')	Total/NA	Solid	8015B NM	2725
820-596-29	T-7(12')	Total/NA	Solid	8015B NM	2725
820-596-30	T-7(14')	Total/NA	Solid	8015B NM	2725
820-596-31	T-8(6')	Total/NA	Solid	8015B NM	2725
820-596-32	T-8(8')	Total/NA	Solid	8015B NM	2725
820-596-33	T-8(10')	Total/NA	Solid	8015B NM	2725
820-596-34	T-8(12')	Total/NA	Solid	8015B NM	2725
820-596-35	T-8(14')	Total/NA	Solid	8015B NM	2725
820-596-36	T-9(6')	Total/NA	Solid	8015B NM	2725
820-596-37	T-9(8')	Total/NA	Solid	8015B NM	2725
820-596-38	T-9(12')	Total/NA	Solid	8015B NM	2725
820-596-39	T-10(6')	Total/NA	Solid	8015B NM	2725
820-596-40	T-10(8')	Total/NA	Solid	8015B NM	2705
MB 880-2705/1-A	Method Blank	Total/NA	Solid	8015B NM	2705
MB 880-2725/1-A	Method Blank	Total/NA	Solid	8015B NM	2725
LCS 880-2705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2705

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC Semi VOA (Continued)

Analysis Batch: 2715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-2725/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2725
LCSD 880-2705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2705
LCSD 880-2725/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2725
820-596-21 MS	T-5(12')	Total/NA	Solid	8015B NM	2725
820-596-21 MSD	T-5(12')	Total/NA	Solid	8015B NM	2725

Prep Batch: 2724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Total/NA	Solid	8015NM Prep	
820-596-2	T-1(8')	Total/NA	Solid	8015NM Prep	
820-596-3	T-1(10')	Total/NA	Solid	8015NM Prep	
820-596-4	T-1(12')	Total/NA	Solid	8015NM Prep	
820-596-5	T-1(14')	Total/NA	Solid	8015NM Prep	
820-596-6	T-3(6')	Total/NA	Solid	8015NM Prep	
820-596-7	T-3(8')	Total/NA	Solid	8015NM Prep	
820-596-8	T-3(10')	Total/NA	Solid	8015NM Prep	
820-596-9	T-2(6')	Total/NA	Solid	8015NM Prep	
820-596-10	T-2(8')	Total/NA	Solid	8015NM Prep	
820-596-11	T-2(10')	Total/NA	Solid	8015NM Prep	
820-596-12	T-2(14')	Total/NA	Solid	8015NM Prep	
820-596-13	T-4(6')	Total/NA	Solid	8015NM Prep	
820-596-14	T-4(8')	Total/NA	Solid	8015NM Prep	
820-596-15	T-4(10')	Total/NA	Solid	8015NM Prep	
820-596-16	T-4(12')	Total/NA	Solid	8015NM Prep	
820-596-17	T-4(14')	Total/NA	Solid	8015NM Prep	
820-596-18	T-5(6')	Total/NA	Solid	8015NM Prep	
820-596-19	T-5(8')	Total/NA	Solid	8015NM Prep	
820-596-20	T-5(10')	Total/NA	Solid	8015NM Prep	
MB 880-2724/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2724/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2724/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-596-1 MS	T-1(6')	Total/NA	Solid	8015NM Prep	
820-596-1 MSD	T-1(6')	Total/NA	Solid	8015NM Prep	

Prep Batch: 2725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Total/NA	Solid	8015NM Prep	
820-596-22	T-5(14')	Total/NA	Solid	8015NM Prep	
820-596-23	T-6(6')	Total/NA	Solid	8015NM Prep	
820-596-24	T-6(8')	Total/NA	Solid	8015NM Prep	
820-596-25	T-6(10')	Total/NA	Solid	8015NM Prep	
820-596-26	T-7(6')	Total/NA	Solid	8015NM Prep	
820-596-27	T-7(8')	Total/NA	Solid	8015NM Prep	
820-596-28	T-7(10')	Total/NA	Solid	8015NM Prep	
820-596-29	T-7(12')	Total/NA	Solid	8015NM Prep	
820-596-30	T-7(14')	Total/NA	Solid	8015NM Prep	
820-596-31	T-8(6')	Total/NA	Solid	8015NM Prep	
820-596-32	T-8(8')	Total/NA	Solid	8015NM Prep	
820-596-33	T-8(10')	Total/NA	Solid	8015NM Prep	
820-596-34	T-8(12')	Total/NA	Solid	8015NM Prep	
820-596-35	T-8(14')	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

GC Semi VOA (Continued)

Prep Batch: 2725 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-36	T-9(6')	Total/NA	Solid	8015NM Prep	
820-596-37	T-9(8')	Total/NA	Solid	8015NM Prep	
820-596-38	T-9(12')	Total/NA	Solid	8015NM Prep	
820-596-39	T-10(6')	Total/NA	Solid	8015NM Prep	
MB 880-2725/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2725/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2725/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-596-21 MS	T-5(12')	Total/NA	Solid	8015NM Prep	
820-596-21 MSD	T-5(12')	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 2733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Soluble	Solid	DI Leach	
820-596-2	T-1(8')	Soluble	Solid	DI Leach	
820-596-3	T-1(10')	Soluble	Solid	DI Leach	
820-596-4	T-1(12')	Soluble	Solid	DI Leach	
820-596-5	T-1(14')	Soluble	Solid	DI Leach	
820-596-6	T-3(6')	Soluble	Solid	DI Leach	
820-596-7	T-3(8')	Soluble	Solid	DI Leach	
820-596-8	T-3(10')	Soluble	Solid	DI Leach	
820-596-9	T-2(6')	Soluble	Solid	DI Leach	
820-596-10	T-2(8')	Soluble	Solid	DI Leach	
820-596-11	T-2(10')	Soluble	Solid	DI Leach	
820-596-12	T-2(14')	Soluble	Solid	DI Leach	
820-596-13	T-4(6')	Soluble	Solid	DI Leach	
820-596-14	T-4(8')	Soluble	Solid	DI Leach	
820-596-15	T-4(10')	Soluble	Solid	DI Leach	
820-596-16	T-4(12')	Soluble	Solid	DI Leach	
820-596-17	T-4(14')	Soluble	Solid	DI Leach	
820-596-18	T-5(6')	Soluble	Solid	DI Leach	
820-596-19	T-5(8')	Soluble	Solid	DI Leach	
820-596-20	T-5(10')	Soluble	Solid	DI Leach	
MB 880-2733/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2733/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2733/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-596-1 MS	T-1(6')	Soluble	Solid	DI Leach	
820-596-1 MSD	T-1(6')	Soluble	Solid	DI Leach	
820-596-11 MS	T-2(10')	Soluble	Solid	DI Leach	
820-596-11 MSD	T-2(10')	Soluble	Solid	DI Leach	

Leach Batch: 2734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Soluble	Solid	DI Leach	
820-596-22	T-5(14')	Soluble	Solid	DI Leach	
820-596-23	T-6(6')	Soluble	Solid	DI Leach	
820-596-24	T-6(8')	Soluble	Solid	DI Leach	
820-596-25	T-6(10')	Soluble	Solid	DI Leach	
820-596-26	T-7(6')	Soluble	Solid	DI Leach	
820-596-27	T-7(8')	Soluble	Solid	DI Leach	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

HPLC/IC (Continued)

Leach Batch: 2734 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-28	T-7(10')	Soluble	Solid	DI Leach	
820-596-29	T-7(12')	Soluble	Solid	DI Leach	
820-596-30	T-7(14')	Soluble	Solid	DI Leach	
820-596-31	T-8(6')	Soluble	Solid	DI Leach	
820-596-32	T-8(8')	Soluble	Solid	DI Leach	
820-596-33	T-8(10')	Soluble	Solid	DI Leach	
820-596-34	T-8(12')	Soluble	Solid	DI Leach	
820-596-35	T-8(14')	Soluble	Solid	DI Leach	
820-596-36	T-9(6')	Soluble	Solid	DI Leach	
820-596-37	T-9(8')	Soluble	Solid	DI Leach	
820-596-38	T-9(12')	Soluble	Solid	DI Leach	
820-596-39	T-10(6')	Soluble	Solid	DI Leach	
820-596-40	T-10(8')	Soluble	Solid	DI Leach	
MB 880-2734/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2734/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2734/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-596-21 MS	T-5(12')	Soluble	Solid	DI Leach	
820-596-21 MSD	T-5(12')	Soluble	Solid	DI Leach	
820-596-31 MS	T-8(6')	Soluble	Solid	DI Leach	
820-596-31 MSD	T-8(6')	Soluble	Solid	DI Leach	

Analysis Batch: 2750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-1	T-1(6')	Soluble	Solid	300.0	2733
820-596-2	T-1(8')	Soluble	Solid	300.0	2733
820-596-3	T-1(10')	Soluble	Solid	300.0	2733
820-596-4	T-1(12')	Soluble	Solid	300.0	2733
820-596-5	T-1(14')	Soluble	Solid	300.0	2733
820-596-6	T-3(6')	Soluble	Solid	300.0	2733
820-596-7	T-3(8')	Soluble	Solid	300.0	2733
820-596-8	T-3(10')	Soluble	Solid	300.0	2733
820-596-9	T-2(6')	Soluble	Solid	300.0	2733
820-596-10	T-2(8')	Soluble	Solid	300.0	2733
820-596-11	T-2(10')	Soluble	Solid	300.0	2733
820-596-12	T-2(14')	Soluble	Solid	300.0	2733
820-596-13	T-4(6')	Soluble	Solid	300.0	2733
820-596-14	T-4(8')	Soluble	Solid	300.0	2733
820-596-15	T-4(10')	Soluble	Solid	300.0	2733
820-596-16	T-4(12')	Soluble	Solid	300.0	2733
820-596-17	T-4(14')	Soluble	Solid	300.0	2733
820-596-18	T-5(6')	Soluble	Solid	300.0	2733
820-596-19	T-5(8')	Soluble	Solid	300.0	2733
820-596-20	T-5(10')	Soluble	Solid	300.0	2733
MB 880-2733/1-A	Method Blank	Soluble	Solid	300.0	2733
LCS 880-2733/2-A	Lab Control Sample	Soluble	Solid	300.0	2733
LCSD 880-2733/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2733
820-596-1 MS	T-1(6')	Soluble	Solid	300.0	2733
820-596-1 MSD	T-1(6')	Soluble	Solid	300.0	2733
820-596-11 MS	T-2(10')	Soluble	Solid	300.0	2733
820-596-11 MSD	T-2(10')	Soluble	Solid	300.0	2733

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

HPLC/IC

Analysis Batch: 2754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-596-21	T-5(12')	Soluble	Solid	300.0	2734
820-596-22	T-5(14')	Soluble	Solid	300.0	2734
820-596-23	T-6(6')	Soluble	Solid	300.0	2734
820-596-24	T-6(8')	Soluble	Solid	300.0	2734
820-596-25	T-6(10')	Soluble	Solid	300.0	2734
820-596-26	T-7(6')	Soluble	Solid	300.0	2734
820-596-27	T-7(8')	Soluble	Solid	300.0	2734
820-596-28	T-7(10')	Soluble	Solid	300.0	2734
820-596-29	T-7(12')	Soluble	Solid	300.0	2734
820-596-30	T-7(14')	Soluble	Solid	300.0	2734
820-596-31	T-8(6')	Soluble	Solid	300.0	2734
820-596-32	T-8(8')	Soluble	Solid	300.0	2734
820-596-33	T-8(10')	Soluble	Solid	300.0	2734
820-596-34	T-8(12')	Soluble	Solid	300.0	2734
820-596-35	T-8(14')	Soluble	Solid	300.0	2734
820-596-36	T-9(6')	Soluble	Solid	300.0	2734
820-596-37	T-9(8')	Soluble	Solid	300.0	2734
820-596-38	T-9(12')	Soluble	Solid	300.0	2734
820-596-39	T-10(6')	Soluble	Solid	300.0	2734
820-596-40	T-10(8')	Soluble	Solid	300.0	2734
MB 880-2734/1-A	Method Blank	Soluble	Solid	300.0	2734
LCS 880-2734/2-A	Lab Control Sample	Soluble	Solid	300.0	2734
LCSD 880-2734/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2734
820-596-21 MS	T-5(12')	Soluble	Solid	300.0	2734
820-596-21 MSD	T-5(12')	Soluble	Solid	300.0	2734
820-596-31 MS	T-8(6')	Soluble	Solid	300.0	2734
820-596-31 MSD	T-8(6')	Soluble	Solid	300.0	2734

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(6')

Lab Sample ID: 820-596-1

Date Collected: 05/03/21 13:00

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 13:53	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 13:11	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 18:57	WP	XM

Client Sample ID: T-1(8')

Lab Sample ID: 820-596-2

Date Collected: 05/03/21 13:05

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 14:14	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 14:13	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 19:13	WP	XM

Client Sample ID: T-1(10')

Lab Sample ID: 820-596-3

Date Collected: 05/03/21 13:10

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 14:35	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 14:34	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		10	2750	05/05/21 19:18	WP	XM

Client Sample ID: T-1(12')

Lab Sample ID: 820-596-4

Date Collected: 05/03/21 13:15

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 14:56	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 15:00	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		10	2750	05/05/21 19:23	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-1(14')

Lab Sample ID: 820-596-5

Date Collected: 05/03/21 13:20

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 15:16	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 15:21	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		5	2750	05/05/21 19:28	WP	XM

Client Sample ID: T-3(6')

Lab Sample ID: 820-596-6

Date Collected: 05/03/21 13:30

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 15:37	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 15:42	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 19:44	WP	XM

Client Sample ID: T-3(8')

Lab Sample ID: 820-596-7

Date Collected: 05/03/21 13:35

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 15:58	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 16:02	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 19:49	WP	XM

Client Sample ID: T-3(10')

Lab Sample ID: 820-596-8

Date Collected: 05/03/21 13:40

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 16:19	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 16:23	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		5	2750	05/05/21 19:54	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-2(6')

Lab Sample ID: 820-596-9

Date Collected: 05/03/21 13:45

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 16:40	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 16:44	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 19:59	WP	XM

Client Sample ID: T-2(8')

Lab Sample ID: 820-596-10

Date Collected: 05/03/21 13:50

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2706	05/05/21 10:30	KL	XM
Total/NA	Analysis	8021B		1	2708	05/05/21 17:00	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 17:05	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 20:05	WP	XM

Client Sample ID: T-2(10')

Lab Sample ID: 820-596-11

Date Collected: 05/03/21 13:55

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 12:16	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 17:48	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 20:10	WP	XM

Client Sample ID: T-2(14')

Lab Sample ID: 820-596-12

Date Collected: 05/03/21 14:00

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 12:37	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 18:09	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 20:25	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(6')

Lab Sample ID: 820-596-13

Date Collected: 05/03/21 14:10

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 16:42	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 18:30	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 20:31	WP	XM

Client Sample ID: T-4(8')

Lab Sample ID: 820-596-14

Date Collected: 05/03/21 14:15

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 17:02	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 18:51	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 20:46	WP	XM

Client Sample ID: T-4(10')

Lab Sample ID: 820-596-15

Date Collected: 05/03/21 14:20

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 17:23	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 19:12	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 20:51	WP	XM

Client Sample ID: T-4(12')

Lab Sample ID: 820-596-16

Date Collected: 05/03/21 14:25

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 17:43	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 19:33	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 20:56	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-4(14')

Lab Sample ID: 820-596-17

Date Collected: 05/03/21 14:30

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 18:04	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 19:54	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		50	2750	05/05/21 21:02	WP	XM

Client Sample ID: T-5(6')

Lab Sample ID: 820-596-18

Date Collected: 05/03/21 14:35

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 18:24	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 20:15	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		10	2750	05/05/21 21:07	WP	XM

Client Sample ID: T-5(8')

Lab Sample ID: 820-596-19

Date Collected: 05/03/21 14:40

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 18:44	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 20:36	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		20	2750	05/05/21 21:12	WP	XM

Client Sample ID: T-5(10')

Lab Sample ID: 820-596-20

Date Collected: 05/03/21 14:45

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2756	05/06/21 08:25	KL	XM
Total/NA	Analysis	8021B		1	2758	05/06/21 19:05	KL	XM
Total/NA	Prep	8015NM Prep			2724	05/05/21 11:37	DM	XM
Total/NA	Analysis	8015B NM		1	2713	05/05/21 20:57	AJ	XM
Soluble	Leach	DI Leach			2733	05/05/21 14:18	SC	XM
Soluble	Analysis	300.0		10	2750	05/05/21 21:17	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-5(12')

Lab Sample ID: 820-596-21

Date Collected: 05/03/21 14:50

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 12:17	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 13:11	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 21:59	WP	XM

Client Sample ID: T-5(14')

Lab Sample ID: 820-596-22

Date Collected: 05/03/21 14:55

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 12:38	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 14:13	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 22:14	WP	XM

Client Sample ID: T-6(6')

Lab Sample ID: 820-596-23

Date Collected: 05/03/21 15:00

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 16:47	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 14:34	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 22:19	WP	XM

Client Sample ID: T-6(8')

Lab Sample ID: 820-596-24

Date Collected: 05/03/21 15:05

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 17:08	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 15:00	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 22:24	WP	XM

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Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-6(10')

Lab Sample ID: 820-596-25

Date Collected: 05/03/21 15:10

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 17:28	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 20:57	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		5	2754	05/05/21 22:30	WP	XM

Client Sample ID: T-7(6')

Lab Sample ID: 820-596-26

Date Collected: 05/03/21 15:15

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 17:49	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 15:42	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 22:45	WP	XM

Client Sample ID: T-7(8')

Lab Sample ID: 820-596-27

Date Collected: 05/03/21 15:20

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 18:10	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 16:02	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 22:50	WP	XM

Client Sample ID: T-7(10')

Lab Sample ID: 820-596-28

Date Collected: 05/03/21 15:25

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 18:30	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 16:23	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 22:56	WP	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-7(12')

Lab Sample ID: 820-596-29

Date Collected: 05/03/21 15:30

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 18:51	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 16:44	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 23:01	WP	XM

Client Sample ID: T-7(14')

Lab Sample ID: 820-596-30

Date Collected: 05/03/21 15:35

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 19:12	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 17:05	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		10	2754	05/05/21 23:06	WP	XM

Client Sample ID: T-8(6')

Lab Sample ID: 820-596-31

Date Collected: 05/03/21 15:40

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 19:33	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 17:48	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 23:11	WP	XM

Client Sample ID: T-8(8')

Lab Sample ID: 820-596-32

Date Collected: 05/03/21 15:45

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2707	05/05/21 11:00	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 19:53	KL	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 18:09	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 23:27	WP	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-8(10')

Lab Sample ID: 820-596-33

Date Collected: 05/03/21 15:50

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 20:18	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 18:30	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 23:32	WP	XM

Client Sample ID: T-8(12')

Lab Sample ID: 820-596-34

Date Collected: 05/03/21 15:55

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 20:39	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 18:51	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 23:47	WP	XM

Client Sample ID: T-8(14')

Lab Sample ID: 820-596-35

Date Collected: 05/03/21 16:00

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 20:59	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 19:12	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/05/21 23:52	WP	XM

Client Sample ID: T-9(6')

Lab Sample ID: 820-596-36

Date Collected: 05/03/21 16:10

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 21:19	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 19:33	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		50	2754	05/05/21 23:58	WP	XM

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Client Sample ID: T-9(8')

Lab Sample ID: 820-596-37

Date Collected: 05/03/21 16:15

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 21:40	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 19:54	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/06/21 00:03	WP	XM

Client Sample ID: T-9(12')

Lab Sample ID: 820-596-38

Date Collected: 05/03/21 16:20

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 22:00	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 20:15	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		20	2754	05/06/21 00:08	WP	XM

Client Sample ID: T-10(6')

Lab Sample ID: 820-596-39

Date Collected: 05/03/21 16:25

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 22:21	MR	XM
Total/NA	Prep	8015NM Prep			2725	05/05/21 11:47	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/05/21 20:36	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		1	2754	05/06/21 00:13	WP	XM

Client Sample ID: T-10(8')

Lab Sample ID: 820-596-40

Date Collected: 05/03/21 16:40

Matrix: Solid

Date Received: 05/04/21 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2780	05/06/21 12:54	MR	XM
Total/NA	Analysis	8021B		1	2786	05/06/21 22:41	MR	XM
Total/NA	Prep	8015NM Prep			2705	05/05/21 09:09	DM	XM
Total/NA	Analysis	8015B NM		1	2715	05/06/21 04:36	AJ	XM
Soluble	Leach	DI Leach			2734	05/05/21 14:20	SC	XM
Soluble	Analysis	300.0		1	2754	05/06/21 00:18	WP	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Lubbock

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 (Brine Seep)

Job ID: 820-596-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
820-596-1	T-1(6')	Solid	05/03/21 13:00	05/04/21 09:32	
820-596-2	T-1(8')	Solid	05/03/21 13:05	05/04/21 09:32	
820-596-3	T-1(10')	Solid	05/03/21 13:10	05/04/21 09:32	
820-596-4	T-1(12')	Solid	05/03/21 13:15	05/04/21 09:32	
820-596-5	T-1(14')	Solid	05/03/21 13:20	05/04/21 09:32	
820-596-6	T-3(6')	Solid	05/03/21 13:30	05/04/21 09:32	
820-596-7	T-3(8')	Solid	05/03/21 13:35	05/04/21 09:32	
820-596-8	T-3(10')	Solid	05/03/21 13:40	05/04/21 09:32	
820-596-9	T-2(6')	Solid	05/03/21 13:45	05/04/21 09:32	
820-596-10	T-2(8')	Solid	05/03/21 13:50	05/04/21 09:32	
820-596-11	T-2(10')	Solid	05/03/21 13:55	05/04/21 09:32	
820-596-12	T-2(14')	Solid	05/03/21 14:00	05/04/21 09:32	
820-596-13	T-4(6')	Solid	05/03/21 14:10	05/04/21 09:32	
820-596-14	T-4(8')	Solid	05/03/21 14:15	05/04/21 09:32	
820-596-15	T-4(10')	Solid	05/03/21 14:20	05/04/21 09:32	
820-596-16	T-4(12')	Solid	05/03/21 14:25	05/04/21 09:32	
820-596-17	T-4(14')	Solid	05/03/21 14:30	05/04/21 09:32	
820-596-18	T-5(6')	Solid	05/03/21 14:35	05/04/21 09:32	
820-596-19	T-5(8')	Solid	05/03/21 14:40	05/04/21 09:32	
820-596-20	T-5(10')	Solid	05/03/21 14:45	05/04/21 09:32	
820-596-21	T-5(12')	Solid	05/03/21 14:50	05/04/21 09:32	
820-596-22	T-5(14')	Solid	05/03/21 14:55	05/04/21 09:32	
820-596-23	T-6(6')	Solid	05/03/21 15:00	05/04/21 09:32	
820-596-24	T-6(8')	Solid	05/03/21 15:05	05/04/21 09:32	
820-596-25	T-6(10')	Solid	05/03/21 15:10	05/04/21 09:32	
820-596-26	T-7(6')	Solid	05/03/21 15:15	05/04/21 09:32	
820-596-27	T-7(8')	Solid	05/03/21 15:20	05/04/21 09:32	
820-596-28	T-7(10')	Solid	05/03/21 15:25	05/04/21 09:32	
820-596-29	T-7(12')	Solid	05/03/21 15:30	05/04/21 09:32	
820-596-30	T-7(14')	Solid	05/03/21 15:35	05/04/21 09:32	
820-596-31	T-8(6')	Solid	05/03/21 15:40	05/04/21 09:32	
820-596-32	T-8(8')	Solid	05/03/21 15:45	05/04/21 09:32	
820-596-33	T-8(10')	Solid	05/03/21 15:50	05/04/21 09:32	
820-596-34	T-8(12')	Solid	05/03/21 15:55	05/04/21 09:32	
820-596-35	T-8(14')	Solid	05/03/21 16:00	05/04/21 09:32	
820-596-36	T-9(6')	Solid	05/03/21 16:10	05/04/21 09:32	
820-596-37	T-9(8')	Solid	05/03/21 16:15	05/04/21 09:32	
820-596-38	T-9(12')	Solid	05/03/21 16:20	05/04/21 09:32	
820-596-39	T-10(6')	Solid	05/03/21 16:25	05/04/21 09:32	
820-596-40	T-10(8')	Solid	05/03/21 16:40	05/04/21 09:32	

Eurofins Xenco, Lubbock

Loc: 820
596

CHAIN OF CUSTODY RECORD

Office Location		Laboratory:		Xenco		Address:		6701 Aberdeen Lubbock, Texas 79424		Phone:		J. Guesnier 806-544-9276		SRS #:		Sampler's Signature		ANALYSIS REQUESTED		LAB USE ONLY DUE DATE:								
Project Manager		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		Chloride (EPA Method 300)		BTEX (EPA Method 8021B)		TPH Extended 8015		TEMP OF COOLER WHEN RECEIVED (°C)		Page 2 of 2		
Sampler's Name		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		J. Guesnier		Chloride (EPA Method 300)		BTEX (EPA Method 8021B)		TPH Extended 8015		TEMP OF COOLER WHEN RECEIVED (°C)		Page 2 of 2		
Project Number		AR217001		Project Name		State 116 (Brine Seep)		Identifying Marks of Sample(s)		Start Depth		End Depth		No. Type of Containers		5035 kit		Poly		40 ml VOA		250 ml		Lab Sample ID		820-596-22		
Matrix	Date	Time	Grab	Comp	Grab	Time	Grab	Comp	Grab	Time	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
S	5/3/2021	14:55	X		X		X		X	13'	14'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:00	X		X		X		X	5'	6'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:05	X		X		X		X	7'	8'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:10	X		X		X		X	9'	10'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:15	X		X		X		X	5'	6'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:20	X		X		X		X	7'	8'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:25	X		X		X		X	9'	10'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:30	X		X		X		X	11'	12'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:35	X		X		X		X	13'	14'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:40	X		X		X		X	5'	6'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:45	X		X		X		X	7'	8'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:50	X		X		X		X	9'	10'	X		X		X		X		X		X		X		X		X
S	5/3/2021	15:55	X		X		X		X	11'	12'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:00	X		X		X		X	13'	14'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:10	X		X		X		X	5'	6'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:15	X		X		X		X	7'	8'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:20	X		X		X		X	11'	12'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:25	X		X		X		X	5'	6'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:30	X		X		X		X	7'	8'	X		X		X		X		X		X		X		X		X
S	5/3/2021	16:40	X		X		X		X	9'	10'	X		X		X		X		X		X		X		X		X
TURNAROUND TIME		48-Hour Rush		24-Hour Rush		TRR Laboratory Review Checklist		NOTES: Client: Spur Energy Partners		e-mail results to:		bryant.mcbrayer@terracon.com		erin.loyd@terracon.com		jrguesnier@terracon.com												
Relinquished by (Signature)		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		
Relinquished by (Signature)		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		
Relinquished by (Signature)		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		
Relinquished by (Signature)		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		Time:		Date:		
Matrix		WW-Membrane		W-Vapor		S-Soil		L-Liquid		C-Channel		S-Sludge																
Container		VOA - 40 ml		A/C - Amber Glass 1L		250 ml - Glass wide mouth		900 - Plastic or other																				
Lubbock Office		5827 50th Street, Suite 1		Lubbock, Texas 79424		806-300-0140		Responsive		Resourceful		Reliable																

Chain of Custody Record



**Environment Testing
America**

Client Information (Sub Contract Lab)			Sampler	Lab PM	Carrier Tracking No(s)	COC No.								
Client Contact				Kramer Jessica		820-792.1								
Shipping/Receiving			Phone	E-Mail: jessica.kramer@eurofinsnet.com	State of Origin	Page 1 of 5								
Company: Eurofins Xenco			Accreditations Required (See note): NELAP - Texas			Job #:								
Address: 1211 W. Florida Ave.			Due Date Requested: 5/6/2021	820-596-1										
City: Midland			TAT Requested (days):	Analysis Requested										
State, Zip: TX, 79701														
Phone: 432-704-5440(Tel)			PO #:											
Email:			WFO #:											
Project Name: State 116 (Brine Sheep)			Project #: 82000268											
Site:			SSOW#:											
Sample Identification - Client ID (Lab ID)			Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (We=Water, S=solid, O=Overstool, BT=Tissue, AA=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:	
T-1(6) (820-596-1)	5/3/21	13 00	Mountain	Solid			X	X	X				1	
T-1(8) (820-596-2)	5/3/21	13 05	Mountain	Solid			X	X	X				1	
T-1(10) (820-596-3)	5/3/21	13 10	Mountain	Solid			X	X	X				1	
T-1(12) (820-596-4)	5/3/21	13 15	Mountain	Solid			X	X	X				1	
T-1(14) (820-596-5)	5/3/21	13 20	Mountain	Solid			X	X	X				1	
T-3(6) (820-596-6)	5/3/21	13 30	Mountain	Solid			X	X	X				1	
T-3(8) (820-596-7)	5/3/21	13 35	Mountain	Solid			X	X	X				1	
T-3(10) (820-596-8)	5/3/21	13 40	Mountain	Solid			X	X	X				1	
T-2(6) (820-596-9)	5/3/21	13 45	Mountain	Solid			X	X	X				1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.														
Possible Hazard Identification														
Unconfirmed														
Deliverable Requested I II III IV Other (Specify)														
Primary Deliverable Rank 2														
Empty Kit Relinquished by														
Relinquished by: <i>[Signature]</i> Date/Time: 5/4/21 11:11 Company: Company														
Relinquished by: Date/Time: Company: Company														
Relinquished by: Date/Time: Company: Company														
Custody Seals Intact: Custody Seal No														
Δ Yes Δ No														
Cooler Temperature(s) °C and Other Remarks:														

Chain of Custody Record



Environment Testing America

Client Information (Sub Contract Lab)				Sampler	Lab PM	Carrier Tracking No(s)	CCC No:							
Client Contact:					Kramer Jessica		820-792.3							
Shipping/Receiving				Phone:	E-Mail: jessica.kramer@eurofnset.com	State of Origin: New Mexico	Page: Page 3 of 5							
Company: Eurofins Xenco				Accreditations Required (See note): NELAP - Texas				Job #: 820-596-1						
Address: 1211 W. Florida Ave				Due Date Requested: 5/6/2021	Analysis Requested			Preservation Codes A. HCL B. NaOH C. Zn Acetate D. Nitric Acid E. NaHSO4 F. MeOH G. Amchlor H. Ascorbic Acid I. Ice J. DI Water K. EDTA L. EDA M. Hexane N. None O. AsH2O2 P. Na2CO3 Q. Na2SO3 R. Na2S2O3 S. H2SO4 T. TSP Dodecylate U. Acetone V. MCAA W. pH 4.5 Z. other (specify)						
City: Midland				TAT Requested (days):										
State, Zip: TX, 79701				PO #:										
Phone: 432-704-5440(Tel)				WO #:										
Email:				Project #:										
Project Name: State 16 (Brine Seep)				82000268										
Site:				SSOW#:										
Sample Identification - Client ID (Lab ID)				Sample Date	Sample Time	Sample Type (C=C-comp, G=grab)	Matrix (W=water, S=solid, O=oil, B=BTX, A=Asphalt)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5035FP_Calc BTX	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
T-5(8) (820-596-19)				5/3/21	14 40	Mountain	Solid		X	X	X		1	
T-5(10) (820-596-20)				5/3/21	14 45	Mountain	Solid		X	X	X		1	
T-5(12) (820-596-21)				5/3/21	14 50	Mountain	Solid		X	X	X		1	
T-5(14) (820-596-22)				5/3/21	14 55	Mountain	Solid		X	X	X		1	
T-6(6) (820-596-23)				5/3/21	15 00	Mountain	Solid		X	X	X		1	
T-6(8) (820-596-24)				5/3/21	15 05	Mountain	Solid		X	X	X		1	
T-6(10) (820-596-25)				5/3/21	15 10	Mountain	Solid		X	X	X		1	
T-7(6) (820-596-26)				5/3/21	15 15	Mountain	Solid		X	X	X		1	
T-7(8) (820-596-27)				5/3/21	15 20	Mountain	Solid		X	X	X		1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/method, being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.														
Possible Hazard Identification														
Unconfirmed														
Deliverable Requested I, II, III, IV Other (Specify)														
Primary Deliverable Rank 2														
Empty Kit Relinquished by: 														
Relinquished by: 														
Relinquished by: 														
Custody Seals Intact: ☐ Yes ☐ No														
Custody Seal No														

Chain of Custody Record

Environment Testing
America

Client Information (Sub Contract Lab)		Sampler	Lab Pk:	Carrier Tracking No(s)	COC No:					
Client Contact:	Phone:		Kramer, Jessica		820-792.5					
Shipping/Receiving	E-Mail:		Jessica.kramer@eurofins.com	State of Origin:	Page 5 of 5					
Company:	Accreditations Required (See note):		NEIAP - Texas	New Mexico						
Eurofins Xenco										
Address:	Due Date Requested:				Job #: 820-596-1					
1211 W Florida Ave.	5/6/2021									
City:	TAT Requested (days)									
Midland										
State Zip:										
TX, 79701										
Phone:	PO #:									
432-704-5440(Tel)										
Email:	WO #:									
Project Name:	Project #:									
State I 16 (Brine Seep)	82000268									
Site:	SSOVA#:									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Organic, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
T-9(8) (820-596-37)	5/3/21	16 15	Mountain	Solid		X	X	X	1	
T-9(12) (820-596-38)	5/3/21	16 20	Mountain	Solid		X	X	X	1	
T-10(6) (820-596-39)	5/3/21	16 25	Mountain	Solid		X	X	X	1	
T-10(8) (820-596-40)	5/3/21	16 40	Mountain	Solid		X	X	X	1	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.										
Possible Hazard Identification										
Unconfirmed										
Deliverable Requested I II III IV, Other (Specify)										
Primary Deliverable Rank: 2										
Empty Kit Relinquished by:										
Date: Time:										
Relinquished by:										
Date/Time: Company:										
Relinquished by:										
Date/Time: Company:										
Custody Seals Intact: Custody Seal No										
Δ Yes Δ No										
Cooler Temperature(s) °C and Other Remarks:										
☐ Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months Special Instructions/QC Requirements										
Method of Shipment:										
Date/Time: Company:										
Date/Time: Company:										
Date/Time: Company:										

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-596-1

SDG Number: AR217001

Login Number: 596

List Number: 1

Creator: Turner, Michael

List Source: Eurofins Lubbock

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

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-596-1

SDG Number: AR217001

Login Number: 596

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 05/05/21 11:31 AM

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-781-1
Client Project/Site: State I 16

For:
Terracon Consulting Eng & Scientists
5827 50th St
Suite 1
Lubbock, Texas 79424

Attn: Joseph Guesnier

A handwritten signature in black ink that reads "Kramer".

Authorized for release by:
5/25/2021 4:34:46 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Laboratory Job ID: 820-781-1

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).



Jessica Kramer
Project Manager
5/25/2021 4:34:46 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Laboratory Job ID: 820-781-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Qualifiers

HPLC/IC

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

Glossary

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

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Job ID: 820-781-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative 820-781-1

Receipt

The samples were received on 5/24/2021 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -9.1°C

HPLC/IC

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

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Client Sample ID: GP-1(14-15)

Lab Sample ID: 820-781-1

Date Collected: 05/21/21 14:15

Matrix: Solid

Date Received: 05/24/21 16:25

Sample Depth: 14 - 15

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.52		5.05		mg/Kg			05/25/21 14:45	1

Client Sample ID: GP-1(15-16)

Lab Sample ID: 820-781-2

Date Collected: 05/21/21 14:17

Matrix: Solid

Date Received: 05/24/21 16:25

Sample Depth: 15 - 16

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03		mg/Kg			05/25/21 14:50	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3461/1-A

Matrix: Solid

Analysis Batch: 3468

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/25/21 13:33	1

Lab Sample ID: LCS 880-3461/2-A

Matrix: Solid

Analysis Batch: 3468

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.6		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-3461/3-A

Matrix: Solid

Analysis Batch: 3468

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	242.2		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

HPLC/IC

Leach Batch: 3461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-781-1	GP-1(14-15)	Soluble	Solid	DI Leach	
820-781-2	GP-1(15-16)	Soluble	Solid	DI Leach	
MB 880-3461/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3461/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3461/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-781-1	GP-1(14-15)	Soluble	Solid	300.0	3461
820-781-2	GP-1(15-16)	Soluble	Solid	300.0	3461
MB 880-3461/1-A	Method Blank	Soluble	Solid	300.0	3461
LCS 880-3461/2-A	Lab Control Sample	Soluble	Solid	300.0	3461
LCSD 880-3461/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3461

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Client Sample ID: GP-1(14-15)
Date Collected: 05/21/21 14:15
Date Received: 05/24/21 16:25

Lab Sample ID: 820-781-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	3461	05/25/21 11:34	SC	XEN MID
Soluble	Analysis	300.0		1			3468	05/25/21 14:45	CH	XEN MID

Client Sample ID: GP-1(15-16)
Date Collected: 05/21/21 14:17
Date Received: 05/24/21 16:25

Lab Sample ID: 820-781-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	3461	05/25/21 11:34	SC	XEN MID
Soluble	Analysis	300.0		1			3468	05/25/21 14:50	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

Laboratory References:

- XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16

Job ID: 820-781-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-781-1	GP-1(14-15)	Solid	05/21/21 14:15	05/24/21 16:25	14 - 15
820-781-2	GP-1(15-16)	Solid	05/21/21 14:17	05/24/21 16:25	15 - 16

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[illegible]

Chain of Custody Record

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

2. Next, it is important to gather relevant information and resources. This may involve researching existing solutions, consulting with experts, or collecting data.

3. Once the information is gathered, the next step is to analyze it and identify the key factors that influence the outcome. This often involves breaking down the problem into smaller, more manageable parts.

4. After analysis, a plan should be developed that outlines the steps to be taken to solve the problem. This plan should be flexible enough to allow for adjustments as more information becomes available.

5. The final step is to implement the plan and monitor the progress. It is important to stay organized and keep track of the results to ensure that the problem is being solved effectively.

eurofins
Environment Testing
America

Chain of Custody Record

Ver. 11/01/2020

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-781-1

SDG Number:

Login Number: 781

List Number: 1

Creator: Lee, Randell

List Source: Eurofins Xenco, Lubbock

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

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-781-1

SDG Number:

Login Number: 781

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 05/25/21 11:22 AM

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-2183-1

Laboratory Sample Delivery Group: AR217001

Client Project/Site: State I #16

For:

Terracon Consulting Eng & Scientists
5827 50th St
Suite 1
Lubbock, Texas 79424

Attn: Erin Lloyd

A handwritten signature in black ink that reads "J. Kramer".

Authorized for release by:
10/15/2021 5:53:30 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Laboratory Job ID: 820-2183-1
SDG: AR217001

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Zachary Smith (Water Microbiology).



Jessica Kramer
Project Manager
10/15/2021 5:53:30 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Laboratory Job ID: 820-2183-1
SDG: AR217001

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Qualifiers

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Job ID: 820-2183-1**Laboratory: Eurofins Xenco, Lubbock****Narrative****Job Narrative
820-2183-1****Receipt**

The samples were received on 10/8/2021 9:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -14.0°C

GC/MS VOA

Method 8260C: Elevated reporting limits are provided for the following samples due to insufficient sample provided for analysis: (880-6853-D-1-A) and (880-6853-D-1-A MS). Both DI waters were overweight; thus, methanol vial was used for analysis.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: (860-13201-A-19-A) and (860-13201-A-19-A MS). Elevated reporting limits (RLs) are provided.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-26154 and analytical batch 860-26169 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260C: The matrix spike (MS) recoveries for preparation batch 860-26485 and analytical batch 860-26500 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-26485 and analytical batch 860-26503 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260C: The following sample was diluted due to the nature of the sample matrix: H6 (820-2183-31). Elevated reporting limits (RLs) are provided. Sample was analyzed at 1x twice using DI terracores vials but failed ISTD recovery test both times; thus, sample was re-analyzed at 25x and reported from methanol vials.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A3

Lab Sample ID: 820-2183-1

Date Collected: 10/05/21 09:00

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:52	10/11/21 18:31	1
Toluene	<0.00495	U	0.00495		mg/Kg		10/11/21 14:52	10/11/21 18:31	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:52	10/11/21 18:31	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 14:52	10/11/21 18:31	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:52	10/11/21 18:31	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 14:52	10/11/21 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		56 - 150	10/11/21 14:52	10/11/21 18:31	1
4-Bromofluorobenzene (Surr)	106		68 - 152	10/11/21 14:52	10/11/21 18:31	1
Dibromofluoromethane (Surr)	108		53 - 142	10/11/21 14:52	10/11/21 18:31	1
Toluene-d8 (Surr)	101		70 - 130	10/11/21 14:52	10/11/21 18:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 01:19	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 01:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 01:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				10/12/21 15:00	10/13/21 01:19	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/13/21 01:19	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.6		9.84		mg/Kg		10/12/21 20:22	10/13/21 05:50	1

Client Sample ID: A4

Lab Sample ID: 820-2183-2

Date Collected: 10/05/21 09:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 18:52	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/11/21 14:52	10/11/21 18:52	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 18:52	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 18:52	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 18:52	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 18:52	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A4

Lab Sample ID: 820-2183-2

Date Collected: 10/05/21 09:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		56 - 150	10/11/21 14:52	10/11/21 18:52	1
4-Bromofluorobenzene (Surr)	105		68 - 152	10/11/21 14:52	10/11/21 18:52	1
Dibromofluoromethane (Surr)	106		53 - 142	10/11/21 14:52	10/11/21 18:52	1
Toluene-d8 (Surr)	103		70 - 130	10/11/21 14:52	10/11/21 18:52	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 02:13	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 02:13	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 02:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130	10/12/21 15:00	10/13/21 02:13	1
o-Terphenyl	112		65 - 130	10/12/21 15:00	10/13/21 02:13	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.3		9.86		mg/Kg		10/12/21 20:22	10/13/21 06:02	1

Client Sample ID: A5

Lab Sample ID: 820-2183-3

Date Collected: 10/05/21 09:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:12	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/11/21 14:52	10/11/21 19:12	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:12	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 19:12	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:12	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		56 - 150	10/11/21 14:52	10/11/21 19:12	1
4-Bromofluorobenzene (Surr)	110		68 - 152	10/11/21 14:52	10/11/21 19:12	1
Dibromofluoromethane (Surr)	108		53 - 142	10/11/21 14:52	10/11/21 19:12	1
Toluene-d8 (Surr)	103		70 - 130	10/11/21 14:52	10/11/21 19:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/14/21 11:08	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A5

Lab Sample ID: 820-2183-3

Date Collected: 10/05/21 09:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/13/21 02:31	1
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/13/21 02:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/13/21 02:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				10/12/21 15:00	10/13/21 02:31	1
o-Terphenyl	110		65 - 130				10/12/21 15:00	10/13/21 02:31	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6170		99.4		mg/Kg		10/12/21 20:22	10/13/21 06:46	10

Client Sample ID: A6

Lab Sample ID: 820-2183-4

Date Collected: 10/05/21 09:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
Toluene	<0.00505	U	0.00505		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		56 - 150				10/11/21 14:52	10/11/21 19:32	1
4-Bromofluorobenzene (Surr)	103		68 - 152				10/11/21 14:52	10/11/21 19:32	1
Dibromofluoromethane (Surr)	106		53 - 142				10/11/21 14:52	10/11/21 19:32	1
Toluene-d8 (Surr)	102		70 - 130				10/11/21 14:52	10/11/21 19:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 02:48	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 02:48	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A6

Lab Sample ID: 820-2183-4

Date Collected: 10/05/21 09:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 02:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				10/12/21 15:00	10/13/21 02:48	1
o-Terphenyl	111		65 - 130				10/12/21 15:00	10/13/21 02:48	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.0		9.82		mg/Kg		10/12/21 20:22	10/13/21 06:57	1

Client Sample ID: B2

Lab Sample ID: 820-2183-5

Date Collected: 10/05/21 09:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 19:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		56 - 150				10/11/21 14:52	10/11/21 19:53	1
4-Bromofluorobenzene (Surr)	104		68 - 152				10/11/21 14:52	10/11/21 19:53	1
Dibromofluoromethane (Surr)	106		53 - 142				10/11/21 14:52	10/11/21 19:53	1
Toluene-d8 (Surr)	102		70 - 130				10/11/21 14:52	10/11/21 19:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 03:06	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 03:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 03:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		65 - 130				10/12/21 15:00	10/13/21 03:06	1
o-Terphenyl	112		65 - 130				10/12/21 15:00	10/13/21 03:06	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B2

Lab Sample ID: 820-2183-5

Date Collected: 10/05/21 09:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg		10/12/21 20:22	10/13/21 07:08	1

Client Sample ID: B3

Lab Sample ID: 820-2183-6

Date Collected: 10/05/21 09:25

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/12/21 15:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		56 - 150				10/11/21 14:52	10/12/21 15:02	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 14:52	10/12/21 15:02	1
Dibromofluoromethane (Surr)	96		53 - 142				10/11/21 14:52	10/12/21 15:02	1
Toluene-d8 (Surr)	99		70 - 130				10/11/21 14:52	10/12/21 15:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 03:24	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 03:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 03:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		65 - 130				10/12/21 15:00	10/13/21 03:24	1
o-Terphenyl	105		65 - 130				10/12/21 15:00	10/13/21 03:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.6		10.1		mg/Kg		10/12/21 20:22	10/13/21 07:19	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B4

Lab Sample ID: 820-2183-7

Date Collected: 10/05/21 09:30

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 17:37	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/11/21 14:52	10/11/21 17:37	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 17:37	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 17:37	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 17:37	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150	10/11/21 14:52	10/11/21 17:37	1
4-Bromofluorobenzene (Surr)	98		68 - 152	10/11/21 14:52	10/11/21 17:37	1
Dibromofluoromethane (Surr)	104		53 - 142	10/11/21 14:52	10/11/21 17:37	1
Toluene-d8 (Surr)	97		70 - 130	10/11/21 14:52	10/11/21 17:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/12/21 15:00	10/13/21 03:42	1
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		10/12/21 15:00	10/13/21 03:42	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/12/21 15:00	10/13/21 03:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		65 - 130				10/12/21 15:00	10/13/21 03:42	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/13/21 03:42	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4710		10.0		mg/Kg		10/12/21 20:22	10/13/21 07:30	1

Client Sample ID: B5

Lab Sample ID: 820-2183-8

Date Collected: 10/05/21 09:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/11/21 17:57	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/11/21 14:52	10/11/21 17:57	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/11/21 17:57	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 17:57	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:52	10/11/21 17:57	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:52	10/11/21 17:57	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B5

Lab Sample ID: 820-2183-8

Date Collected: 10/05/21 09:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		56 - 150	10/11/21 14:52	10/11/21 17:57	1
4-Bromofluorobenzene (Surr)	99		68 - 152	10/11/21 14:52	10/11/21 17:57	1
Dibromofluoromethane (Surr)	113		53 - 142	10/11/21 14:52	10/11/21 17:57	1
Toluene-d8 (Surr)	98		70 - 130	10/11/21 14:52	10/11/21 17:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:18	1
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:18	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130	10/12/21 15:00	10/13/21 04:18	1
o-Terphenyl	108		65 - 130	10/12/21 15:00	10/13/21 04:18	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5650		101		mg/Kg		10/12/21 20:22	10/13/21 08:15	10

Client Sample ID: B6

Lab Sample ID: 820-2183-9

Date Collected: 10/05/21 09:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:17	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/11/21 14:52	10/11/21 18:17	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:17	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 18:17	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:17	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		56 - 150	10/11/21 14:52	10/11/21 18:17	1
4-Bromofluorobenzene (Surr)	96		68 - 152	10/11/21 14:52	10/11/21 18:17	1
Dibromofluoromethane (Surr)	107		53 - 142	10/11/21 14:52	10/11/21 18:17	1
Toluene-d8 (Surr)	101		70 - 130	10/11/21 14:52	10/11/21 18:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/14/21 11:08	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B6

Lab Sample ID: 820-2183-9

Date Collected: 10/05/21 09:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:36	1
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:36	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/12/21 15:00	10/13/21 04:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		65 - 130				10/12/21 15:00	10/13/21 04:36	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/13/21 04:36	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.6		9.94		mg/Kg		10/12/21 20:22	10/13/21 08:48	1

Client Sample ID: C2

Lab Sample ID: 820-2183-10

Date Collected: 10/05/21 09:45

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 14:52	10/11/21 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		56 - 150				10/11/21 14:52	10/11/21 18:37	1
4-Bromofluorobenzene (Surr)	97		68 - 152				10/11/21 14:52	10/11/21 18:37	1
Dibromofluoromethane (Surr)	110		53 - 142				10/11/21 14:52	10/11/21 18:37	1
Toluene-d8 (Surr)	98		70 - 130				10/11/21 14:52	10/11/21 18:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 04:54	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 04:54	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C2

Lab Sample ID: 820-2183-10

Date Collected: 10/05/21 09:45

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 04:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		65 - 130				10/12/21 15:00	10/13/21 04:54	1
o-Terphenyl	105		65 - 130				10/12/21 15:00	10/13/21 04:54	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.1		9.84		mg/Kg		10/12/21 20:22	10/13/21 08:59	1

Client Sample ID: C3

Lab Sample ID: 820-2183-11

Date Collected: 10/05/21 09:50

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
Toluene	<0.00505	U	0.00505		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/11/21 14:52	10/11/21 18:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150				10/11/21 14:52	10/11/21 18:57	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 14:52	10/11/21 18:57	1
Dibromofluoromethane (Surr)	112		53 - 142				10/11/21 14:52	10/11/21 18:57	1
Toluene-d8 (Surr)	99		70 - 130				10/11/21 14:52	10/11/21 18:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:12	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		65 - 130				10/12/21 15:00	10/13/21 05:12	1
o-Terphenyl	105		65 - 130				10/12/21 15:00	10/13/21 05:12	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C3

Lab Sample ID: 820-2183-11

Date Collected: 10/05/21 09:50

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.86	U	9.86		mg/Kg		10/12/21 20:22	10/13/21 09:10	1

Client Sample ID: C4

Lab Sample ID: 820-2183-12

Date Collected: 10/05/21 09:55

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
Toluene	<0.00501	U	0.00501		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:54	10/11/21 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		56 - 150				10/11/21 14:54	10/11/21 19:17	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 14:54	10/11/21 19:17	1
Dibromofluoromethane (Surr)	112		53 - 142				10/11/21 14:54	10/11/21 19:17	1
Toluene-d8 (Surr)	99		70 - 130				10/11/21 14:54	10/11/21 19:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 05:30	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 05:30	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 05:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130				10/12/21 15:00	10/13/21 05:30	1
o-Terphenyl	109		65 - 130				10/12/21 15:00	10/13/21 05:30	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	384		10.1		mg/Kg		10/12/21 20:22	10/13/21 09:22	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C5

Lab Sample ID: 820-2183-13

Date Collected: 10/05/21 10:00

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:54	10/11/21 19:38	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/11/21 14:54	10/11/21 19:38	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:54	10/11/21 19:38	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 14:54	10/11/21 19:38	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/11/21 14:54	10/11/21 19:38	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 14:54	10/11/21 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		56 - 150	10/11/21 14:54	10/11/21 19:38	1
4-Bromofluorobenzene (Surr)	100		68 - 152	10/11/21 14:54	10/11/21 19:38	1
Dibromofluoromethane (Surr)	115		53 - 142	10/11/21 14:54	10/11/21 19:38	1
Toluene-d8 (Surr)	98		70 - 130	10/11/21 14:54	10/11/21 19:38	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:48	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 05:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		65 - 130				10/12/21 15:00	10/13/21 05:48	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/13/21 05:48	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		10.1		mg/Kg		10/12/21 20:22	10/13/21 09:33	1

Client Sample ID: C6

Lab Sample ID: 820-2183-14

Date Collected: 10/05/21 10:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:54	10/11/21 19:58	1
Toluene	<0.00495	U	0.00495		mg/Kg		10/11/21 14:54	10/11/21 19:58	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:54	10/11/21 19:58	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 14:54	10/11/21 19:58	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		10/11/21 14:54	10/11/21 19:58	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 14:54	10/11/21 19:58	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C6

Lab Sample ID: 820-2183-14

Date Collected: 10/05/21 10:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		56 - 150	10/11/21 14:54	10/11/21 19:58	1
4-Bromofluorobenzene (Surr)	103		68 - 152	10/11/21 14:54	10/11/21 19:58	1
Dibromofluoromethane (Surr)	115		53 - 142	10/11/21 14:54	10/11/21 19:58	1
Toluene-d8 (Surr)	100		70 - 130	10/11/21 14:54	10/11/21 19:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/11/21 19:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 06:06	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 06:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/13/21 06:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		65 - 130	10/12/21 15:00	10/13/21 06:06	1
o-Terphenyl	94		65 - 130	10/12/21 15:00	10/13/21 06:06	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.5		10.0		mg/Kg		10/12/21 20:22	10/13/21 09:44	1

Client Sample ID: D2

Lab Sample ID: 820-2183-15

Date Collected: 10/05/21 10:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 20:18	1
Toluene	<0.00502	U	0.00502		mg/Kg		10/11/21 14:54	10/11/21 20:18	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 20:18	1
m,p-Xylenes	<0.00201	U	0.00201		mg/Kg		10/11/21 14:54	10/11/21 20:18	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 14:54	10/11/21 20:18	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/11/21 14:54	10/11/21 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	10/11/21 14:54	10/11/21 20:18	1
4-Bromofluorobenzene (Surr)	103		68 - 152	10/11/21 14:54	10/11/21 20:18	1
Dibromofluoromethane (Surr)	113		53 - 142	10/11/21 14:54	10/11/21 20:18	1
Toluene-d8 (Surr)	100		70 - 130	10/11/21 14:54	10/11/21 20:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/14/21 11:08	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: D2

Lab Sample ID: 820-2183-15

Date Collected: 10/05/21 10:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:24	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:24	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				10/12/21 15:00	10/13/21 06:24	1
o-Terphenyl	114		65 - 130				10/12/21 15:00	10/13/21 06:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.0		10.2		mg/Kg		10/12/21 20:22	10/13/21 09:55	1

Client Sample ID: D3

Lab Sample ID: 820-2183-16

Date Collected: 10/05/21 10:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
Toluene	<0.00498	U F1	0.00498		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
Ethylbenzene	<0.000996	U F1	0.000996		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
m,p-Xylenes	<0.00199	U F1	0.00199		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
o-Xylene	<0.000996	U F1	0.000996		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/12/21 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		56 - 150				10/11/21 19:17	10/12/21 14:57	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 19:17	10/12/21 14:57	1
Dibromofluoromethane (Surr)	116		53 - 142				10/11/21 19:17	10/12/21 14:57	1
Toluene-d8 (Surr)	97		70 - 130				10/11/21 19:17	10/12/21 14:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:42	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:42	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: D3

Lab Sample ID: 820-2183-16

Date Collected: 10/05/21 10:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/13/21 06:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				10/12/21 15:00	10/13/21 06:42	1
o-Terphenyl	112		65 - 130				10/12/21 15:00	10/13/21 06:42	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.8		9.94		mg/Kg		10/12/21 20:22	10/13/21 10:06	1

Client Sample ID: D4

Lab Sample ID: 820-2183-17

Date Collected: 10/05/21 10:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
Toluene	<0.00496	U	0.00496		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/12/21 20:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		56 - 150				10/11/21 19:17	10/12/21 20:19	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 19:17	10/12/21 20:19	1
Dibromofluoromethane (Surr)	111		53 - 142				10/11/21 19:17	10/12/21 20:19	1
Toluene-d8 (Surr)	93		70 - 130				10/11/21 19:17	10/12/21 20:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 07:00	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 07:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 07:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		65 - 130				10/12/21 15:00	10/13/21 07:00	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/13/21 07:00	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: D4

Lab Sample ID: 820-2183-17

Date Collected: 10/05/21 10:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3940		10.2		mg/Kg		10/12/21 20:22	10/13/21 16:13	1

Client Sample ID: D5

Lab Sample ID: 820-2183-18

Date Collected: 10/05/21 10:25

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/12/21 20:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150				10/11/21 19:17	10/12/21 20:39	1
4-Bromofluorobenzene (Surr)	101		68 - 152				10/11/21 19:17	10/12/21 20:39	1
Dibromofluoromethane (Surr)	106		53 - 142				10/11/21 19:17	10/12/21 20:39	1
Toluene-d8 (Surr)	100		70 - 130				10/11/21 19:17	10/12/21 20:39	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/13/21 07:53	1
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/13/21 07:53	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/13/21 07:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		65 - 130				10/12/21 15:00	10/13/21 07:53	1
o-Terphenyl	113		65 - 130				10/12/21 15:00	10/13/21 07:53	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		9.84		mg/Kg		10/12/21 20:22	10/13/21 10:17	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: D6

Lab Sample ID: 820-2183-19

Date Collected: 10/05/21 10:30

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/12/21 21:00	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/11/21 19:17	10/12/21 21:00	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/12/21 21:00	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/12/21 21:00	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/12/21 21:00	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/12/21 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		56 - 150	10/11/21 19:17	10/12/21 21:00	1
4-Bromofluorobenzene (Surr)	99		68 - 152	10/11/21 19:17	10/12/21 21:00	1
Dibromofluoromethane (Surr)	111		53 - 142	10/11/21 19:17	10/12/21 21:00	1
Toluene-d8 (Surr)	97		70 - 130	10/11/21 19:17	10/12/21 21:00	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 08:11	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 08:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 08:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				10/12/21 15:00	10/13/21 08:11	1
o-Terphenyl	112		65 - 130				10/12/21 15:00	10/13/21 08:11	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6540		101		mg/Kg		10/12/21 20:22	10/13/21 16:57	10

Client Sample ID: E2

Lab Sample ID: 820-2183-20

Date Collected: 10/05/21 10:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/12/21 21:20	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/11/21 19:17	10/12/21 21:20	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/12/21 21:20	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/12/21 21:20	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/12/21 21:20	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/12/21 21:20	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E2

Lab Sample ID: 820-2183-20

Date Collected: 10/05/21 10:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		56 - 150	10/11/21 19:17	10/12/21 21:20	1
4-Bromofluorobenzene (Surr)	99		68 - 152	10/11/21 19:17	10/12/21 21:20	1
Dibromofluoromethane (Surr)	111		53 - 142	10/11/21 19:17	10/12/21 21:20	1
Toluene-d8 (Surr)	99		70 - 130	10/11/21 19:17	10/12/21 21:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 08:29	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 08:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/13/21 08:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130	10/12/21 15:00	10/13/21 08:29	1
o-Terphenyl	112		65 - 130	10/12/21 15:00	10/13/21 08:29	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.8		10.1		mg/Kg		10/12/21 20:22	10/13/21 17:08	1

Client Sample ID: E3

Lab Sample ID: 820-2183-21

Date Collected: 10/05/21 10:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 21:40	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/11/21 19:17	10/12/21 21:40	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 21:40	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/12/21 21:40	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/12/21 21:40	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/12/21 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	10/11/21 19:17	10/12/21 21:40	1
4-Bromofluorobenzene (Surr)	97		68 - 152	10/11/21 19:17	10/12/21 21:40	1
Dibromofluoromethane (Surr)	107		53 - 142	10/11/21 19:17	10/12/21 21:40	1
Toluene-d8 (Surr)	101		70 - 130	10/11/21 19:17	10/12/21 21:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:18	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E3

Lab Sample ID: 820-2183-21

Date Collected: 10/05/21 10:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 19:23	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 19:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		65 - 130				10/12/21 15:00	10/12/21 19:23	1
o-Terphenyl	106		65 - 130				10/12/21 15:00	10/12/21 19:23	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.2		10.2		mg/Kg		10/12/21 20:22	10/13/21 17:19	1

Client Sample ID: E4

Lab Sample ID: 820-2183-22

Date Collected: 10/05/21 10:45

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/12/21 09:48	10/13/21 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150				10/12/21 09:48	10/13/21 17:35	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/12/21 09:48	10/13/21 17:35	1
Dibromofluoromethane (Surr)	96		53 - 142				10/12/21 09:48	10/13/21 17:35	1
Toluene-d8 (Surr)	97		70 - 130				10/12/21 09:48	10/13/21 17:35	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 19:41	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 19:41	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E4

Lab Sample ID: 820-2183-22

Date Collected: 10/05/21 10:45

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				10/12/21 15:00	10/12/21 19:41	1
o-Terphenyl	105		65 - 130				10/12/21 15:00	10/12/21 19:41	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.4		10.0		mg/Kg		10/12/21 20:22	10/13/21 17:53	1

Client Sample ID: E5

Lab Sample ID: 820-2183-23

Date Collected: 10/05/21 10:50

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/12/21 18:57	10/13/21 11:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		56 - 150				10/12/21 18:57	10/13/21 11:47	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/12/21 18:57	10/13/21 11:47	1
Dibromofluoromethane (Surr)	97		53 - 142				10/12/21 18:57	10/13/21 11:47	1
Toluene-d8 (Surr)	96		70 - 130				10/12/21 18:57	10/13/21 11:47	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 20:35	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 20:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 20:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				10/12/21 15:00	10/12/21 20:35	1
o-Terphenyl	106		65 - 130				10/12/21 15:00	10/12/21 20:35	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E5

Lab Sample ID: 820-2183-23

Date Collected: 10/05/21 10:50

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.1		10.1		mg/Kg		10/12/21 20:51	10/13/21 18:04	1

Client Sample ID: F3

Lab Sample ID: 820-2183-24

Date Collected: 10/05/21 10:55

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/12/21 18:57	10/13/21 13:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150				10/12/21 18:57	10/13/21 13:54	1
4-Bromofluorobenzene (Surr)	95		68 - 152				10/12/21 18:57	10/13/21 13:54	1
Dibromofluoromethane (Surr)	102		53 - 142				10/12/21 18:57	10/13/21 13:54	1
Toluene-d8 (Surr)	95		70 - 130				10/12/21 18:57	10/13/21 13:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/12/21 20:53	1
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/12/21 20:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/12/21 15:00	10/12/21 20:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				10/12/21 15:00	10/12/21 20:53	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/12/21 20:53	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.1		10.0		mg/Kg		10/12/21 20:51	10/13/21 18:15	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: F4

Lab Sample ID: 820-2183-25

Date Collected: 10/05/21 11:00

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 11:53	1
Toluene	<0.00496	U	0.00496		mg/Kg		10/11/21 19:17	10/13/21 11:53	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 11:53	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 11:53	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 11:53	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 11:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		56 - 150	10/11/21 19:17	10/13/21 11:53	1
4-Bromofluorobenzene (Surr)	111		68 - 152	10/11/21 19:17	10/13/21 11:53	1
Dibromofluoromethane (Surr)	108		53 - 142	10/11/21 19:17	10/13/21 11:53	1
Toluene-d8 (Surr)	99		70 - 130	10/11/21 19:17	10/13/21 11:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 09:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/12/21 21:10	1
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/12/21 21:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/12/21 15:00	10/12/21 21:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		65 - 130				10/12/21 15:00	10/12/21 21:10	1
o-Terphenyl	104		65 - 130				10/12/21 15:00	10/12/21 21:10	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.2		10.0		mg/Kg		10/12/21 20:51	10/13/21 18:26	1

Client Sample ID: F5

Lab Sample ID: 820-2183-26

Date Collected: 10/05/21 11:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/11/21 19:17	10/13/21 17:55	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/11/21 19:17	10/13/21 17:55	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/11/21 19:17	10/13/21 17:55	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/13/21 17:55	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/11/21 19:17	10/13/21 17:55	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/13/21 17:55	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: F5

Lab Sample ID: 820-2183-26

Date Collected: 10/05/21 11:05

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150	10/11/21 19:17	10/13/21 17:55	1
4-Bromofluorobenzene (Surr)	100		68 - 152	10/11/21 19:17	10/13/21 17:55	1
Dibromofluoromethane (Surr)	97		53 - 142	10/11/21 19:17	10/13/21 17:55	1
Toluene-d8 (Surr)	97		70 - 130	10/11/21 19:17	10/13/21 17:55	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 21:46	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 21:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 21:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		65 - 130	10/12/21 15:00	10/12/21 21:46	1
o-Terphenyl	106		65 - 130	10/12/21 15:00	10/12/21 21:46	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.4		9.94		mg/Kg		10/12/21 20:51	10/13/21 18:37	1

Client Sample ID: G4

Lab Sample ID: 820-2183-27

Date Collected: 10/05/21 11:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/13/21 18:15	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/11/21 19:17	10/13/21 18:15	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/13/21 18:15	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/13/21 18:15	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/11/21 19:17	10/13/21 18:15	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/13/21 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		56 - 150	10/11/21 19:17	10/13/21 18:15	1
4-Bromofluorobenzene (Surr)	97		68 - 152	10/11/21 19:17	10/13/21 18:15	1
Dibromofluoromethane (Surr)	102		53 - 142	10/11/21 19:17	10/13/21 18:15	1
Toluene-d8 (Surr)	96		70 - 130	10/11/21 19:17	10/13/21 18:15	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:18	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: G4

Lab Sample ID: 820-2183-27

Date Collected: 10/05/21 11:10

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:04	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:04	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		65 - 130				10/12/21 15:00	10/12/21 22:04	1
o-Terphenyl	108		65 - 130				10/12/21 15:00	10/12/21 22:04	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.3		9.96		mg/Kg		10/12/21 20:51	10/13/21 18:48	1

Client Sample ID: G5

Lab Sample ID: 820-2183-28

Date Collected: 10/05/21 11:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
Toluene	<0.00496	U	0.00496		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		56 - 150				10/11/21 19:17	10/13/21 18:35	1
4-Bromofluorobenzene (Surr)	97		68 - 152				10/11/21 19:17	10/13/21 18:35	1
Dibromofluoromethane (Surr)	100		53 - 142				10/11/21 19:17	10/13/21 18:35	1
Toluene-d8 (Surr)	95		70 - 130				10/11/21 19:17	10/13/21 18:35	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:22	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:22	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: G5

Lab Sample ID: 820-2183-28

Date Collected: 10/05/21 11:15

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 22:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				10/12/21 15:00	10/12/21 22:22	1
o-Terphenyl	110		65 - 130				10/12/21 15:00	10/12/21 22:22	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.9		9.84		mg/Kg		10/12/21 20:51	10/13/21 18:59	1

Client Sample ID: G6

Lab Sample ID: 820-2183-29

Date Collected: 10/05/21 11:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/11/21 19:17	10/13/21 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		56 - 150				10/11/21 19:17	10/13/21 18:56	1
4-Bromofluorobenzene (Surr)	100		68 - 152				10/11/21 19:17	10/13/21 18:56	1
Dibromofluoromethane (Surr)	99		53 - 142				10/11/21 19:17	10/13/21 18:56	1
Toluene-d8 (Surr)	97		70 - 130				10/11/21 19:17	10/13/21 18:56	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/12/21 22:40	1
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/12/21 22:40	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		10/12/21 15:00	10/12/21 22:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				10/12/21 15:00	10/12/21 22:40	1
o-Terphenyl	113		65 - 130				10/12/21 15:00	10/12/21 22:40	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: G6

Lab Sample ID: 820-2183-29

Date Collected: 10/05/21 11:20

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.8		9.96		mg/Kg		10/12/21 20:51	10/13/21 19:10	1

Client Sample ID: H5

Lab Sample ID: 820-2183-30

Date Collected: 10/05/21 11:25

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/11/21 19:17	10/13/21 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		56 - 150				10/11/21 19:17	10/13/21 19:16	1
4-Bromofluorobenzene (Surr)	98		68 - 152				10/11/21 19:17	10/13/21 19:16	1
Dibromofluoromethane (Surr)	99		53 - 142				10/11/21 19:17	10/13/21 19:16	1
Toluene-d8 (Surr)	97		70 - 130				10/11/21 19:17	10/13/21 19:16	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 22:57	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 22:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 22:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				10/12/21 15:00	10/12/21 22:57	1
o-Terphenyl	114		65 - 130				10/12/21 15:00	10/12/21 22:57	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.7		9.82		mg/Kg		10/12/21 20:51	10/13/21 19:44	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: H6

Lab Sample ID: 820-2183-31

Date Collected: 10/05/21 11:30

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0252	U	0.0252		mg/Kg		10/14/21 08:52	10/14/21 14:07	25
Toluene	<0.126	U	0.126		mg/Kg		10/14/21 08:52	10/14/21 14:07	25
Ethylbenzene	<0.0252	U	0.0252		mg/Kg		10/14/21 08:52	10/14/21 14:07	25
m,p-Xylenes	<0.0504	U	0.0504		mg/Kg		10/14/21 08:52	10/14/21 14:07	25
o-Xylene	<0.0252	U	0.0252		mg/Kg		10/14/21 08:52	10/14/21 14:07	25
Xylenes, Total	<0.0504	U	0.0504		mg/Kg		10/14/21 08:52	10/14/21 14:07	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	132		56 - 150	10/14/21 08:52	10/14/21 14:07	25
4-Bromofluorobenzene (Surr)	90		68 - 152	10/14/21 08:52	10/14/21 14:07	25
Dibromofluoromethane (Surr)	99		53 - 142	10/14/21 08:52	10/14/21 14:07	25
Toluene-d8 (Surr)	94		70 - 130	10/14/21 08:52	10/14/21 14:07	25

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0504	U	0.0504		mg/Kg			10/14/21 09:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 23:15	1
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 23:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/12/21 15:00	10/12/21 23:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130				10/12/21 15:00	10/12/21 23:15	1
o-Terphenyl	107		65 - 130				10/12/21 15:00	10/12/21 23:15	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.86	U	9.86		mg/Kg		10/12/21 20:51	10/13/21 19:55	1

Client Sample ID: I5

Lab Sample ID: 820-2183-32

Date Collected: 10/05/21 11:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/14/21 08:52	10/14/21 12:33	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/14/21 08:52	10/14/21 12:33	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/14/21 08:52	10/14/21 12:33	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		10/14/21 08:52	10/14/21 12:33	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/14/21 08:52	10/14/21 12:33	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/14/21 08:52	10/14/21 12:33	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: I5

Lab Sample ID: 820-2183-32

Date Collected: 10/05/21 11:35

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		56 - 150	10/14/21 08:52	10/14/21 12:33	1
4-Bromofluorobenzene (Surr)	100		68 - 152	10/14/21 08:52	10/14/21 12:33	1
Dibromofluoromethane (Surr)	98		53 - 142	10/14/21 08:52	10/14/21 12:33	1
Toluene-d8 (Surr)	97		70 - 130	10/14/21 08:52	10/14/21 12:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/14/21 09:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 23:33	1
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 23:33	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/12/21 15:00	10/12/21 23:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130	10/12/21 15:00	10/12/21 23:33	1
o-Terphenyl	109		65 - 130	10/12/21 15:00	10/12/21 23:33	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.6		10.2		mg/Kg		10/12/21 20:22	10/13/21 05:28	1

Client Sample ID: I6

Lab Sample ID: 820-2183-33

Date Collected: 10/05/21 11:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000990	U	0.000990		mg/Kg		10/11/21 19:17	10/13/21 20:16	1
Toluene	<0.00495	U	0.00495		mg/Kg		10/11/21 19:17	10/13/21 20:16	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		10/11/21 19:17	10/13/21 20:16	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 20:16	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		10/11/21 19:17	10/13/21 20:16	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		10/11/21 19:17	10/13/21 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	10/11/21 19:17	10/13/21 20:16	1
4-Bromofluorobenzene (Surr)	100		68 - 152	10/11/21 19:17	10/13/21 20:16	1
Dibromofluoromethane (Surr)	101		53 - 142	10/11/21 19:17	10/13/21 20:16	1
Toluene-d8 (Surr)	100		70 - 130	10/11/21 19:17	10/13/21 20:16	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00198	U	0.00198		mg/Kg			10/14/21 09:27	1

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: I6

Lab Sample ID: 820-2183-33

Date Collected: 10/05/21 11:40

Matrix: Solid

Date Received: 10/08/21 09:36

Sample Depth: 0.5' - 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/15/21 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 23:50	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 23:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/12/21 23:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130				10/12/21 15:00	10/12/21 23:50	1
o-Terphenyl	109		65 - 130				10/12/21 15:00	10/12/21 23:50	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.1		10.2		mg/Kg		10/12/21 20:22	10/13/21 05:39	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
820-2183-1	A3	115	106	108	101
820-2183-2	A4	117	105	106	103
820-2183-3	A5	113	110	108	103
820-2183-4	A6	118	103	106	102
820-2183-5	B2	116	104	106	102
820-2183-6	B3	102	100	96	99
820-2183-6 MS	B3	99	99	101	102
820-2183-7	B4	104	98	104	97
820-2183-8	B5	107	99	113	98
820-2183-9	B6	97	96	107	101
820-2183-10	C2	105	97	110	98
820-2183-11	C3	109	100	112	99
820-2183-12	C4	113	100	112	99
820-2183-13	C5	113	100	115	98
820-2183-14	C6	119	103	115	100
820-2183-15	D2	112	103	113	100
820-2183-16	D3	114	100	116	97
820-2183-16 MS	D3	111	101	109	97
820-2183-17	D4	113	100	111	93
820-2183-18	D5	106	101	106	100
820-2183-19	D6	115	99	111	97
820-2183-20	E2	108	99	111	99
820-2183-21	E3	112	97	107	101
820-2183-22	E4	101	100	96	97
820-2183-23	E5	105	100	97	96
820-2183-23 MS	E5	101	99	100	100
820-2183-24	F3	104	95	102	95
820-2183-24 MS	F3	105	100	101	97
820-2183-25	F4	120	111	108	99
820-2183-25 MS	F4	108	107	108	103
820-2183-26	F5	104	100	97	97
820-2183-27	G4	110	97	102	96
820-2183-28	G5	115	97	100	95
820-2183-29	G6	110	100	99	97
820-2183-30	H5	111	98	99	97
820-2183-31	H6	132	90	99	94
820-2183-32	I5	105	100	98	97
820-2183-33	I6	112	100	101	100
860-13201-A-19-A MS	Matrix Spike	101	97	101	98
880-6853-D-1-A MS	Matrix Spike	100	104	101	102
880-7076-A-1-G MS	Matrix Spike	106	98	101	99
880-7076-A-3-E MS	Matrix Spike	116	103	106	97
LCS 860-25970/3	Lab Control Sample	115	102	104	101
LCS 860-25983/3	Lab Control Sample	91	98	100	99
LCS 860-26126/1011	Lab Control Sample	99	100	100	102
LCS 860-26162/3	Lab Control Sample	101	105	99	103
LCS 860-26169/3	Lab Control Sample	102	103	110	99
LCS 860-26315/3	Lab Control Sample	100	100	101	103
LCS 860-26360/3	Lab Control Sample	94	99	98	99

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Surrogate Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2183-1

Project/Site: State I #16

SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
LCS 860-26500/3	Lab Control Sample	98	100	102	100
LCS 860-26503/3	Lab Control Sample	106	100	100	99
LCSD 860-25970/4	Lab Control Sample Dup	120	103	106	100
LCSD 860-25983/4	Lab Control Sample Dup	91	98	99	99
LCSD 860-26126/12	Lab Control Sample Dup	98	98	100	101
LCSD 860-26162/4	Lab Control Sample Dup	107	102	103	101
LCSD 860-26169/4	Lab Control Sample Dup	101	105	109	99
LCSD 860-26315/4	Lab Control Sample Dup	99	100	100	102
LCSD 860-26360/4	Lab Control Sample Dup	96	100	97	99
LCSD 860-26500/4	Lab Control Sample Dup	98	101	100	101
LCSD 860-26503/4	Lab Control Sample Dup	104	100	102	98
MB 860-25970/8	Method Blank	107	102	102	103
MB 860-25983/8	Method Blank	96	95	105	101
MB 860-26126/17	Method Blank	104	99	96	97
MB 860-26162/8	Method Blank	110	102	102	100
MB 860-26169/9	Method Blank	113	100	112	96
MB 860-26315/9	Method Blank	101	100	98	95
MB 860-26360/9	Method Blank	101	95	96	95
MB 860-26500/9	Method Blank	103	99	98	95
MB 860-26503/9	Method Blank	111	100	102	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (65-130)	OTPH1 (65-130)
820-2183-1	A3	100	107
820-2183-1 MS	A3	116	94
820-2183-1 MSD	A3	101	83
820-2183-2	A4	103	112
820-2183-3	A5	103	110
820-2183-4	A6	103	111
820-2183-5	B2	104	112
820-2183-6	B3	95	105
820-2183-7	B4	98	107
820-2183-8	B5	100	108
820-2183-9	B6	98	107
820-2183-10	C2	95	105
820-2183-11	C3	97	105
820-2183-12	C4	101	109
820-2183-13	C5	98	107
820-2183-14	C6	85	94
820-2183-15	D2	105	114
820-2183-16	D3	103	112

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Surrogate Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2183-1

Project/Site: State I #16

SDG: AR217001

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (65-130)	OTPH1 (65-130)
820-2183-17	D4	96	107
820-2183-18	D5	102	113
820-2183-19	D6	103	112
820-2183-20	E2	101	112
820-2183-21	E3	99	106
820-2183-22	E4	100	105
820-2183-22 MS	E4	114	90
820-2183-22 MSD	E4	116	93
820-2183-23	E5	100	106
820-2183-24	F3	100	107
820-2183-25	F4	98	104
820-2183-26	F5	99	106
820-2183-27	G4	99	108
820-2183-28	G5	100	110
820-2183-29	G6	103	113
820-2183-30	H5	105	114
820-2183-31	H6	101	107
820-2183-32	I5	101	109
820-2183-33	I6	101	109
LCS 860-26260/2-A	Lab Control Sample	122	102
LCS 860-26266/2-A	Lab Control Sample	121	101
LCSD 860-26260/3-A	Lab Control Sample Dup	121	101
LCSD 860-26266/3-A	Lab Control Sample Dup	119	99
MB 860-26260/1-A	Method Blank	105	114
MB 860-26266/1-A	Method Blank	105	115

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: 860-13201-A-19-A MS

Matrix: Solid

Analysis Batch: 25983

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	21.1		25.3	42.70		mg/Kg		85	71 - 119
Toluene	20.8		25.3	43.39		mg/Kg		89	74 - 122
Ethylbenzene	1.18		25.3	22.68		mg/Kg		85	80 - 123
m,p-Xylenes	12.1		25.3	32.72		mg/Kg		82	78 - 127
o-Xylene	1.90		25.3	24.00		mg/Kg		88	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		56 - 150
4-Bromofluorobenzene (Surr)	97		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: 880-6853-D-1-A MS

Matrix: Solid

Analysis Batch: 25970

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0279	U	1.40	1.299		mg/Kg		93	71 - 119
Toluene	<0.140	U	1.40	1.294		mg/Kg		93	74 - 122
Ethylbenzene	<0.0279	U	1.40	1.313		mg/Kg		94	80 - 123
m,p-Xylenes	<0.0559	U	1.40	1.323		mg/Kg		95	78 - 127
o-Xylene	<0.0279	U	1.40	1.317		mg/Kg		94	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		56 - 150
4-Bromofluorobenzene (Surr)	104		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: MB 860-25970/8

Matrix: Solid

Analysis Batch: 25970

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:46	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/11/21 14:46	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:46	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/11/21 14:46	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:46	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/11/21 14:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		56 - 150		10/11/21 14:46	1
4-Bromofluorobenzene (Surr)	102		68 - 152		10/11/21 14:46	1
Dibromofluoromethane (Surr)	102		53 - 142		10/11/21 14:46	1
Toluene-d8 (Surr)	103		70 - 130		10/11/21 14:46	1

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-25970/3

Matrix: Solid

Analysis Batch: 25970

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04304		mg/Kg		86	66 - 142
Toluene	0.0500	0.04244		mg/Kg		85	74 - 130
Ethylbenzene	0.0500	0.04277		mg/Kg		86	80 - 130
m,p-Xylenes	0.0500	0.04322		mg/Kg		86	78 - 130
o-Xylene	0.0500	0.04272		mg/Kg		85	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	115		56 - 150
4-Bromofluorobenzene (Surr)	102		68 - 152
Dibromofluoromethane (Surr)	104		53 - 142
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 860-25970/4

Matrix: Solid

Analysis Batch: 25970

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04999		mg/Kg		100	66 - 142	15	25
Toluene	0.0500	0.04818		mg/Kg		96	74 - 130	13	25
Ethylbenzene	0.0500	0.04880		mg/Kg		98	80 - 130	13	25
m,p-Xylenes	0.0500	0.04868		mg/Kg		97	78 - 130	12	25
o-Xylene	0.0500	0.04879		mg/Kg		98	79 - 130	13	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	120		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	106		53 - 142
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: MB 860-25983/8

Matrix: Solid

Analysis Batch: 25983

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:12	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/11/21 14:12	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:12	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/11/21 14:12	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/11/21 14:12	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/11/21 14:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		56 - 150		10/11/21 14:12	1
4-Bromofluorobenzene (Surr)	95		68 - 152		10/11/21 14:12	1
Dibromofluoromethane (Surr)	105		53 - 142		10/11/21 14:12	1
Toluene-d8 (Surr)	101		70 - 130		10/11/21 14:12	1

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-25983/3

Matrix: Solid

Analysis Batch: 25983

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04398		mg/Kg		88	66 - 142
Toluene	0.0500	0.04673		mg/Kg		93	74 - 130
Ethylbenzene	0.0500	0.04833		mg/Kg		97	80 - 130
m,p-Xylenes	0.0500	0.04764		mg/Kg		95	78 - 130
o-Xylene	0.0500	0.04896		mg/Kg		98	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		56 - 150
4-Bromofluorobenzene (Surr)	98		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 860-25983/4

Matrix: Solid

Analysis Batch: 25983

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04412		mg/Kg		88	66 - 142	0	25
Toluene	0.0500	0.04616		mg/Kg		92	74 - 130	1	25
Ethylbenzene	0.0500	0.04757		mg/Kg		95	80 - 130	2	25
m,p-Xylenes	0.0500	0.04729		mg/Kg		95	78 - 130	1	25
o-Xylene	0.0500	0.04854		mg/Kg		97	79 - 130	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		56 - 150
4-Bromofluorobenzene (Surr)	98		68 - 152
Dibromofluoromethane (Surr)	99		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MB 860-26126/17

Matrix: Solid

Analysis Batch: 26126

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:41	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/12/21 14:41	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:41	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/12/21 14:41	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:41	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/12/21 14:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150		10/12/21 14:41	1
4-Bromofluorobenzene (Surr)	99		68 - 152		10/12/21 14:41	1
Dibromofluoromethane (Surr)	96		53 - 142		10/12/21 14:41	1
Toluene-d8 (Surr)	97		70 - 130		10/12/21 14:41	1

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-26126/1011

Matrix: Solid

Analysis Batch: 26126

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04583		mg/Kg		92	66 - 142
Toluene	0.0500	0.04563		mg/Kg		91	74 - 130
Ethylbenzene	0.0500	0.04658		mg/Kg		93	80 - 130
m,p-Xylenes	0.0500	0.04676		mg/Kg		94	78 - 130
o-Xylene	0.0500	0.04699		mg/Kg		94	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 860-26126/12

Matrix: Solid

Analysis Batch: 26126

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.04377		mg/Kg		88	66 - 142	5	25
Toluene	0.0500	0.04361		mg/Kg		87	74 - 130	5	25
Ethylbenzene	0.0500	0.04446		mg/Kg		89	80 - 130	5	25
m,p-Xylenes	0.0500	0.04500		mg/Kg		90	78 - 130	4	25
o-Xylene	0.0500	0.04505		mg/Kg		90	79 - 130	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		56 - 150
4-Bromofluorobenzene (Surr)	98		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: 820-2183-6 MS

Matrix: Solid

Analysis Batch: 26126

Client Sample ID: B3

Prep Type: Total/NA

Prep Batch: 26154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00100	U	0.0503	0.05178		mg/Kg		103	71 - 119
Toluene	<0.00500	U	0.0503	0.05346		mg/Kg		106	74 - 122
Ethylbenzene	<0.00100	U	0.0503	0.05389		mg/Kg		107	80 - 123
m,p-Xylenes	<0.00200	U	0.0503	0.05435		mg/Kg		108	78 - 127
o-Xylene	<0.00100	U	0.0503	0.05308		mg/Kg		106	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		56 - 150
4-Bromofluorobenzene (Surr)	99		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	102		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 820-2183-16 MS

Matrix: Solid

Analysis Batch: 26169

Client Sample ID: D3

Prep Type: Total/NA

Prep Batch: 26154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000996	U	0.0498	0.03710		mg/Kg		74	71 - 119
Toluene	<0.00498	U F1	0.0498	0.03564	F1	mg/Kg		72	74 - 122
Ethylbenzene	<0.000996	U F1	0.0498	0.03553	F1	mg/Kg		71	80 - 123
m,p-Xylenes	<0.00199	U F1	0.0498	0.03507	F1	mg/Kg		70	78 - 127
o-Xylene	<0.000996	U F1	0.0498	0.03452	F1	mg/Kg		69	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		56 - 150
4-Bromofluorobenzene (Surr)	101		68 - 152
Dibromofluoromethane (Surr)	109		53 - 142
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: 820-2183-25 MS

Matrix: Solid

Analysis Batch: 26162

Client Sample ID: F4

Prep Type: Total/NA

Prep Batch: 26154

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000992	U	0.0502	0.04133		mg/Kg		82	71 - 119
Toluene	<0.00496	U	0.0502	0.04253		mg/Kg		85	74 - 122
Ethylbenzene	<0.000992	U	0.0502	0.04227		mg/Kg		84	80 - 123
m,p-Xylenes	<0.00198	U	0.0502	0.04250		mg/Kg		85	78 - 127
o-Xylene	<0.000992	U	0.0502	0.04270		mg/Kg		85	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		56 - 150
4-Bromofluorobenzene (Surr)	107		68 - 152
Dibromofluoromethane (Surr)	108		53 - 142
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 860-26162/8

Matrix: Solid

Analysis Batch: 26162

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/13/21 11:27	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/13/21 11:27	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/13/21 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		56 - 150		10/13/21 11:27	1
4-Bromofluorobenzene (Surr)	102		68 - 152		10/13/21 11:27	1
Dibromofluoromethane (Surr)	102		53 - 142		10/13/21 11:27	1
Toluene-d8 (Surr)	100		70 - 130		10/13/21 11:27	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-26162/3

Matrix: Solid

Analysis Batch: 26162

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04045		mg/Kg		81	66 - 142
Toluene	0.0500	0.04185		mg/Kg		84	74 - 130
Ethylbenzene	0.0500	0.04257		mg/Kg		85	80 - 130
m,p-Xylenes	0.0500	0.04207		mg/Kg		84	78 - 130
o-Xylene	0.0500	0.04155		mg/Kg		83	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		56 - 150
4-Bromofluorobenzene (Surr)	105		68 - 152
Dibromofluoromethane (Surr)	99		53 - 142
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: LCSD 860-26162/4

Matrix: Solid

Analysis Batch: 26162

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04713		mg/Kg		94	66 - 142	15	25
Toluene	0.0500	0.04756		mg/Kg		95	74 - 130	13	25
Ethylbenzene	0.0500	0.04794		mg/Kg		96	80 - 130	12	25
m,p-Xylenes	0.0500	0.04834		mg/Kg		97	78 - 130	14	25
o-Xylene	0.0500	0.04789		mg/Kg		96	79 - 130	14	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		56 - 150
4-Bromofluorobenzene (Surr)	102		68 - 152
Dibromofluoromethane (Surr)	103		53 - 142
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: MB 860-26169/9

Matrix: Solid

Analysis Batch: 26169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:37	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/12/21 14:37	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:37	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/12/21 14:37	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/12/21 14:37	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/12/21 14:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		56 - 150		10/12/21 14:37	1
4-Bromofluorobenzene (Surr)	100		68 - 152		10/12/21 14:37	1
Dibromofluoromethane (Surr)	112		53 - 142		10/12/21 14:37	1
Toluene-d8 (Surr)	96		70 - 130		10/12/21 14:37	1

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-26169/3

Matrix: Solid

Analysis Batch: 26169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04594		mg/Kg		92	66 - 142
Toluene	0.0500	0.04460		mg/Kg		89	74 - 130
Ethylbenzene	0.0500	0.04486		mg/Kg		90	80 - 130
m,p-Xylenes	0.0500	0.04491		mg/Kg		90	78 - 130
o-Xylene	0.0500	0.04552		mg/Kg		91	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	110		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 860-26169/4

Matrix: Solid

Analysis Batch: 26169

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04731		mg/Kg		95	66 - 142	3	25
Toluene	0.0500	0.04616		mg/Kg		92	74 - 130	3	25
Ethylbenzene	0.0500	0.04620		mg/Kg		92	80 - 130	3	25
m,p-Xylenes	0.0500	0.04615		mg/Kg		92	78 - 130	3	25
o-Xylene	0.0500	0.04669		mg/Kg		93	79 - 130	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		56 - 150
4-Bromofluorobenzene (Surr)	105		68 - 152
Dibromofluoromethane (Surr)	109		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 820-2183-23 MS

Matrix: Solid

Analysis Batch: 26315

Client Sample ID: E5

Prep Type: Total/NA

Prep Batch: 26304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000996	U	0.0498	0.04288		mg/Kg		86	71 - 119
Toluene	<0.00498	U	0.0498	0.04214		mg/Kg		85	74 - 122
Ethylbenzene	<0.000996	U	0.0498	0.04272		mg/Kg		86	80 - 123
m,p-Xylenes	<0.00199	U	0.0498	0.04244		mg/Kg		85	78 - 127
o-Xylene	<0.000996	U	0.0498	0.04172		mg/Kg		84	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		56 - 150
4-Bromofluorobenzene (Surr)	99		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	100		70 - 130

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 820-2183-24 MS

Matrix: Solid

Analysis Batch: 26360

Client Sample ID: F3

Prep Type: Total/NA

Prep Batch: 26304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000996	U	0.0495	0.04387		mg/Kg		89	71 - 119
Toluene	<0.00498	U	0.0495	0.04300		mg/Kg		87	74 - 122
Ethylbenzene	<0.000996	U	0.0495	0.04163		mg/Kg		84	80 - 123
m,p-Xylenes	<0.00199	U	0.0495	0.04098		mg/Kg		83	78 - 127
o-Xylene	<0.000996	U	0.0495	0.04199		mg/Kg		85	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: MB 860-26315/9

Matrix: Solid

Analysis Batch: 26315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/13/21 11:27	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/13/21 11:27	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/13/21 11:27	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/13/21 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150		10/13/21 11:27	1
4-Bromofluorobenzene (Surr)	100		68 - 152		10/13/21 11:27	1
Dibromofluoromethane (Surr)	98		53 - 142		10/13/21 11:27	1
Toluene-d8 (Surr)	95		70 - 130		10/13/21 11:27	1

Lab Sample ID: LCS 860-26315/3

Matrix: Solid

Analysis Batch: 26315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05172		mg/Kg		103	66 - 142
Toluene	0.0500	0.05330		mg/Kg		107	74 - 130
Ethylbenzene	0.0500	0.05500		mg/Kg		110	80 - 130
m,p-Xylenes	0.0500	0.05503		mg/Kg		110	78 - 130
o-Xylene	0.0500	0.05402		mg/Kg		108	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	103		70 - 130

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-26315/4

Matrix: Solid

Analysis Batch: 26315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04890		mg/Kg		98	66 - 142	6	25
Toluene	0.0500	0.05021		mg/Kg		100	74 - 130	6	25
Ethylbenzene	0.0500	0.05229		mg/Kg		105	80 - 130	5	25
m,p-Xylenes	0.0500	0.05190		mg/Kg		104	78 - 130	6	25
o-Xylene	0.0500	0.05066		mg/Kg		101	79 - 130	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: MB 860-26360/9

Matrix: Solid

Analysis Batch: 26360

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/13/21 13:34	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/13/21 13:34	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/13/21 13:34	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/13/21 13:34	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/13/21 13:34	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/13/21 13:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150		10/13/21 13:34	1
4-Bromofluorobenzene (Surr)	95		68 - 152		10/13/21 13:34	1
Dibromofluoromethane (Surr)	96		53 - 142		10/13/21 13:34	1
Toluene-d8 (Surr)	95		70 - 130		10/13/21 13:34	1

Lab Sample ID: LCS 860-26360/3

Matrix: Solid

Analysis Batch: 26360

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04035		mg/Kg		81	66 - 142
Toluene	0.0500	0.04090		mg/Kg		82	74 - 130
Ethylbenzene	0.0500	0.04126		mg/Kg		83	80 - 130
m,p-Xylenes	0.0500	0.04113		mg/Kg		82	78 - 130
o-Xylene	0.0500	0.04190		mg/Kg		84	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		56 - 150
4-Bromofluorobenzene (Surr)	99		68 - 152
Dibromofluoromethane (Surr)	98		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-26360/4

Matrix: Solid

Analysis Batch: 26360

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04805		mg/Kg		96	66 - 142	17	25
Toluene	0.0500	0.04835		mg/Kg		97	74 - 130	17	25
Ethylbenzene	0.0500	0.04777		mg/Kg		96	80 - 130	15	25
m,p-Xylenes	0.0500	0.04706		mg/Kg		94	78 - 130	13	25
o-Xylene	0.0500	0.04818		mg/Kg		96	79 - 130	14	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	97		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 880-7076-A-1-G MS

Matrix: Solid

Analysis Batch: 26500

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 26485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000992	U F1	0.0498	0.03480	F1	mg/Kg		70	71 - 119
Toluene	<0.00496	U F1	0.0498	0.03462	F1	mg/Kg		70	74 - 122
Ethylbenzene	<0.000992	U F1	0.0498	0.03618	F1	mg/Kg		73	80 - 123
m,p-Xylenes	<0.00198	U F1	0.0498	0.03584	F1	mg/Kg		72	78 - 127
o-Xylene	<0.000992	U F1	0.0498	0.03446	F1	mg/Kg		69	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		56 - 150
4-Bromofluorobenzene (Surr)	98		68 - 152
Dibromofluoromethane (Surr)	101		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 880-7076-A-3-E MS

Matrix: Solid

Analysis Batch: 26503

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 26485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000994	U F1	0.0500	0.02571	F1	mg/Kg		51	71 - 119
Toluene	<0.00497	U F1	0.0500	0.02501	F1	mg/Kg		50	74 - 122
Ethylbenzene	<0.000994	U F1	0.0500	0.02521	F1	mg/Kg		50	80 - 123
m,p-Xylenes	<0.00199	U F1	0.0500	0.02473	F1	mg/Kg		49	78 - 127
o-Xylene	<0.000994	U F1	0.0500	0.02584	F1	mg/Kg		52	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	116		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	106		53 - 142
Toluene-d8 (Surr)	97		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-26500/9

Matrix: Solid

Analysis Batch: 26500

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/14/21 11:11	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/14/21 11:11	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/14/21 11:11	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/14/21 11:11	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/14/21 11:11	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/14/21 11:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		56 - 150		10/14/21 11:11	1
4-Bromofluorobenzene (Surr)	99		68 - 152		10/14/21 11:11	1
Dibromofluoromethane (Surr)	98		53 - 142		10/14/21 11:11	1
Toluene-d8 (Surr)	95		70 - 130		10/14/21 11:11	1

Lab Sample ID: LCS 860-26500/3

Matrix: Solid

Analysis Batch: 26500

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04198		mg/Kg		84	66 - 142
Toluene	0.0500	0.04280		mg/Kg		86	74 - 130
Ethylbenzene	0.0500	0.04456		mg/Kg		89	80 - 130
m,p-Xylenes	0.0500	0.04495		mg/Kg		90	78 - 130
o-Xylene	0.0500	0.04521		mg/Kg		90	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 860-26500/4

Matrix: Solid

Analysis Batch: 26500

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04389		mg/Kg		88	66 - 142	4	25
Toluene	0.0500	0.04440		mg/Kg		89	74 - 130	4	25
Ethylbenzene	0.0500	0.04619		mg/Kg		92	80 - 130	4	25
m,p-Xylenes	0.0500	0.04643		mg/Kg		93	78 - 130	3	25
o-Xylene	0.0500	0.04637		mg/Kg		93	79 - 130	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		56 - 150
4-Bromofluorobenzene (Surr)	101		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	101		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-26503/9

Matrix: Solid

Analysis Batch: 26503

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/14/21 12:06	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/14/21 12:06	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/14/21 12:06	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			10/14/21 12:06	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/14/21 12:06	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/14/21 12:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		56 - 150		10/14/21 12:06	1
4-Bromofluorobenzene (Surr)	100		68 - 152		10/14/21 12:06	1
Dibromofluoromethane (Surr)	102		53 - 142		10/14/21 12:06	1
Toluene-d8 (Surr)	97		70 - 130		10/14/21 12:06	1

Lab Sample ID: LCS 860-26503/3

Matrix: Solid

Analysis Batch: 26503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04444		mg/Kg		89	66 - 142
Toluene	0.0500	0.04380		mg/Kg		88	74 - 130
Ethylbenzene	0.0500	0.04483		mg/Kg		90	80 - 130
m,p-Xylenes	0.0500	0.04371		mg/Kg		87	78 - 130
o-Xylene	0.0500	0.04579		mg/Kg		92	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 860-26503/4

Matrix: Solid

Analysis Batch: 26503

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04049		mg/Kg		81	66 - 142	9	25
Toluene	0.0500	0.04056		mg/Kg		81	74 - 130	8	25
Ethylbenzene	0.0500	0.04168		mg/Kg		83	80 - 130	7	25
m,p-Xylenes	0.0500	0.04170		mg/Kg		83	78 - 130	5	25
o-Xylene	0.0500	0.04297		mg/Kg		86	79 - 130	6	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		56 - 150
4-Bromofluorobenzene (Surr)	100		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	98		70 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

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

Lab Sample ID: MB 860-26260/1-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 01:01	1
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 01:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/12/21 15:00	10/13/21 01:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				10/12/21 15:00	10/13/21 01:01	1
o-Terphenyl	114		65 - 130				10/12/21 15:00	10/13/21 01:01	1

Lab Sample ID: LCS 860-26260/2-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	993	1080		mg/Kg		109	70 - 135
Gasoline Range Organics (GRO)-C6-C10	993	884.1		mg/Kg		89	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	122		65 - 130				
o-Terphenyl	102		65 - 130				

Lab Sample ID: LCSD 860-26260/3-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26260

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	996	1092		mg/Kg		110	70 - 135	1	35
Gasoline Range Organics (GRO)-C6-C10	996	904.9		mg/Kg		91	70 - 135	2	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	121		65 - 130						
o-Terphenyl	101		65 - 130						

Lab Sample ID: 820-2183-1 MS

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: A3

Prep Type: Total/NA

Prep Batch: 26260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	<49.9	U	992	1036		mg/Kg		104	70 - 135
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	992	967.6		mg/Kg		98	70 - 135

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

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

Lab Sample ID: 820-2183-1 MS

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: A3

Prep Type: Total/NA

Prep Batch: 26260

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	116		65 - 130
o-Terphenyl	94		65 - 130

Lab Sample ID: 820-2183-1 MSD

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: A3

Prep Type: Total/NA

Prep Batch: 26260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	994	913.3		mg/Kg		92	70 - 135	13	35
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	994	1054		mg/Kg		106	70 - 135	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	101		65 - 130
o-Terphenyl	83		65 - 130

Lab Sample ID: MB 860-26266/1-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26266

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		10/12/21 15:00	10/12/21 18:29	1
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		10/12/21 15:00	10/12/21 18:29	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		10/12/21 15:00	10/12/21 18:29	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	105		65 - 130	10/12/21 15:00	10/12/21 18:29	1			
o-Terphenyl	115		65 - 130	10/12/21 15:00	10/12/21 18:29	1			

Lab Sample ID: LCS 860-26266/2-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26266

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	995	1076		mg/Kg		108	70 - 135
Gasoline Range Organics (GRO)-C6-C10	995	995.3		mg/Kg		100	70 - 135

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	121		65 - 130
o-Terphenyl	101		65 - 130

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

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

Lab Sample ID: LCSD 860-26266/3-A

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26266

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	1045		mg/Kg		105	70 - 135	3	35
Gasoline Range Organics (GRO)-C6-C10	1000	1005		mg/Kg		101	70 - 135	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		65 - 130						
o-Terphenyl	99		65 - 130						

Lab Sample ID: 820-2183-22 MS

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: E4

Prep Type: Total/NA

Prep Batch: 26266

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1006		mg/Kg		101	70 - 135		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1009		mg/Kg		101	70 - 135		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	114		65 - 130								
o-Terphenyl	90		65 - 130								

Lab Sample ID: 820-2183-22 MSD

Matrix: Solid

Analysis Batch: 26165

Client Sample ID: E4

Prep Type: Total/NA

Prep Batch: 26266

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1040		mg/Kg		104	70 - 135	3	35
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1039		mg/Kg		104	70 - 135	3	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	116		65 - 130								
o-Terphenyl	93		65 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-26307/28-A

Matrix: Solid

Analysis Batch: 26129

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		10/12/21 20:22	10/13/21 04:22	1

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-26307/56-A

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 26307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		10/12/21 20:22	10/13/21 15:39	1

Lab Sample ID: LCS 860-26307/29-A

Matrix: Solid

Analysis Batch: 26129

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	104.9		mg/Kg		105	80 - 120

Lab Sample ID: LCS 860-26307/57-A

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	107.1		mg/Kg		107	80 - 120

Lab Sample ID: LCSD 860-26307/30-A

Matrix: Solid

Analysis Batch: 26129

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	101.5		mg/Kg		101	80 - 120	3	20

Lab Sample ID: LCSD 860-26307/58-A

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	103.9		mg/Kg		104	80 - 120	3	20

Lab Sample ID: 820-2183-17 MS

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: D4

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3940		101	3930	4	mg/Kg		-9	80 - 120

Lab Sample ID: 820-2183-17 MSD

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: D4

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3940		102	3981	4	mg/Kg		41	80 - 120

Lab Sample ID: 820-2183-31 MS

Matrix: Solid

Analysis Batch: 26383

Client Sample ID: H6

Prep Type: Total/NA

Prep Batch: 26307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<9.86	U	98.4	107.2		mg/Kg		102	80 - 120

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 820-2183-31 MSD									Client Sample ID: H6		
Matrix: Solid									Prep Type: Total/NA		
Analysis Batch: 26383									Prep Batch: 26307		
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limits
Chloride	<9.86	U	99.8	109.1		mg/Kg		103	80 - 120	2	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC/MS VOA

Prep Batch: 25581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-13201-A-19-A MS	Matrix Spike	Total/NA	Solid	5035	

Prep Batch: 25637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-6853-D-1-A MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 25970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	8260C	26055
820-2183-2	A4	Total/NA	Solid	8260C	26055
820-2183-3	A5	Total/NA	Solid	8260C	26055
820-2183-4	A6	Total/NA	Solid	8260C	26055
820-2183-5	B2	Total/NA	Solid	8260C	26055
MB 860-25970/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-25970/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-25970/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
880-6853-D-1-A MS	Matrix Spike	Total/NA	Solid	8260C	25637

Analysis Batch: 25983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-7	B4	Total/NA	Solid	8260C	26055
820-2183-8	B5	Total/NA	Solid	8260C	26055
820-2183-9	B6	Total/NA	Solid	8260C	26055
820-2183-10	C2	Total/NA	Solid	8260C	26055
820-2183-11	C3	Total/NA	Solid	8260C	26055
820-2183-12	C4	Total/NA	Solid	8260C	26055
820-2183-13	C5	Total/NA	Solid	8260C	26055
820-2183-14	C6	Total/NA	Solid	8260C	26055
820-2183-15	D2	Total/NA	Solid	8260C	26055
MB 860-25983/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-25983/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-25983/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
860-13201-A-19-A MS	Matrix Spike	Total/NA	Solid	8260C	25581

Prep Batch: 26055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	5035	
820-2183-2	A4	Total/NA	Solid	5035	
820-2183-3	A5	Total/NA	Solid	5035	
820-2183-4	A6	Total/NA	Solid	5035	
820-2183-5	B2	Total/NA	Solid	5035	
820-2183-6	B3	Total/NA	Solid	5035	
820-2183-7	B4	Total/NA	Solid	5035	
820-2183-8	B5	Total/NA	Solid	5035	
820-2183-9	B6	Total/NA	Solid	5035	
820-2183-10	C2	Total/NA	Solid	5035	
820-2183-11	C3	Total/NA	Solid	5035	
820-2183-12	C4	Total/NA	Solid	5035	
820-2183-13	C5	Total/NA	Solid	5035	
820-2183-14	C6	Total/NA	Solid	5035	
820-2183-15	D2	Total/NA	Solid	5035	

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QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC/MS VOA

Prep Batch: 26105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-16	D3	Total/NA	Solid	5035	26105
820-2183-17	D4	Total/NA	Solid	5035	
820-2183-18	D5	Total/NA	Solid	5035	
820-2183-19	D6	Total/NA	Solid	5035	
820-2183-20	E2	Total/NA	Solid	5035	
820-2183-21	E3	Total/NA	Solid	5035	
820-2183-25	F4	Total/NA	Solid	5035	
820-2183-26	F5	Total/NA	Solid	5035	
820-2183-27	G4	Total/NA	Solid	5035	
820-2183-28	G5	Total/NA	Solid	5035	
820-2183-29	G6	Total/NA	Solid	5035	
820-2183-30	H5	Total/NA	Solid	5035	
820-2183-33	I6	Total/NA	Solid	5035	

Analysis Batch: 26126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-6	B3	Total/NA	Solid	8260C	26055
MB 860-26126/17	Method Blank	Total/NA	Solid	8260C	26154
LCS 860-26126/1011	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26126/12	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-2183-6 MS	B3	Total/NA	Solid	8260C	

Prep Batch: 26154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-22	E4	Total/NA	Solid	5035	26154
820-2183-6 MS	B3	Total/NA	Solid	5035	
820-2183-16 MS	D3	Total/NA	Solid	5035	
820-2183-25 MS	F4	Total/NA	Solid	5035	

Analysis Batch: 26162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-25	F4	Total/NA	Solid	8260C	26105
MB 860-26162/8	Method Blank	Total/NA	Solid	8260C	26154
LCS 860-26162/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26162/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-2183-25 MS	F4	Total/NA	Solid	8260C	

Analysis Batch: 26169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-16	D3	Total/NA	Solid	8260C	26105
820-2183-17	D4	Total/NA	Solid	8260C	26105
820-2183-18	D5	Total/NA	Solid	8260C	26105
820-2183-19	D6	Total/NA	Solid	8260C	26105
820-2183-20	E2	Total/NA	Solid	8260C	26105
820-2183-21	E3	Total/NA	Solid	8260C	26105
MB 860-26169/9	Method Blank	Total/NA	Solid	8260C	26154
LCS 860-26169/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26169/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-2183-16 MS	D3	Total/NA	Solid	8260C	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC/MS VOA

Prep Batch: 26304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-23	E5	Total/NA	Solid	5035	
820-2183-24	F3	Total/NA	Solid	5035	
820-2183-23 MS	E5	Total/NA	Solid	5035	
820-2183-24 MS	F3	Total/NA	Solid	5035	

Analysis Batch: 26315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-23	E5	Total/NA	Solid	8260C	26304
MB 860-26315/9	Method Blank	Total/NA	Solid	8260C	
LCS 860-26315/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26315/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-2183-23 MS	E5	Total/NA	Solid	8260C	26304

Analysis Batch: 26360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-22	E4	Total/NA	Solid	8260C	26154
820-2183-24	F3	Total/NA	Solid	8260C	26304
820-2183-26	F5	Total/NA	Solid	8260C	26105
820-2183-27	G4	Total/NA	Solid	8260C	26105
820-2183-28	G5	Total/NA	Solid	8260C	26105
820-2183-29	G6	Total/NA	Solid	8260C	26105
820-2183-30	H5	Total/NA	Solid	8260C	26105
820-2183-33	I6	Total/NA	Solid	8260C	26105
MB 860-26360/9	Method Blank	Total/NA	Solid	8260C	
LCS 860-26360/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26360/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-2183-24 MS	F3	Total/NA	Solid	8260C	26304

Prep Batch: 26485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-7076-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-7076-A-3-E MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 26500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-32	I5	Total/NA	Solid	8260C	26523
MB 860-26500/9	Method Blank	Total/NA	Solid	8260C	
LCS 860-26500/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26500/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
880-7076-A-1-G MS	Matrix Spike	Total/NA	Solid	8260C	26485

Analysis Batch: 26503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-31	H6	Total/NA	Solid	8260C	26523
MB 860-26503/9	Method Blank	Total/NA	Solid	8260C	
LCS 860-26503/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-26503/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
880-7076-A-3-E MS	Matrix Spike	Total/NA	Solid	8260C	26485

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC/MS VOA

Prep Batch: 26523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-31	H6	Total/NA	Solid	5035	
820-2183-32	I5	Total/NA	Solid	5035	

Analysis Batch: 26534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-25	F4	Total/NA	Solid	Total BTEX	
820-2183-31	H6	Total/NA	Solid	Total BTEX	
820-2183-32	I5	Total/NA	Solid	Total BTEX	
820-2183-33	I6	Total/NA	Solid	Total BTEX	

Analysis Batch: 26567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	Total BTEX	
820-2183-2	A4	Total/NA	Solid	Total BTEX	
820-2183-3	A5	Total/NA	Solid	Total BTEX	
820-2183-4	A6	Total/NA	Solid	Total BTEX	
820-2183-5	B2	Total/NA	Solid	Total BTEX	
820-2183-6	B3	Total/NA	Solid	Total BTEX	
820-2183-7	B4	Total/NA	Solid	Total BTEX	
820-2183-8	B5	Total/NA	Solid	Total BTEX	
820-2183-9	B6	Total/NA	Solid	Total BTEX	
820-2183-10	C2	Total/NA	Solid	Total BTEX	
820-2183-11	C3	Total/NA	Solid	Total BTEX	
820-2183-12	C4	Total/NA	Solid	Total BTEX	
820-2183-13	C5	Total/NA	Solid	Total BTEX	
820-2183-14	C6	Total/NA	Solid	Total BTEX	
820-2183-15	D2	Total/NA	Solid	Total BTEX	
820-2183-16	D3	Total/NA	Solid	Total BTEX	
820-2183-17	D4	Total/NA	Solid	Total BTEX	
820-2183-18	D5	Total/NA	Solid	Total BTEX	
820-2183-19	D6	Total/NA	Solid	Total BTEX	
820-2183-20	E2	Total/NA	Solid	Total BTEX	

Analysis Batch: 26568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-21	E3	Total/NA	Solid	Total BTEX	
820-2183-22	E4	Total/NA	Solid	Total BTEX	
820-2183-23	E5	Total/NA	Solid	Total BTEX	
820-2183-24	F3	Total/NA	Solid	Total BTEX	
820-2183-26	F5	Total/NA	Solid	Total BTEX	
820-2183-27	G4	Total/NA	Solid	Total BTEX	
820-2183-28	G5	Total/NA	Solid	Total BTEX	
820-2183-29	G6	Total/NA	Solid	Total BTEX	
820-2183-30	H5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 26106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	8015 NM	
820-2183-2	A4	Total/NA	Solid	8015 NM	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC Semi VOA (Continued)

Analysis Batch: 26106 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-3	A5	Total/NA	Solid	8015 NM	
820-2183-4	A6	Total/NA	Solid	8015 NM	
820-2183-5	B2	Total/NA	Solid	8015 NM	
820-2183-6	B3	Total/NA	Solid	8015 NM	
820-2183-7	B4	Total/NA	Solid	8015 NM	
820-2183-8	B5	Total/NA	Solid	8015 NM	
820-2183-9	B6	Total/NA	Solid	8015 NM	
820-2183-10	C2	Total/NA	Solid	8015 NM	
820-2183-11	C3	Total/NA	Solid	8015 NM	
820-2183-12	C4	Total/NA	Solid	8015 NM	
820-2183-13	C5	Total/NA	Solid	8015 NM	
820-2183-14	C6	Total/NA	Solid	8015 NM	
820-2183-15	D2	Total/NA	Solid	8015 NM	
820-2183-16	D3	Total/NA	Solid	8015 NM	
820-2183-17	D4	Total/NA	Solid	8015 NM	
820-2183-18	D5	Total/NA	Solid	8015 NM	
820-2183-19	D6	Total/NA	Solid	8015 NM	
820-2183-20	E2	Total/NA	Solid	8015 NM	
820-2183-21	E3	Total/NA	Solid	8015 NM	
820-2183-22	E4	Total/NA	Solid	8015 NM	
820-2183-23	E5	Total/NA	Solid	8015 NM	
820-2183-24	F3	Total/NA	Solid	8015 NM	
820-2183-25	F4	Total/NA	Solid	8015 NM	
820-2183-26	F5	Total/NA	Solid	8015 NM	
820-2183-27	G4	Total/NA	Solid	8015 NM	
820-2183-28	G5	Total/NA	Solid	8015 NM	
820-2183-29	G6	Total/NA	Solid	8015 NM	
820-2183-30	H5	Total/NA	Solid	8015 NM	
820-2183-31	H6	Total/NA	Solid	8015 NM	
820-2183-32	I5	Total/NA	Solid	8015 NM	
820-2183-33	I6	Total/NA	Solid	8015 NM	

Analysis Batch: 26165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	8015B NM	26260
820-2183-2	A4	Total/NA	Solid	8015B NM	26260
820-2183-3	A5	Total/NA	Solid	8015B NM	26260
820-2183-4	A6	Total/NA	Solid	8015B NM	26260
820-2183-5	B2	Total/NA	Solid	8015B NM	26260
820-2183-6	B3	Total/NA	Solid	8015B NM	26260
820-2183-7	B4	Total/NA	Solid	8015B NM	26260
820-2183-8	B5	Total/NA	Solid	8015B NM	26260
820-2183-9	B6	Total/NA	Solid	8015B NM	26260
820-2183-10	C2	Total/NA	Solid	8015B NM	26260
820-2183-11	C3	Total/NA	Solid	8015B NM	26260
820-2183-12	C4	Total/NA	Solid	8015B NM	26260
820-2183-13	C5	Total/NA	Solid	8015B NM	26260
820-2183-14	C6	Total/NA	Solid	8015B NM	26260
820-2183-15	D2	Total/NA	Solid	8015B NM	26260
820-2183-16	D3	Total/NA	Solid	8015B NM	26260
820-2183-17	D4	Total/NA	Solid	8015B NM	26260

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QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC Semi VOA (Continued)

Analysis Batch: 26165 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-18	D5	Total/NA	Solid	8015B NM	26260
820-2183-19	D6	Total/NA	Solid	8015B NM	26260
820-2183-20	E2	Total/NA	Solid	8015B NM	26260
820-2183-21	E3	Total/NA	Solid	8015B NM	26266
820-2183-22	E4	Total/NA	Solid	8015B NM	26266
820-2183-23	E5	Total/NA	Solid	8015B NM	26266
820-2183-24	F3	Total/NA	Solid	8015B NM	26266
820-2183-25	F4	Total/NA	Solid	8015B NM	26266
820-2183-26	F5	Total/NA	Solid	8015B NM	26266
820-2183-27	G4	Total/NA	Solid	8015B NM	26266
820-2183-28	G5	Total/NA	Solid	8015B NM	26266
820-2183-29	G6	Total/NA	Solid	8015B NM	26266
820-2183-30	H5	Total/NA	Solid	8015B NM	26266
820-2183-31	H6	Total/NA	Solid	8015B NM	26266
820-2183-32	I5	Total/NA	Solid	8015B NM	26266
820-2183-33	I6	Total/NA	Solid	8015B NM	26266
MB 860-26260/1-A	Method Blank	Total/NA	Solid	8015B NM	26260
MB 860-26266/1-A	Method Blank	Total/NA	Solid	8015B NM	26266
LCS 860-26260/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26260
LCS 860-26266/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	26266
LCSD 860-26260/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26260
LCSD 860-26266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	26266
820-2183-1 MS	A3	Total/NA	Solid	8015B NM	26260
820-2183-1 MSD	A3	Total/NA	Solid	8015B NM	26260
820-2183-22 MS	E4	Total/NA	Solid	8015B NM	26266
820-2183-22 MSD	E4	Total/NA	Solid	8015B NM	26266

Prep Batch: 26260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	8015NM Prep	
820-2183-2	A4	Total/NA	Solid	8015NM Prep	
820-2183-3	A5	Total/NA	Solid	8015NM Prep	
820-2183-4	A6	Total/NA	Solid	8015NM Prep	
820-2183-5	B2	Total/NA	Solid	8015NM Prep	
820-2183-6	B3	Total/NA	Solid	8015NM Prep	
820-2183-7	B4	Total/NA	Solid	8015NM Prep	
820-2183-8	B5	Total/NA	Solid	8015NM Prep	
820-2183-9	B6	Total/NA	Solid	8015NM Prep	
820-2183-10	C2	Total/NA	Solid	8015NM Prep	
820-2183-11	C3	Total/NA	Solid	8015NM Prep	
820-2183-12	C4	Total/NA	Solid	8015NM Prep	
820-2183-13	C5	Total/NA	Solid	8015NM Prep	
820-2183-14	C6	Total/NA	Solid	8015NM Prep	
820-2183-15	D2	Total/NA	Solid	8015NM Prep	
820-2183-16	D3	Total/NA	Solid	8015NM Prep	
820-2183-17	D4	Total/NA	Solid	8015NM Prep	
820-2183-18	D5	Total/NA	Solid	8015NM Prep	
820-2183-19	D6	Total/NA	Solid	8015NM Prep	
820-2183-20	E2	Total/NA	Solid	8015NM Prep	
MB 860-26260/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-26260/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

GC Semi VOA (Continued)

Prep Batch: 26260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 860-26260/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-2183-1 MS	A3	Total/NA	Solid	8015NM Prep	
820-2183-1 MSD	A3	Total/NA	Solid	8015NM Prep	

Prep Batch: 26266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-21	E3	Total/NA	Solid	8015NM Prep	
820-2183-22	E4	Total/NA	Solid	8015NM Prep	
820-2183-23	E5	Total/NA	Solid	8015NM Prep	
820-2183-24	F3	Total/NA	Solid	8015NM Prep	
820-2183-25	F4	Total/NA	Solid	8015NM Prep	
820-2183-26	F5	Total/NA	Solid	8015NM Prep	
820-2183-27	G4	Total/NA	Solid	8015NM Prep	
820-2183-28	G5	Total/NA	Solid	8015NM Prep	
820-2183-29	G6	Total/NA	Solid	8015NM Prep	
820-2183-30	H5	Total/NA	Solid	8015NM Prep	
820-2183-31	H6	Total/NA	Solid	8015NM Prep	
820-2183-32	I5	Total/NA	Solid	8015NM Prep	
820-2183-33	I6	Total/NA	Solid	8015NM Prep	
MB 860-26266/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-26266/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-26266/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-2183-22 MS	E4	Total/NA	Solid	8015NM Prep	
820-2183-22 MSD	E4	Total/NA	Solid	8015NM Prep	

HPLC/IC

Analysis Batch: 26129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	300.0	26307
820-2183-2	A4	Total/NA	Solid	300.0	26307
820-2183-3	A5	Total/NA	Solid	300.0	26307
820-2183-4	A6	Total/NA	Solid	300.0	26307
820-2183-5	B2	Total/NA	Solid	300.0	26307
820-2183-6	B3	Total/NA	Solid	300.0	26307
820-2183-7	B4	Total/NA	Solid	300.0	26307
820-2183-8	B5	Total/NA	Solid	300.0	26307
820-2183-9	B6	Total/NA	Solid	300.0	26307
820-2183-10	C2	Total/NA	Solid	300.0	26307
820-2183-11	C3	Total/NA	Solid	300.0	26307
820-2183-12	C4	Total/NA	Solid	300.0	26307
820-2183-13	C5	Total/NA	Solid	300.0	26307
820-2183-14	C6	Total/NA	Solid	300.0	26307
820-2183-15	D2	Total/NA	Solid	300.0	26307
820-2183-16	D3	Total/NA	Solid	300.0	26307
820-2183-18	D5	Total/NA	Solid	300.0	26307
820-2183-32	I5	Total/NA	Solid	300.0	26307
820-2183-33	I6	Total/NA	Solid	300.0	26307
MB 860-26307/28-A	Method Blank	Total/NA	Solid	300.0	26307
LCS 860-26307/29-A	Lab Control Sample	Total/NA	Solid	300.0	26307
LCSD 860-26307/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	26307

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

HPLC/IC

Prep Batch: 26307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-1	A3	Total/NA	Solid	300_Prep	
820-2183-2	A4	Total/NA	Solid	300_Prep	
820-2183-3	A5	Total/NA	Solid	300_Prep	
820-2183-4	A6	Total/NA	Solid	300_Prep	
820-2183-5	B2	Total/NA	Solid	300_Prep	
820-2183-6	B3	Total/NA	Solid	300_Prep	
820-2183-7	B4	Total/NA	Solid	300_Prep	
820-2183-8	B5	Total/NA	Solid	300_Prep	
820-2183-9	B6	Total/NA	Solid	300_Prep	
820-2183-10	C2	Total/NA	Solid	300_Prep	
820-2183-11	C3	Total/NA	Solid	300_Prep	
820-2183-12	C4	Total/NA	Solid	300_Prep	
820-2183-13	C5	Total/NA	Solid	300_Prep	
820-2183-14	C6	Total/NA	Solid	300_Prep	
820-2183-15	D2	Total/NA	Solid	300_Prep	
820-2183-16	D3	Total/NA	Solid	300_Prep	
820-2183-17	D4	Total/NA	Solid	300_Prep	
820-2183-18	D5	Total/NA	Solid	300_Prep	
820-2183-19	D6	Total/NA	Solid	300_Prep	
820-2183-20	E2	Total/NA	Solid	300_Prep	
820-2183-21	E3	Total/NA	Solid	300_Prep	
820-2183-22	E4	Total/NA	Solid	300_Prep	
820-2183-23	E5	Total/NA	Solid	300_Prep	
820-2183-24	F3	Total/NA	Solid	300_Prep	
820-2183-25	F4	Total/NA	Solid	300_Prep	
820-2183-26	F5	Total/NA	Solid	300_Prep	
820-2183-27	G4	Total/NA	Solid	300_Prep	
820-2183-28	G5	Total/NA	Solid	300_Prep	
820-2183-29	G6	Total/NA	Solid	300_Prep	
820-2183-30	H5	Total/NA	Solid	300_Prep	
820-2183-31	H6	Total/NA	Solid	300_Prep	
820-2183-32	I5	Total/NA	Solid	300_Prep	
820-2183-33	I6	Total/NA	Solid	300_Prep	
MB 860-26307/28-A	Method Blank	Total/NA	Solid	300_Prep	
MB 860-26307/56-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-26307/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCS 860-26307/57-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-26307/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
LCSD 860-26307/58-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
820-2183-17 MS	D4	Total/NA	Solid	300_Prep	
820-2183-17 MSD	D4	Total/NA	Solid	300_Prep	
820-2183-31 MS	H6	Total/NA	Solid	300_Prep	
820-2183-31 MSD	H6	Total/NA	Solid	300_Prep	

Analysis Batch: 26383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-17	D4	Total/NA	Solid	300.0	26307
820-2183-19	D6	Total/NA	Solid	300.0	26307
820-2183-20	E2	Total/NA	Solid	300.0	26307
820-2183-21	E3	Total/NA	Solid	300.0	26307
820-2183-22	E4	Total/NA	Solid	300.0	26307

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

HPLC/IC (Continued)

Analysis Batch: 26383 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-23	E5	Total/NA	Solid	300.0	26307
820-2183-24	F3	Total/NA	Solid	300.0	26307
820-2183-25	F4	Total/NA	Solid	300.0	26307
820-2183-26	F5	Total/NA	Solid	300.0	26307
820-2183-27	G4	Total/NA	Solid	300.0	26307
820-2183-28	G5	Total/NA	Solid	300.0	26307
820-2183-29	G6	Total/NA	Solid	300.0	26307
820-2183-30	H5	Total/NA	Solid	300.0	26307
820-2183-31	H6	Total/NA	Solid	300.0	26307
MB 860-26307/56-A	Method Blank	Total/NA	Solid	300.0	26307
LCS 860-26307/57-A	Lab Control Sample	Total/NA	Solid	300.0	26307
LCSD 860-26307/58-A	Lab Control Sample Dup	Total/NA	Solid	300.0	26307
820-2183-17 MS	D4	Total/NA	Solid	300.0	26307
820-2183-17 MSD	D4	Total/NA	Solid	300.0	26307
820-2183-31 MS	H6	Total/NA	Solid	300.0	26307
820-2183-31 MSD	H6	Total/NA	Solid	300.0	26307

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A3

Lab Sample ID: 820-2183-1

Date Collected: 10/05/21 09:00

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25970	10/11/21 18:31	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 01:19	T1S	XEN STF
Total/NA	Prep	300_Prep			5.08 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 05:50	A1S	XEN STF

Client Sample ID: A4

Lab Sample ID: 820-2183-2

Date Collected: 10/05/21 09:05

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25970	10/11/21 18:52	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 02:13	T1S	XEN STF
Total/NA	Prep	300_Prep			5.07 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 06:02	A1S	XEN STF

Client Sample ID: A5

Lab Sample ID: 820-2183-3

Date Collected: 10/05/21 09:10

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25970	10/11/21 19:12	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 02:31	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		10			26129	10/13/21 06:46	A1S	XEN STF

Client Sample ID: A6

Lab Sample ID: 820-2183-4

Date Collected: 10/05/21 09:15

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25970	10/11/21 19:32	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A6

Lab Sample ID: 820-2183-4

Date Collected: 10/05/21 09:15

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 02:48	T1S	XEN STF
Total/NA	Prep	300_Prep			5.09 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 06:57	A1S	XEN STF

Client Sample ID: B2

Lab Sample ID: 820-2183-5

Date Collected: 10/05/21 09:20

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25970	10/11/21 19:53	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 03:06	T1S	XEN STF
Total/NA	Prep	300_Prep			4.95 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 07:08	A1S	XEN STF

Client Sample ID: B3

Lab Sample ID: 820-2183-6

Date Collected: 10/05/21 09:25

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26126	10/12/21 15:02	NA	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 03:24	T1S	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 07:19	A1S	XEN STF

Client Sample ID: B4

Lab Sample ID: 820-2183-7

Date Collected: 10/05/21 09:30

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 17:37	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 03:42	T1S	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B4

Lab Sample ID: 820-2183-7

Date Collected: 10/05/21 09:30

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			4.98 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 07:30	A1S	XEN STF

Client Sample ID: B5

Lab Sample ID: 820-2183-8

Date Collected: 10/05/21 09:35

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 17:57	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 04:18	T1S	XEN STF
Total/NA	Prep	300_Prep			4.93 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		10			26129	10/13/21 08:15	A1S	XEN STF

Client Sample ID: B6

Lab Sample ID: 820-2183-9

Date Collected: 10/05/21 09:40

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 18:17	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 04:36	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 08:48	A1S	XEN STF

Client Sample ID: C2

Lab Sample ID: 820-2183-10

Date Collected: 10/05/21 09:45

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 18:37	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 04:54	T1S	XEN STF
Total/NA	Prep	300_Prep			5.08 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 08:59	A1S	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C3

Lab Sample ID: 820-2183-11

Date Collected: 10/05/21 09:50

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	26055	10/11/21 14:52	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 18:57	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 05:12	T1S	XEN STF
Total/NA	Prep	300_Prep			5.07 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 09:10	A1S	XEN STF

Client Sample ID: C4

Lab Sample ID: 820-2183-12

Date Collected: 10/05/21 09:55

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	26055	10/11/21 14:54	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 19:17	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 05:30	T1S	XEN STF
Total/NA	Prep	300_Prep			4.94 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 09:22	A1S	XEN STF

Client Sample ID: C5

Lab Sample ID: 820-2183-13

Date Collected: 10/05/21 10:00

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26055	10/11/21 14:54	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 19:38	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 05:48	T1S	XEN STF
Total/NA	Prep	300_Prep			4.95 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 09:33	A1S	XEN STF

Client Sample ID: C6

Lab Sample ID: 820-2183-14

Date Collected: 10/05/21 10:05

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	26055	10/11/21 14:54	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 19:58	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: C6

Lab Sample ID: 820-2183-14

Date Collected: 10/05/21 10:05

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26106	10/11/21 19:30	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 06:06	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 09:44	A1S	XEN STF

Client Sample ID: D2

Lab Sample ID: 820-2183-15

Date Collected: 10/05/21 10:10

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	26055	10/11/21 14:54	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	25983	10/11/21 20:18	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 06:24	T1S	XEN STF
Total/NA	Prep	300_Prep			4.92 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 09:55	A1S	XEN STF

Client Sample ID: D3

Lab Sample ID: 820-2183-16

Date Collected: 10/05/21 10:15

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 14:57	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 06:42	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 10:06	A1S	XEN STF

Client Sample ID: D4

Lab Sample ID: 820-2183-17

Date Collected: 10/05/21 10:20

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 20:19	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 07:00	T1S	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: D4

Lab Sample ID: 820-2183-17

Date Collected: 10/05/21 10:20

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			4.92 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 16:13	WP	XEN STF

Client Sample ID: D5

Lab Sample ID: 820-2183-18

Date Collected: 10/05/21 10:25

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 20:39	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 07:53	T1S	XEN STF
Total/NA	Prep	300_Prep			5.08 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 10:17	A1S	XEN STF

Client Sample ID: D6

Lab Sample ID: 820-2183-19

Date Collected: 10/05/21 10:30

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 21:00	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 08:11	T1S	XEN STF
Total/NA	Prep	300_Prep			4.93 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		10			26383	10/13/21 16:57	WP	XEN STF

Client Sample ID: E2

Lab Sample ID: 820-2183-20

Date Collected: 10/05/21 10:35

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 21:20	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26567	10/14/21 11:08	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26260	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/13/21 08:29	T1S	XEN STF
Total/NA	Prep	300_Prep			4.95 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 17:08	WP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E3

Lab Sample ID: 820-2183-21

Date Collected: 10/05/21 10:40

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26169	10/12/21 21:40	A1S	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 19:23	T1S	XEN STF
Total/NA	Prep	300_Prep			4.92 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 17:19	WP	XEN STF

Client Sample ID: E4

Lab Sample ID: 820-2183-22

Date Collected: 10/05/21 10:45

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26154	10/12/21 09:48	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 17:35	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 19:41	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 17:53	WP	XEN STF

Client Sample ID: E5

Lab Sample ID: 820-2183-23

Date Collected: 10/05/21 10:50

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	26304	10/12/21 18:57	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26315	10/13/21 11:47	NA	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 20:35	T1S	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:04	WP	XEN STF

Client Sample ID: F3

Lab Sample ID: 820-2183-24

Date Collected: 10/05/21 10:55

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	26304	10/12/21 18:57	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 13:54	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: F3

Lab Sample ID: 820-2183-24

Date Collected: 10/05/21 10:55

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 20:53	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:15	WP	XEN STF

Client Sample ID: F4

Lab Sample ID: 820-2183-25

Date Collected: 10/05/21 11:00

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26162	10/13/21 11:53	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26534	10/14/21 09:27	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 21:10	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:26	WP	XEN STF

Client Sample ID: F5

Lab Sample ID: 820-2183-26

Date Collected: 10/05/21 11:05

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 17:55	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 21:46	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:37	WP	XEN STF

Client Sample ID: G4

Lab Sample ID: 820-2183-27

Date Collected: 10/05/21 11:10

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 18:15	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 22:04	T1S	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: G4

Lab Sample ID: 820-2183-27

Date Collected: 10/05/21 11:10

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			5.02 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:48	WP	XEN STF

Client Sample ID: G5

Lab Sample ID: 820-2183-28

Date Collected: 10/05/21 11:15

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 18:35	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 22:22	T1S	XEN STF
Total/NA	Prep	300_Prep			5.08 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 18:59	WP	XEN STF

Client Sample ID: G6

Lab Sample ID: 820-2183-29

Date Collected: 10/05/21 11:20

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 18:56	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.1 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 22:40	T1S	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 19:10	WP	XEN STF

Client Sample ID: H5

Lab Sample ID: 820-2183-30

Date Collected: 10/05/21 11:25

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 19:16	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26568	10/14/21 11:18	EM	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 22:57	T1S	XEN STF
Total/NA	Prep	300_Prep			5.09 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 19:44	WP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: H6

Lab Sample ID: 820-2183-31

Date Collected: 10/05/21 11:30

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	26523	10/14/21 08:52	CM1	XEN STF
Total/NA	Analysis	8260C		25	5 mL	5 mL	26503	10/14/21 14:07	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26534	10/14/21 09:27	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 23:15	T1S	XEN STF
Total/NA	Prep	300_Prep			5.07 g	50 mL	26307	10/12/21 20:51	ANP	XEN STF
Total/NA	Analysis	300.0		1			26383	10/13/21 19:55	WP	XEN STF

Client Sample ID: I5

Lab Sample ID: 820-2183-32

Date Collected: 10/05/21 11:35

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	26523	10/14/21 08:52	CM1	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26500	10/14/21 12:33	NA	XEN STF
Total/NA	Analysis	Total BTEX		1			26534	10/14/21 09:27	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 23:33	T1S	XEN STF
Total/NA	Prep	300_Prep			4.91 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 05:28	A1S	XEN STF

Client Sample ID: I6

Lab Sample ID: 820-2183-33

Date Collected: 10/05/21 11:40

Matrix: Solid

Date Received: 10/08/21 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	26105	10/11/21 19:17	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	26360	10/13/21 20:16	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			26534	10/14/21 09:27	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			26106	10/15/21 18:44	DD	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	26266	10/12/21 15:00	SAR	XEN STF
Total/NA	Analysis	8015B NM		1			26165	10/12/21 23:50	T1S	XEN STF
Total/NA	Prep	300_Prep			4.90 g	50 mL	26307	10/12/21 20:22	ANP	XEN STF
Total/NA	Analysis	300.0		1			26129	10/13/21 05:39	A1S	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Xenco, Lubbock

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
Total BTEX		Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
Total BTEX	Total BTEX Calculation	TAL SOP	XEN STF
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN STF
8015NM Prep	Microextraction	SW846	XEN STF

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4147 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-2183-1	A3	Solid	10/05/21 09:00	10/08/21 09:36	0.5' - 1'
820-2183-2	A4	Solid	10/05/21 09:05	10/08/21 09:36	0.5' - 1'
820-2183-3	A5	Solid	10/05/21 09:10	10/08/21 09:36	0.5' - 1'
820-2183-4	A6	Solid	10/05/21 09:15	10/08/21 09:36	0.5' - 1'
820-2183-5	B2	Solid	10/05/21 09:20	10/08/21 09:36	0.5' - 1'
820-2183-6	B3	Solid	10/05/21 09:25	10/08/21 09:36	0.5' - 1'
820-2183-7	B4	Solid	10/05/21 09:30	10/08/21 09:36	0.5' - 1'
820-2183-8	B5	Solid	10/05/21 09:35	10/08/21 09:36	0.5' - 1'
820-2183-9	B6	Solid	10/05/21 09:40	10/08/21 09:36	0.5' - 1'
820-2183-10	C2	Solid	10/05/21 09:45	10/08/21 09:36	0.5' - 1'
820-2183-11	C3	Solid	10/05/21 09:50	10/08/21 09:36	0.5' - 1'
820-2183-12	C4	Solid	10/05/21 09:55	10/08/21 09:36	0.5' - 1'
820-2183-13	C5	Solid	10/05/21 10:00	10/08/21 09:36	0.5' - 1'
820-2183-14	C6	Solid	10/05/21 10:05	10/08/21 09:36	0.5' - 1'
820-2183-15	D2	Solid	10/05/21 10:10	10/08/21 09:36	0.5' - 1'
820-2183-16	D3	Solid	10/05/21 10:15	10/08/21 09:36	0.5' - 1'
820-2183-17	D4	Solid	10/05/21 10:20	10/08/21 09:36	0.5' - 1'
820-2183-18	D5	Solid	10/05/21 10:25	10/08/21 09:36	0.5' - 1'
820-2183-19	D6	Solid	10/05/21 10:30	10/08/21 09:36	0.5' - 1'
820-2183-20	E2	Solid	10/05/21 10:35	10/08/21 09:36	0.5' - 1'
820-2183-21	E3	Solid	10/05/21 10:40	10/08/21 09:36	0.5' - 1'
820-2183-22	E4	Solid	10/05/21 10:45	10/08/21 09:36	0.5' - 1'
820-2183-23	E5	Solid	10/05/21 10:50	10/08/21 09:36	0.5' - 1'
820-2183-24	F3	Solid	10/05/21 10:55	10/08/21 09:36	0.5' - 1'
820-2183-25	F4	Solid	10/05/21 11:00	10/08/21 09:36	0.5' - 1'
820-2183-26	F5	Solid	10/05/21 11:05	10/08/21 09:36	0.5' - 1'
820-2183-27	G4	Solid	10/05/21 11:10	10/08/21 09:36	0.5' - 1'
820-2183-28	G5	Solid	10/05/21 11:15	10/08/21 09:36	0.5' - 1'
820-2183-29	G6	Solid	10/05/21 11:20	10/08/21 09:36	0.5' - 1'
820-2183-30	H5	Solid	10/05/21 11:25	10/08/21 09:36	0.5' - 1'
820-2183-31	H6	Solid	10/05/21 11:30	10/08/21 09:36	0.5' - 1'
820-2183-32	I5	Solid	10/05/21 11:35	10/08/21 09:36	0.5' - 1'
820-2183-33	I6	Solid	10/05/21 11:40	10/08/21 09:36	0.5' - 1'

Loc: 820
2183

CHAIN OF CUSTODY RECORD									
ANALYSIS REQUESTED						LAB USE ONLY DUE DATE: _____ TEMP OF COOLER WHEN RECEIVED (°C) _____			
Terracon Office Location: Lubbock Laboratory: Xenco Address: 6701 Aberdeen Lubbock, Texas 79424 Project Manager: J. Guesnier SRS #: J. Guesnier 806-544-9276 Sampler's Name: Aaron Adams Sampler's Signature: _____ Phone: _____						Page 1 of 2 Lab Sample ID: _____			
Project Number: AR217001 Project Name: State I #16 No. Type of Containers: 4 oz Glass, 250 ml Poly, 5035 kit									
Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	Analysis	Lab Sample ID
\$	10/5/2021	9:00	X	X	A3	0.5'	1'	Chloride (EPA Method 300)	
\$	10/5/2021	9:05	X	X	A4	0.5'	1'	TPH Extended 8015	
\$	10/5/2021	9:10	X	X	A5	0.5'	1'	BTEX (EPA Method 8260B)	
\$	10/5/2021	9:15	X	X	A6	0.5'	1'		
\$	10/5/2021	9:20	X	X	B2	0.5'	1'		
\$	10/5/2021	9:25	X	X	B3	0.5'	1'		
\$	10/5/2021	9:30	X	X	B4	0.5'	1'		
\$	10/5/2021	9:35	X	X	B5	0.5'	1'		
\$	10/5/2021	9:40	X	X	B6	0.5'	1'		
\$	10/5/2021	9:45	X	X	C2	0.5'	1'		
\$	10/5/2021	9:50	X	X	C3	0.5'	1'		
\$	10/5/2021	9:55	X	X	C4	0.5'	1'		
\$	10/5/2021	10:00	X	X	C5	0.5'	1'		
\$	10/5/2021	10:05	X	X	C6	0.5'	1'		
\$	10/5/2021	10:10	X	X	D2	0.5'	1'		
\$	10/5/2021	10:15	X	X	D3	0.5'	1'		
\$	10/5/2021	10:20	X	X	D4	0.5'	1'		
\$	10/5/2021	10:25	X	X	D5	0.5'	1'		
\$	10/5/2021	10:30	X	X	D6	0.5'	1'		
\$	10/5/2021	10:35	X	X	E2	0.5'	1'		
\$	10/5/2021	10:40	X	X	E3	0.5'	1'		
\$	10/5/2021	10:45	X	X	E4	0.5'	1'		
\$	10/5/2021	10:50	X	X	E5	0.5'	1'		
TURNAROUND TIME: 10:50 (Requisitioned by Signature) _____ (Requisitioned by Signature) _____ (Requisitioned by Signature) _____ (Requisitioned by Signature) _____									
TRRP Laboratory Review Checklist ☐ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush Received by Signature: _____ Date: 10-8-21 Time: 9:36 Received by Signature: _____ Date: _____ Time: _____ Received by Signature: _____ Date: _____ Time: _____ Received by Signature: _____ Date: _____ Time: _____									
NOTES: Client: IR-4 -0.04 -14.04 -14/-13.96 C e-mail results to: brett.dennis@terracon.com erin.loyd@terracon.com jguesnier@terracon.com 10/8/21									
Mark: WW Waterway VQA - 40 ml vial Container: W - Water AQS - Amber Glass 11 200ml + Glass vial mouth S - Soil L - Liquid A - Air Bag C - Charcoal bag S - Skidder PPD - Plastic or other									
Lubbock Office ■ 5827 50th Street, Suite 1 ■ Lubbock, Texas 79424 ■ 806-300-0140 Responsive ■ Resourceful ■ Reliable									

[illegible]

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)		Lab PM: Kramer Jessica		Carrier Tracking No(s):		SOC No: 820-2257 1	
Client Contact		Phone:		State of Origin: Texas		Page: Page 1 of 4	
Shipping/Receiving		E-Mail: jessica.kramer@eurofinset.com		Job #:		820-2183-1	
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Preservation Codes:		A HCL M Hexane B NaOH N None C Zn Acetate O AsNaO2 D Nitric Acid P Na2O4S E NaHSO4 Q Na2SO3 F MeOH R Na2SO3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecylhydrate I Ice U Acetone J Di Water V MCAA K EDTA W pH 4.5 L EDA Z other (specify) Other	
Due Date Requested: 10/14/2021		Analysis Requested		Total BTEX		Special Instructions/Note:	
TAT Requested (days):		8015MOD_NM/8015NM_5_Prep (MOD) Full TPH		300_ORGFM_28D/300_Prep Chloride			
City: Stafford		Matrix (Wet, Solid, Smelt, Dried, Oil, etc.)		8015MOD_Calc			
State, Zip: TX, 77477		Sample Type (C-Comp, G-grab) (BIO-Tissue, Aseptic)		8280C/5035FP_Calc (MOD) BTEX			
Phone: 281-240-4200(Tel)		Sample Time		8015MOD_Calc			
Email:		Sample Date		300_ORGFM_28D/300_Prep Chloride			
Project Name: State I #16		Sample Date		Total BTEX			
Site:		Sample Date		Total BTEX			
SSOW#:		Sample Date		Total BTEX			
Sample Identification		Client ID (Lab ID)		Sample Date		Sample Time	
A3 (820-2183-1)		Central		10/5/21		09:00	
A4 (820-2183-2)		Central		10/5/21		09:05	
A5 (820-2183-3)		Central		10/5/21		09:10	
A6 (820-2183-4)		Central		10/5/21		09:15	
B2 (820-2183-5)		Central		10/5/21		09:20	
B3 (820-2183-6)		Central		10/5/21		09:25	
B4 (820-2183-7)		Central		10/5/21		09:30	
B5 (820-2183-8)		Central		10/5/21		09:35	
B6 (820-2183-9)		Central		10/5/21		09:40	
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.							
Possible Hazard Identification							
Unconfirmed							
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2							
Empty Kit Relinquished by: Date: Time: Method of Shipment:							
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:							
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:							
Relinquished by: Date/Time: Company: Received by: Date/Time: Company:							
Custody Seals Intact: Custody Seal No. Temp: 2.9 IR ID:HOU-188 C/F: -0.9 Corrected Temp: 2.9							

Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler		Lab Pkt: Kramer Jessica		Carrier Tracking No(s): 820-2257 2		COC No: 820-2257 2	
Client Contact		Phone:		E-Mail: jessica.kramer@eurofinset.com		State of Origin: Texas		Page: Page 2 of 4	
Shipping/Receiving		Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #:		Preservation Codes: 820-2183-1	
Address: 4147 Greenbriar Dr		Due Date Requested: 10/14/2021		Analysis Requested		Total BTEX		Special Instructions/Note:	
City: Stafford		TAT Requested (days):		8015MOD, NM/8015NM, S Prep (MOD) Full TPH		8015MOD, Calc		A HCL M Hexane	
State, Zip: TX, 77477		PO #:		300_ORGFM_28D/300_Prep Chloride		8260C/5035FP_Calc (MOD) BTEX		B NaOH N None	
Phone: 281-240-4200(Tel)		WO #:		Matrix (Weigher, Swab, Overstabil, or Other)		Solid		C Zn Acetate O AsNaO2	
Email: 281-240-4200(Tel)		Project #:		Sample Type (C=Comp, G=Grab)		Solid		D Nitric Acid P Na2O4S	
Project Name: State I #16		SSOW#:		Sample Time		08:45 Central		E NaHSO4 Q Na2SO3	
Site:		Sample Date		Sample Time		09:50 Central		F MeOH R Na2SO3	
C2 (820-2183-10)		10/5/21		08:45 Central		09:50 Central		G Amchlor S H2SO4	
C3 (820-2183-11)		10/5/21		09:50 Central		10:00 Central		H Ascorbic Acid T TSP Dodecaldehyde	
C4 (820-2183-12)		10/5/21		10:00 Central		10:05 Central		I Ice U Acetone	
C5 (820-2183-13)		10/5/21		10:05 Central		10:10 Central		J DI Water V MCAA	
C6 (820-2183-14)		10/5/21		10:10 Central		10:15 Central		K EDTA W pH 4-5	
D2 (820-2183-15)		10/5/21		10:15 Central		10:20 Central		L EDA Z other (specify)	
D3 (820-2183-16)		10/5/21		10:20 Central		10:25 Central		Other	
D4 (820-2183-17)		10/5/21		10:25 Central					
D5 (820-2183-18)		10/5/21							

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/dest/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months	
Deliverable Requested: I II III IV Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>Whitney Ruggles</i>		Received by: <i>FFx</i>	
Relinquished by: <i>FFx</i>		Received by: <i>Pulapala</i>	
Relinquished by:		Received by:	
Custody Seals Intact: ☐ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks: Temp 2.0 IR ID-HOU-188 C/F +0.9 Corrected Temp 2.9	
Custody Seal No.		Ver 06/08/2021	

Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler	Lab P/N Kramer Jessica		Carrier Tracking No(s)	COC No: 820-2257.3				
Client Contact		Phone:	E-Mail: jessica.kramer@eurofinset.com		State of Origin: Texas	Page: Page 3 of 4				
Shipping/Receiving		Accreditations Required (See note): NELAP Texas								
Company: Eurofins Xenco		Job #: 820-2183-1								
Address: 4147 Greenbriar Dr		Preservation Codes: 820-2183-1								
City: Stafford	Analysis Requested <table><tr><td>8015MOD_NM/8015NM_S_Prep (MOD) Full TPH</td><td>8015MOD_Calc</td><td>300_ORGFM_28D/300_Prep Chloride</td><td>8260C/8039FP_Calc (MOD) BTEX</td><td>Total BTEX</td></tr></table>					8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	8260C/8039FP_Calc (MOD) BTEX	Total BTEX
8015MOD_NM/8015NM_S_Prep (MOD) Full TPH						8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	8260C/8039FP_Calc (MOD) BTEX	Total BTEX	
State, Zip: TX, 77477										
Phone: 281-240-4200(Tel)										
WO #:										
Project Name: State I #16										
Site:	SSOW#:									
Due Date Requested: 10/14/2021		TAT Requested (days):								
PO #:		Matrix (Water, Soil, On-site, Off-site, Air)								
WO #:		Sample Type (C=Comp, G=grab)								
Project #: 82000340		Sample Time								
Site:		Sample Date								
Sample Identification		Client ID (Lab ID)								
D6 (820-2183-19)		10/5/21 10:30 Central								
E2 (820-2183-20)		10/5/21 10:35 Central								
E3 (820-2183-21)		10/5/21 10:40 Central								
E4 (820-2183-22)		10/5/21 10:45 Central								
E5 (820-2183-23)		10/5/21 10:50 Central								
F3 (820-2183-24)		10/5/21 10:55 Central								
F4 (820-2183-25)		10/5/21 11:00 Central								
F5 (820-2183-26)		10/5/21 11:05 Central								
G4 (820-2183-27)		10/5/21 11:10 Central								
Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.										
Possible Hazard Identification										
Unconfirmed										
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2										
Empty Kit Relinquished by										
Relinquished by: Ashley Ruggler										
Relinquished by: FEx										
Relinquished by:										
Custody Seals Intact: Custody Seal No.										
Δ Yes Δ No										
Received by: FEx										
Received by: PAPA										
Received by:										
Date/Time: 10/18/21 17:00										
Date/Time:										
Date/Time:										
Temp: 2.0 IR ID-HOU-188										
C/F +0.9										
Corrected Temp: 24										
06/08/2021										

Client Information (Sub Contract Lab)		Lab PM: Kramer Jessica	Carrier Tracking No(s): 820-2257.4
Client Contact Shipping/Receiving		E-Mail: jessica.kramer@eurofinsnet.com	State of Origin: Texas
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas	Job #: 820-2183-1
Address: 14147 Greenbriar Dr City Stafford State, Zip: TX, 77477		Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Amchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other	
Phone: 281-240-4200(Tel)		M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2SO3 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Z other (specify)	
Email: Project #: 82000340 Site:			
Due Date Requested: 10/14/2021		Analysis Requested	
TAT Requested (days):			
PO #:			
WO #:			
Project #:			
82000340			
SSOW#:			
Sample Identification - Client ID (Lab ID)		Special Instructions/Note:	
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			
H5 (820-2183-30)			
H6 (820-2183-31)			
I5 (820-2183-32)			
I6 (820-2183-33)			
G5 (820-2183-28)			
G6 (820-2183-29)			

Phone: 806-794-1296

Chain of Custody Record



**Environment Testing
America**

Client Information (Sub Contract Lab)				Lab PM: Bulles, John E-Mail: John.bulles@eurofins.com		Carrier Tracking No(s): 820-2258.1 State of Origin: Texas		Page: Page 1 of 1		COC No: 820-2258.1	
Client Contact: Shipping/Receiving Company: Eurofins Xenco				Phone: 281-240-4200		Accredited Required (See note): NELAP Texas		Job #: 820-2186-1		Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Ascorbic Acid H TSP Dodecylhydrate I Ice J DI Water K EDTA L EDA Other	
Address: 14147 Greenbriar Dr City: Stafford State, Zip: TX, 77477				PO #: WO #: Project #: 82000170 SSOW#:		Due Date Requested: 10/15/2021 TAT Requested (days):		Analysis Requested			
Sample Identification - Client ID (Lab ID)				Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Residue, Swill, On-site, BT-Tissue, Analyt)	
				Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Residue, Swill, On-site, BT-Tissue, Analyt)	
Dynamic Foods (820-2186-1)				10/8/21		09:00 Central		C		Water	
Dynamic Foods (820-2186-2)				10/7/21		16:00 Central		G		Water	
Dynamic Foods (820-2186-3)				10/7/21		11:00 Central		G		Water	
Dynamic Foods (820-2186-4)				10/7/21		13:00 Central		G		Water	
Dynamic Foods (820-2186-5)				10/7/21		15:00 Central		G		Water	
Dynamic Foods (820-2186-6)				10/7/21		13:00 Central		G		Water	
Dynamic Foods (820-2186-7)				10/8/21		09:00 Central		G		Water	
Special Instructions/Note:				HDPE 1L		Clear Glass 1L w/ HD		Clear Glass 1L w/ HD		Clear Glass 1L w/ HD	
HDPE 250ml w/ HD				HDPE 250ml w/ HD		HDPE 250ml w/ HD		HDPE 250ml w/ HD		HDPE 250ml w/ HD	
HDPE 250ml w/ HD				HDPE 250ml w/ HD		HDPE 250ml w/ HD		HDPE 250ml w/ HD		HDPE 250ml w/ HD	

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV Other (specify)

Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	

Custody Seals Intact: A Yes A No

Custody Seal No. IR ID:HOU-188

Temp: 2.0 °C

C/F: +0.9

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2183-1

SDG Number: AR217001

Login Number: 2183

List Number: 1

Creator: Ruggles, Ashley

List Source: Eurofins Xenco, Lubbock

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

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2183-1

SDG Number: AR217001

Login Number: 2183

List Number: 2

Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford

List Creation: 10/09/21 12:15 PM

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock, TX 79424
Tel: (806)794-1296

Laboratory Job ID: 820-2361-1

Client Project/Site: State I 16 AR217001

For:

Terracon Consulting Eng & Scientists
5827 50th St
Suite 1
Lubbock, Texas 79424

Attn: Erin Lloyd

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
11/1/2021 5:37:53 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Laboratory Job ID: 820-2361-1

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments. QC data that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result. Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Coliform MCLs

· Based on the EPA primary drinking water standard MCL for total coliforms, a water supply is considered bacteriologically "SAFE" if no coliform bacteria are detected. To be considered "SAFE" your report should indicate "<1 cfu/100mL" or "NEG" for the coliform test. If you report indicates a positive result "POS" or a value greater than or equal to one, then your supply is "UNSAFE FOR DRINKING" contact your local health department.

Warranties, Terms, and Conditions

· Analyses for Field Parameters are performed by EQC field staff. Locations and certifications are identified on the Chain of Custody as follows:

ERF = field staff performs tests under NJ State certification #02015

VL = field staff performs tests under NJ State certification #06005

WG = field staff performs tests under NJ State certification #PA001

H = field staff performs tests under NJ NELAP certification #PA093, PA NELAP certification # 46-

05499

· Test results meet all TNI or other applicable regulatory agency requirements, including holding times and preservation, unless otherwise indicated.

· The report shall not be reproduced, except in full, without the written consent of the laboratory

· All samples are collected as "grab" samples unless otherwise identified.

· Reported results related only to the samples as tested. EQC is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· EQC is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure compliance.

· Eurofins' online data portal "TotalAccess" will provide you with real-time access to collection dates and testing results. Please contact Client Services for further information.

· The following personnel or their deputies have approved the results of the tests performed by EQC: Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).



Jessica Kramer

Project Manager

11/1/2021 5:37:53 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Laboratory Job ID: 820-2361-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

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Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Job ID: 820-2361-1**Laboratory: Eurofins Xenco, Lubbock****Narrative****Job Narrative
820-2361-1****Receipt**

The samples were received on 10/27/2021 8:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -8.6°C

GC/MS VOA

Method 8260C: Surrogate recovery for 4-Bromofluorobenzene (Surrogate) for the following samples were outside control limits: (MB 860-28433/7), (MB 860-28433/8), (860-14385-A-6-A) and (860-14385-A-6-A MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. This surrogate does not correspond with any target analytes.

Method 8260C: The matrix spike (MS) recoveries for preparation batch 860-28333 and analytical batch 860-28453 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260C: Due to the high concentration of Ethylbenzene and Xylenes, the matrix spike (MS) for preparation batch 860-28307 and analytical batch 860-28433 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

Method 8260C: Elevated reporting limits are provided for the following samples due to insufficient sample provided for analysis: (870-3600-B-1-A) and (870-3600-B-1-A MS). Both DI water vials were overweight (>10g), so the MeOH vial was used for analysis.

Method 8260C: Internal standard (ISTD) response for 1,4-Dichlorobenzene-d4 for the following sample was outside acceptance criteria: D-6 (2.5-3) (820-2361-14). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-4 (1.5-2)

Lab Sample ID: 820-2361-1

Date Collected: 10/26/21 12:45

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 20:22	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:24	10/28/21 20:22	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 20:22	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 20:22	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 20:22	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		56 - 150	10/28/21 14:24	10/28/21 20:22	1
4-Bromofluorobenzene (Surr)	114		68 - 152	10/28/21 14:24	10/28/21 20:22	1
Dibromofluoromethane (Surr)	110		53 - 142	10/28/21 14:24	10/28/21 20:22	1
Toluene-d8 (Surr)	97		70 - 130	10/28/21 14:24	10/28/21 20:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 22:46	1
Over C10-C28	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 22:46	1
Over C28-C36	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		65 - 130	10/28/21 16:08	10/28/21 22:46	1
o-Terphenyl	92		65 - 130	10/28/21 16:08	10/28/21 22:46	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12300		100		mg/Kg		10/29/21 08:00	11/01/21 12:50	10

Client Sample ID: B-4 (2.5-3)

Lab Sample ID: 820-2361-2

Date Collected: 10/26/21 12:50

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:24	10/28/21 20:43	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/28/21 14:24	10/28/21 20:43	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:24	10/28/21 20:43	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 20:43	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:24	10/28/21 20:43	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150	10/28/21 14:24	10/28/21 20:43	1

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-4 (2.5-3)

Lab Sample ID: 820-2361-2

Date Collected: 10/26/21 12:50

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		68 - 152	10/28/21 14:24	10/28/21 20:43	1
Dibromofluoromethane (Surr)	105		53 - 142	10/28/21 14:24	10/28/21 20:43	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:24	10/28/21 20:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/28/21 23:24	1
Over C10-C28	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/28/21 23:24	1
Over C28-C36	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/28/21 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		65 - 130	10/28/21 16:08	10/28/21 23:24	1
o-Terphenyl	100		65 - 130	10/28/21 16:08	10/28/21 23:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12800		100		mg/Kg		10/29/21 08:00	11/01/21 13:22	10

Client Sample ID: B-4 (3.5-4)

Lab Sample ID: 820-2361-3

Date Collected: 10/26/21 12:55

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 21:03	1
Toluene	<0.00503	U	0.00503		mg/Kg		10/28/21 14:24	10/28/21 21:03	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 21:03	1
m-Xylene & p-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/21 14:24	10/28/21 21:03	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 21:03	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/28/21 14:24	10/28/21 21:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150	10/28/21 14:24	10/28/21 21:03	1
4-Bromofluorobenzene (Surr)	110		68 - 152	10/28/21 14:24	10/28/21 21:03	1
Dibromofluoromethane (Surr)	103		53 - 142	10/28/21 14:24	10/28/21 21:03	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:24	10/28/21 21:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/29/21 15:24	1

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-4 (3.5-4)

Lab Sample ID: 820-2361-3

Date Collected: 10/26/21 12:55

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 23:05	1
Over C10-C28	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 23:05	1
Over C28-C36	<49.9	U	49.9		mg/Kg		10/28/21 16:08	10/28/21 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		65 - 130	10/28/21 16:08	10/28/21 23:05	1
o-Terphenyl	92		65 - 130	10/28/21 16:08	10/28/21 23:05	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12800		100		mg/Kg		10/29/21 08:00	11/01/21 13:54	10

Client Sample ID: A-5 (1.5-2)

Lab Sample ID: 820-2361-4

Date Collected: 10/26/21 13:00

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 15:39	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/28/21 14:24	10/28/21 15:39	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 15:39	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 15:39	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 15:39	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 15:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		56 - 150	10/28/21 14:24	10/28/21 15:39	1
4-Bromofluorobenzene (Surr)	101		68 - 152	10/28/21 14:24	10/28/21 15:39	1
Dibromofluoromethane (Surr)	100		53 - 142	10/28/21 14:24	10/28/21 15:39	1
Toluene-d8 (Surr)	102		70 - 130	10/28/21 14:24	10/28/21 15:39	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	143		50.0		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	143		50.0		mg/Kg		10/28/21 16:08	10/29/21 10:24	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/29/21 10:24	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/29/21 10:24	1

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: A-5 (1.5-2)

Lab Sample ID: 820-2361-4

Date Collected: 10/26/21 13:00

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		65 - 130	10/28/21 16:08	10/29/21 10:24	1
o-Terphenyl	83		65 - 130	10/28/21 16:08	10/29/21 10:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18000		100		mg/Kg		10/29/21 08:00	11/01/21 14:04	10

Client Sample ID: A-5 (2.5-3)

Lab Sample ID: 820-2361-5

Date Collected: 10/26/21 13:05

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 16:01	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:24	10/28/21 16:01	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 16:01	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 16:01	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 16:01	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		56 - 150	10/28/21 14:24	10/28/21 16:01	1
4-Bromofluorobenzene (Surr)	102		68 - 152	10/28/21 14:24	10/28/21 16:01	1
Dibromofluoromethane (Surr)	105		53 - 142	10/28/21 14:24	10/28/21 16:01	1
Toluene-d8 (Surr)	102		70 - 130	10/28/21 14:24	10/28/21 16:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:42	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:42	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130	10/28/21 16:08	10/29/21 10:42	1
o-Terphenyl	113		65 - 130	10/28/21 16:08	10/29/21 10:42	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41700		100		mg/Kg		10/29/21 08:00	11/01/21 14:15	10

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: A-5 (3.5-4)

Lab Sample ID: 820-2361-6

Date Collected: 10/26/21 13:10

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:23	1
Toluene	<0.00505	U	0.00505		mg/Kg		10/28/21 14:24	10/28/21 16:23	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:23	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 16:23	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:23	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150	10/28/21 14:24	10/28/21 16:23	1
4-Bromofluorobenzene (Surr)	97		68 - 152	10/28/21 14:24	10/28/21 16:23	1
Dibromofluoromethane (Surr)	102		53 - 142	10/28/21 14:24	10/28/21 16:23	1
Toluene-d8 (Surr)	102		70 - 130	10/28/21 14:24	10/28/21 16:23	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:59	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:59	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130	10/28/21 16:08	10/29/21 10:59	1
o-Terphenyl	110		65 - 130	10/28/21 16:08	10/29/21 10:59	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		10.0		mg/Kg		10/29/21 08:00	10/29/21 20:37	1

Client Sample ID: B-5 (1.5-2)

Lab Sample ID: 820-2361-7

Date Collected: 10/26/21 13:15

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:45	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/28/21 14:24	10/28/21 16:45	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:45	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 16:45	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 16:45	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150	10/28/21 14:24	10/28/21 16:45	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-5 (1.5-2)

Lab Sample ID: 820-2361-7

Date Collected: 10/26/21 13:15

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		68 - 152	10/28/21 14:24	10/28/21 16:45	1
Dibromofluoromethane (Surr)	104		53 - 142	10/28/21 14:24	10/28/21 16:45	1
Toluene-d8 (Surr)	100		70 - 130	10/28/21 14:24	10/28/21 16:45	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/29/21 00:59	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/29/21 00:59	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/29/21 00:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		65 - 130	10/28/21 16:08	10/29/21 00:59	1
o-Terphenyl	104		65 - 130	10/28/21 16:08	10/29/21 00:59	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20700		100		mg/Kg		10/29/21 08:00	11/01/21 14:26	10

Client Sample ID: B-5 (2.5-3)

Lab Sample ID: 820-2361-8

Date Collected: 10/26/21 13:20

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	10/28/21 14:24	10/28/21 17:07	1
4-Bromofluorobenzene (Surr)	100		68 - 152	10/28/21 14:24	10/28/21 17:07	1
Dibromofluoromethane (Surr)	109		53 - 142	10/28/21 14:24	10/28/21 17:07	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:24	10/28/21 17:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00202	U	0.00202		mg/Kg			10/29/21 15:24	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-5 (2.5-3)

Lab Sample ID: 820-2361-8

Date Collected: 10/26/21 13:20

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/29/21 01:19	1
Over C10-C28	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/29/21 01:19	1
Over C28-C36	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/29/21 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	68		65 - 130	10/28/21 16:08	10/29/21 01:19	1
o-Terphenyl	81		65 - 130	10/28/21 16:08	10/29/21 01:19	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17600		100		mg/Kg		10/29/21 08:00	11/01/21 14:36	10

Client Sample ID: B-5 (3.5-4)

Lab Sample ID: 820-2361-9

Date Collected: 10/26/21 13:25

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 17:29	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:24	10/28/21 17:29	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 17:29	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 17:29	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 17:29	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150	10/28/21 14:24	10/28/21 17:29	1
4-Bromofluorobenzene (Surr)	95		68 - 152	10/28/21 14:24	10/28/21 17:29	1
Dibromofluoromethane (Surr)	105		53 - 142	10/28/21 14:24	10/28/21 17:29	1
Toluene-d8 (Surr)	105		70 - 130	10/28/21 14:24	10/28/21 17:29	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.6	U	49.6		mg/Kg		10/28/21 16:08	10/29/21 01:38	1
Over C10-C28	<49.6	U	49.6		mg/Kg		10/28/21 16:08	10/29/21 01:38	1
Over C28-C36	<49.6	U	49.6		mg/Kg		10/28/21 16:08	10/29/21 01:38	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-5 (3.5-4)

Lab Sample ID: 820-2361-9

Date Collected: 10/26/21 13:25

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		65 - 130	10/28/21 16:08	10/29/21 01:38	1
o-Terphenyl	90		65 - 130	10/28/21 16:08	10/29/21 01:38	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18000		100		mg/Kg		10/29/21 08:00	11/01/21 14:47	10

Client Sample ID: D-4 (1.5-2)

Lab Sample ID: 820-2361-10

Date Collected: 10/26/21 13:30

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:51	1
Toluene	<0.00503	U	0.00503		mg/Kg		10/28/21 14:24	10/28/21 17:51	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:51	1
m-Xylene & p-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/21 14:24	10/28/21 17:51	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:51	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/28/21 14:24	10/28/21 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150	10/28/21 14:24	10/28/21 17:51	1
4-Bromofluorobenzene (Surr)	102		68 - 152	10/28/21 14:24	10/28/21 17:51	1
Dibromofluoromethane (Surr)	105		53 - 142	10/28/21 14:24	10/28/21 17:51	1
Toluene-d8 (Surr)	99		70 - 130	10/28/21 14:24	10/28/21 17:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/29/21 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 01:57	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 01:57	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/29/21 01:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		65 - 130	10/28/21 16:08	10/29/21 01:57	1
o-Terphenyl	90		65 - 130	10/28/21 16:08	10/29/21 01:57	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6940		100		mg/Kg		10/29/21 08:00	11/01/21 14:58	10

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-4 (2.5-3)

Lab Sample ID: 820-2361-11

Date Collected: 10/26/21 13:35

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 18:14	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/28/21 14:25	10/28/21 18:14	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 18:14	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 18:14	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 18:14	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150	10/28/21 14:25	10/28/21 18:14	1
4-Bromofluorobenzene (Surr)	94		68 - 152	10/28/21 14:25	10/28/21 18:14	1
Dibromofluoromethane (Surr)	106		53 - 142	10/28/21 14:25	10/28/21 18:14	1
Toluene-d8 (Surr)	104		70 - 130	10/28/21 14:25	10/28/21 18:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<500	U	500		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<500	U	500		mg/Kg		10/28/21 16:16	10/29/21 11:47	1
Over C10-C28	<500	U	500		mg/Kg		10/28/21 16:16	10/29/21 11:47	1
Over C28-C36	<500	U	500		mg/Kg		10/28/21 16:16	10/29/21 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130	10/28/21 16:16	10/29/21 11:47	1
o-Terphenyl	109		65 - 130	10/28/21 16:16	10/29/21 11:47	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8790		100		mg/Kg		10/29/21 08:00	11/01/21 15:08	10

Client Sample ID: D-4 (3.5-4)

Lab Sample ID: 820-2361-12

Date Collected: 10/26/21 13:40

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000998	U	0.000998		mg/Kg		10/28/21 14:25	10/28/21 18:36	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/28/21 14:25	10/28/21 18:36	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/28/21 14:25	10/28/21 18:36	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 18:36	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/28/21 14:25	10/28/21 18:36	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		56 - 150	10/28/21 14:25	10/28/21 18:36	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-4 (3.5-4)

Lab Sample ID: 820-2361-12

Date Collected: 10/26/21 13:40

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		68 - 152	10/28/21 14:25	10/28/21 18:36	1
Dibromofluoromethane (Surr)	104		53 - 142	10/28/21 14:25	10/28/21 18:36	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:25	10/28/21 18:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.9	U	49.9		mg/Kg		10/28/21 16:16	10/29/21 10:46	1
Over C10-C28	<49.9	U	49.9		mg/Kg		10/28/21 16:16	10/29/21 10:46	1
Over C28-C36	<49.9	U	49.9		mg/Kg		10/28/21 16:16	10/29/21 10:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		65 - 130	10/28/21 16:16	10/29/21 10:46	1
o-Terphenyl	103		65 - 130	10/28/21 16:16	10/29/21 10:46	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8900		100		mg/Kg		10/29/21 08:00	11/01/21 16:02	10

Client Sample ID: D-6 (1.5-2)

Lab Sample ID: 820-2361-13

Date Collected: 10/26/21 13:45

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 18:58	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:25	10/28/21 18:58	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 18:58	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:25	10/28/21 18:58	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 18:58	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:25	10/28/21 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	10/28/21 14:25	10/28/21 18:58	1
4-Bromofluorobenzene (Surr)	93		68 - 152	10/28/21 14:25	10/28/21 18:58	1
Dibromofluoromethane (Surr)	98		53 - 142	10/28/21 14:25	10/28/21 18:58	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:25	10/28/21 18:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-6 (1.5-2)

Lab Sample ID: 820-2361-13

Date Collected: 10/26/21 13:45

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 11:06	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 11:06	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 11:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130	10/28/21 16:16	10/29/21 11:06	1
o-Terphenyl	104		65 - 130	10/28/21 16:16	10/29/21 11:06	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.3		10.0		mg/Kg		10/29/21 08:00	10/29/21 23:28	1

Client Sample ID: D-6 (2.5-3)

Lab Sample ID: 820-2361-14

Date Collected: 10/26/21 13:50

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 19:20	1
Toluene	<0.00502	U	0.00502		mg/Kg		10/28/21 14:25	10/28/21 19:20	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 19:20	1
m-Xylene & p-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 19:20	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 19:20	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		56 - 150	10/28/21 14:25	10/28/21 19:20	1
4-Bromofluorobenzene (Surr)	107	*3	68 - 152	10/28/21 14:25	10/28/21 19:20	1
Dibromofluoromethane (Surr)	100		53 - 142	10/28/21 14:25	10/28/21 19:20	1
Toluene-d8 (Surr)	102		70 - 130	10/28/21 14:25	10/28/21 19:20	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 11:26	1
Over C10-C28	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 11:26	1
Over C28-C36	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 11:26	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-6 (2.5-3)

Lab Sample ID: 820-2361-14

Date Collected: 10/26/21 13:50

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		65 - 130	10/28/21 16:16	10/29/21 11:26	1
o-Terphenyl	102		65 - 130	10/28/21 16:16	10/29/21 11:26	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.8		10.0		mg/Kg		10/29/21 08:00	10/29/21 23:39	1

Client Sample ID: D-6 (3.5-4)

Lab Sample ID: 820-2361-15

Date Collected: 10/26/21 13:55

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 19:42	1
Toluene	<0.00503	U	0.00503		mg/Kg		10/28/21 14:25	10/28/21 19:42	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 19:42	1
m-Xylene & p-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 19:42	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 19:42	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 19:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		56 - 150	10/28/21 14:25	10/28/21 19:42	1
4-Bromofluorobenzene (Surr)	101		68 - 152	10/28/21 14:25	10/28/21 19:42	1
Dibromofluoromethane (Surr)	106		53 - 142	10/28/21 14:25	10/28/21 19:42	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:25	10/28/21 19:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.8	U	49.8		mg/Kg		10/28/21 16:16	10/29/21 11:47	1
Over C10-C28	<49.8	U	49.8		mg/Kg		10/28/21 16:16	10/29/21 11:47	1
Over C28-C36	<49.8	U	49.8		mg/Kg		10/28/21 16:16	10/29/21 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130	10/28/21 16:16	10/29/21 11:47	1
o-Terphenyl	102		65 - 130	10/28/21 16:16	10/29/21 11:47	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.5		10.0		mg/Kg		10/29/21 08:00	10/29/21 23:49	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: C-5 (1.5-2)

Lab Sample ID: 820-2361-16

Date Collected: 10/26/21 14:00

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 20:04	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:25	10/28/21 20:04	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 20:04	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:25	10/28/21 20:04	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:25	10/28/21 20:04	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:25	10/28/21 20:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150	10/28/21 14:25	10/28/21 20:04	1
4-Bromofluorobenzene (Surr)	97		68 - 152	10/28/21 14:25	10/28/21 20:04	1
Dibromofluoromethane (Surr)	99		53 - 142	10/28/21 14:25	10/28/21 20:04	1
Toluene-d8 (Surr)	104		70 - 130	10/28/21 14:25	10/28/21 20:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00199	U	0.00199		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.5	U	49.5		mg/Kg		10/28/21 16:16	10/29/21 12:08	1
Over C10-C28	<49.5	U	49.5		mg/Kg		10/28/21 16:16	10/29/21 12:08	1
Over C28-C36	<49.5	U	49.5		mg/Kg		10/28/21 16:16	10/29/21 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		65 - 130	10/28/21 16:16	10/29/21 12:08	1
o-Terphenyl	91		65 - 130	10/28/21 16:16	10/29/21 12:08	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5160		100		mg/Kg		10/29/21 08:00	11/01/21 16:12	10

Client Sample ID: C-5 (2.5-3)

Lab Sample ID: 820-2361-17

Date Collected: 10/26/21 14:05

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 20:26	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/28/21 14:25	10/28/21 20:26	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 20:26	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 20:26	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:25	10/28/21 20:26	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:25	10/28/21 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		56 - 150	10/28/21 14:25	10/28/21 20:26	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: C-5 (2.5-3)

Lab Sample ID: 820-2361-17

Date Collected: 10/26/21 14:05

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 2.5 - 3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		68 - 152	10/28/21 14:25	10/28/21 20:26	1
Dibromofluoromethane (Surr)	100		53 - 142	10/28/21 14:25	10/28/21 20:26	1
Toluene-d8 (Surr)	101		70 - 130	10/28/21 14:25	10/28/21 20:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/Kg			10/29/21 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 12:28	1
Over C10-C28	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 12:28	1
Over C28-C36	<49.7	U	49.7		mg/Kg		10/28/21 16:16	10/29/21 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		65 - 130	10/28/21 16:16	10/29/21 12:28	1
o-Terphenyl	96		65 - 130	10/28/21 16:16	10/29/21 12:28	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6480		100		mg/Kg		10/29/21 08:00	11/01/21 16:23	10

Client Sample ID: C-5 (3.5-4)

Lab Sample ID: 820-2361-18

Date Collected: 10/26/21 14:10

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 20:48	1
Toluene	<0.00503	U	0.00503		mg/Kg		10/28/21 14:25	10/28/21 20:48	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 20:48	1
m-Xylene & p-Xylene	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 20:48	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:25	10/28/21 20:48	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		10/28/21 14:25	10/28/21 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150	10/28/21 14:25	10/28/21 20:48	1
4-Bromofluorobenzene (Surr)	93		68 - 152	10/28/21 14:25	10/28/21 20:48	1
Dibromofluoromethane (Surr)	101		53 - 142	10/28/21 14:25	10/28/21 20:48	1
Toluene-d8 (Surr)	102		70 - 130	10/28/21 14:25	10/28/21 20:48	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00201	U	0.00201		mg/Kg			10/29/21 15:24	1

Eurofins Xenco, Lubbock

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: C-5 (3.5-4)

Lab Sample ID: 820-2361-18

Date Collected: 10/26/21 14:10

Matrix: Solid

Date Received: 10/27/21 08:36

Sample Depth: 3.5 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/29/21 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.1	U	50.1		mg/Kg		10/28/21 16:16	10/29/21 11:17	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:16	10/29/21 11:17	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:16	10/29/21 11:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		65 - 130	10/28/21 16:16	10/29/21 11:17	1
o-Terphenyl	129		65 - 130	10/28/21 16:16	10/29/21 11:17	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6570		100		mg/Kg		10/29/21 08:00	11/01/21 16:34	10

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
820-2361-1	B-4 (1.5-2)	103	114	110	97
820-2361-2	B-4 (2.5-3)	101	110	105	101
820-2361-3	B-4 (3.5-4)	101	110	103	101
820-2361-4	A-5 (1.5-2)	105	101	100	102
820-2361-5	A-5 (2.5-3)	111	102	105	102
820-2361-6	A-5 (3.5-4)	106	97	102	102
820-2361-7	B-5 (1.5-2)	109	98	104	100
820-2361-8	B-5 (2.5-3)	112	100	109	101
820-2361-9	B-5 (3.5-4)	109	95	105	105
820-2361-10	D-4 (1.5-2)	109	102	105	99
820-2361-11	D-4 (2.5-3)	109	94	106	104
820-2361-12	D-4 (3.5-4)	109	96	104	101
820-2361-13	D-6 (1.5-2)	112	93	98	101
820-2361-14	D-6 (2.5-3)	110	107 *3	100	102
820-2361-15	D-6 (3.5-4)	108	101	106	101
820-2361-16	C-5 (1.5-2)	106	97	99	104
820-2361-17	C-5 (2.5-3)	110	92	100	101
820-2361-18	C-5 (3.5-4)	106	93	101	102
860-14385-A-6-A MS	Matrix Spike	110	166 S1+	112	98
870-3600-B-1-A MS	Matrix Spike	99	105	102	100
LCS 860-28433/3	Lab Control Sample	107	103	110	95
LCS 860-28453/3	Lab Control Sample	102	103	100	100
LCSD 860-28433/4	Lab Control Sample Dup	105	107	108	95
LCSD 860-28453/4	Lab Control Sample Dup	99	109	97	99
MB 860-28433/8	Method Blank	93	107	104	98
MB 860-28453/8	Method Blank	103	99	99	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (65-130)	OTPH1 (65-130)
820-2360-A-1-C MS	Matrix Spike	113	94
820-2360-A-1-D MSD	Matrix Spike Duplicate	115	94
820-2361-1	B-4 (1.5-2)	78	92
820-2361-2	B-4 (2.5-3)	88	100
820-2361-3	B-4 (3.5-4)	79	92
820-2361-4 - RA	A-5 (1.5-2)	71	83
820-2361-5 - RA	A-5 (2.5-3)	100	113
820-2361-6 - RA	A-5 (3.5-4)	101	110
820-2361-7	B-5 (1.5-2)	91	104
820-2361-8	B-5 (2.5-3)	68	81
820-2361-9	B-5 (3.5-4)	76	90

Eurofins Xenco, Lubbock

Surrogate Summary

Client: Terracon Consulting Eng & Scientists

Job ID: 820-2361-1

Project/Site: State I 16 AR217001

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (65-130)	OTPH1 (65-130)
820-2361-10	D-4 (1.5-2)	77	90
820-2361-11	D-4 (2.5-3)	101	109
820-2361-11 MS	D-4 (2.5-3)	108	112
820-2361-11 MSD	D-4 (2.5-3)	117	126
820-2361-12	D-4 (3.5-4)	102	103
820-2361-13	D-6 (1.5-2)	103	104
820-2361-14	D-6 (2.5-3)	102	102
820-2361-15	D-6 (3.5-4)	101	102
820-2361-16	C-5 (1.5-2)	91	91
820-2361-17	C-5 (2.5-3)	95	96
820-2361-18	C-5 (3.5-4)	115	129
LCS 860-28527/2-A	Lab Control Sample	119	102
LCS 860-28529/2-A	Lab Control Sample	122	124
LCSD 860-28527/3-A	Lab Control Sample Dup	117	100
LCSD 860-28529/3-A	Lab Control Sample Dup	111	122
MB 860-28527/1-A	Method Blank	96	110
MB 860-28529/1-A	Method Blank	126	134 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: 860-14385-A-6-A MS

Matrix: Solid

Analysis Batch: 28433

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 28307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	4.28		25.3	29.17		mg/Kg		99	71 - 119
Toluene	32.9		25.3	55.88		mg/Kg		91	74 - 122
Ethylbenzene	69.8		25.3	94.75	E	mg/Kg		99	80 - 123
m-Xylene & p-Xylene	446	E	25.3	468.4	E 4	mg/Kg		88	78 - 127
o-Xylene	298	E	25.3	321.7	E 4	mg/Kg		93	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	110		56 - 150
4-Bromofluorobenzene (Surr)	166	S1+	68 - 152
Dibromofluoromethane (Surr)	112		53 - 142
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: 870-3600-B-1-A MS

Matrix: Solid

Analysis Batch: 28453

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 28333

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00907	U F1	0.453	0.3178	F1	mg/Kg		70	71 - 119
Toluene	<0.0453	U F1	0.453	0.3094	F1	mg/Kg		68	74 - 122
Ethylbenzene	<0.00907	U F1	0.453	0.3245	F1	mg/Kg		72	80 - 123
m-Xylene & p-Xylene	<0.0181	U F1	0.453	0.3157	F1	mg/Kg		70	78 - 127
o-Xylene	<0.00907	U F1	0.453	0.3216	F1	mg/Kg		71	79 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		56 - 150
4-Bromofluorobenzene (Surr)	105		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: MB 860-28433/8

Matrix: Solid

Analysis Batch: 28433

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/28/21 12:21	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/28/21 12:21	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/28/21 12:21	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg			10/28/21 12:21	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/28/21 12:21	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/28/21 12:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		56 - 150		10/28/21 12:21	1
4-Bromofluorobenzene (Surr)	107		68 - 152		10/28/21 12:21	1
Dibromofluoromethane (Surr)	104		53 - 142		10/28/21 12:21	1
Toluene-d8 (Surr)	98		70 - 130		10/28/21 12:21	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-28433/3

Matrix: Solid

Analysis Batch: 28433

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04837		mg/Kg		97	66 - 142
Toluene	0.0500	0.04213		mg/Kg		84	74 - 130
Ethylbenzene	0.0500	0.04538		mg/Kg		91	80 - 130
m-Xylene & p-Xylene	0.0500	0.04588		mg/Kg		92	78 - 130
o-Xylene	0.0500	0.04609		mg/Kg		92	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	110		53 - 142
Toluene-d8 (Surr)	95		70 - 130

Lab Sample ID: LCSD 860-28433/4

Matrix: Solid

Analysis Batch: 28433

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05407		mg/Kg		108	66 - 142	11	25
Toluene	0.0500	0.04900		mg/Kg		98	74 - 130	15	25
Ethylbenzene	0.0500	0.05222		mg/Kg		104	80 - 130	14	25
m-Xylene & p-Xylene	0.0500	0.05379		mg/Kg		108	78 - 130	16	25
o-Xylene	0.0500	0.05250		mg/Kg		105	79 - 130	13	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		56 - 150
4-Bromofluorobenzene (Surr)	107		68 - 152
Dibromofluoromethane (Surr)	108		53 - 142
Toluene-d8 (Surr)	95		70 - 130

Lab Sample ID: MB 860-28453/8

Matrix: Solid

Analysis Batch: 28453

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100		mg/Kg			10/28/21 13:26	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/28/21 13:26	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/28/21 13:26	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg			10/28/21 13:26	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/28/21 13:26	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/28/21 13:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		56 - 150		10/28/21 13:26	1
4-Bromofluorobenzene (Surr)	99		68 - 152		10/28/21 13:26	1
Dibromofluoromethane (Surr)	99		53 - 142		10/28/21 13:26	1
Toluene-d8 (Surr)	105		70 - 130		10/28/21 13:26	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-28453/3

Matrix: Solid

Analysis Batch: 28453

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.04428		mg/Kg		89	66 - 142
Toluene	0.0500	0.04406		mg/Kg		88	74 - 130
Ethylbenzene	0.0500	0.04955		mg/Kg		99	80 - 130
m-Xylene & p-Xylene	0.0500	0.04719		mg/Kg		94	78 - 130
o-Xylene	0.0500	0.05016		mg/Kg		100	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 860-28453/4

Matrix: Solid

Analysis Batch: 28453

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.05145		mg/Kg		103	66 - 142	15	25
Toluene	0.0500	0.04917		mg/Kg		98	74 - 130	11	25
Ethylbenzene	0.0500	0.05322		mg/Kg		106	80 - 130	7	25
m-Xylene & p-Xylene	0.0500	0.05205		mg/Kg		104	78 - 130	10	25
o-Xylene	0.0500	0.05409		mg/Kg		108	79 - 130	8	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		56 - 150
4-Bromofluorobenzene (Surr)	109		68 - 152
Dibromofluoromethane (Surr)	97		53 - 142
Toluene-d8 (Surr)	99		70 - 130

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

Lab Sample ID: MB 860-28527/1-A

Matrix: Solid

Analysis Batch: 28449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28527

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 18:30	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 18:30	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 18:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		65 - 130	10/28/21 16:08	10/28/21 18:30	1
o-Terphenyl	110		65 - 130	10/28/21 16:08	10/28/21 18:30	1

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

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

Lab Sample ID: LCS 860-28527/2-A

Matrix: Solid

Analysis Batch: 28449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28527

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10			1000	1072		mg/Kg		107	70 - 135		
Over C10-C28			997	1069		mg/Kg		107	70 - 135		
		LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	119		65 - 130								
o-Terphenyl	102		65 - 130								

Lab Sample ID: LCSD 860-28527/3-A

Matrix: Solid

Analysis Batch: 28449

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28527

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10			1000	1004		mg/Kg		100	70 - 135	7	35
Over C10-C28			997	1075		mg/Kg		108	70 - 135	1	35
		LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	117		65 - 130								
o-Terphenyl	100		65 - 130								

Lab Sample ID: 820-2360-A-1-C MS

Matrix: Solid

Analysis Batch: 28449

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 28527

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10	<50.1	U	996	1003		mg/Kg		101	70 - 135		
Over C10-C28	<50.1	U	991	1017		mg/Kg		103	70 - 135		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	113		65 - 130								
o-Terphenyl	94		65 - 130								

Lab Sample ID: 820-2360-A-1-D MSD

Matrix: Solid

Analysis Batch: 28449

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	<50.1	U	1000	1026		mg/Kg		103	70 - 135	2	35
Over C10-C28	<50.1	U	995	1047		mg/Kg		105	70 - 135	3	35
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	115		65 - 130								
o-Terphenyl	94		65 - 130								

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

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

Lab Sample ID: MB 860-28529/1-A

Matrix: Solid

Analysis Batch: 28611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 10:46	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 10:46	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:16	10/29/21 10:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		65 - 130	10/28/21 16:16	10/29/21 10:46	1
o-Terphenyl	134	S1+	65 - 130	10/28/21 16:16	10/29/21 10:46	1

Lab Sample ID: LCS 860-28529/2-A

Matrix: Solid

Analysis Batch: 28611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	1000	1181		mg/Kg		118	70 - 135
Over C10-C28	997	1210		mg/Kg		121	70 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		65 - 130
o-Terphenyl	124		65 - 130

Lab Sample ID: LCSD 860-28529/3-A

Matrix: Solid

Analysis Batch: 28611

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28529

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	1000	1140		mg/Kg		114	70 - 135	4	35
Over C10-C28	997	1200		mg/Kg		120	70 - 135	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	111		65 - 130
o-Terphenyl	122		65 - 130

Lab Sample ID: 820-2361-11 MS

Matrix: Solid

Analysis Batch: 28611

Client Sample ID: D-4 (2.5-3)

Prep Type: Total/NA

Prep Batch: 28529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	<500	U	1000	1042		mg/Kg		104	70 - 135
Over C10-C28	<500	U	998	1091		mg/Kg		109	70 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	108		65 - 130
o-Terphenyl	112		65 - 130

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QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

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

Lab Sample ID: 820-2361-11 MSD

Matrix: Solid

Analysis Batch: 28611

Client Sample ID: D-4 (2.5-3)

Prep Type: Total/NA

Prep Batch: 28529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	<500	U	1000	1145		mg/Kg		114	70 - 135	9	35
Over C10-C28	<500	U	999	1197		mg/Kg		120	70 - 135	9	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	117		65 - 130								
o-Terphenyl	126		65 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-28634/1-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		10/29/21 08:00	10/29/21 16:00	1

Lab Sample ID: MB 860-28634/1-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		10/29/21 08:00	10/29/21 21:52	1

Lab Sample ID: MB 860-28634/1-A

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		10/29/21 08:00	11/01/21 12:18	1

Lab Sample ID: LCS 860-28634/2-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	100	95.55		mg/Kg		96	80 - 120		

Lab Sample ID: LCS 860-28634/2-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	100	98.91		mg/Kg		99	80 - 120		

Lab Sample ID: LCS 860-28634/2-A

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	100	102.1		mg/Kg		102	80 - 120		

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 860-28634/3-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	95.51		mg/Kg		96	80 - 120	0	20

Lab Sample ID: LCSD 860-28634/3-A

Matrix: Solid

Analysis Batch: 28690

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	99.03		mg/Kg		99	80 - 120	0	20

Lab Sample ID: LCSD 860-28634/3-A

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	100.1		mg/Kg		100	80 - 120	2	20

Lab Sample ID: 820-2361-1 MS

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: B-4 (1.5-2)

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12300		100	12890	4	mg/Kg		608	80 - 120		

Lab Sample ID: 820-2361-1 MSD

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: B-4 (1.5-2)

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12300		100	12870	4	mg/Kg		597	80 - 120	0	20

Lab Sample ID: 820-2361-11 MS

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: D-4 (2.5-3)

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8790		100	9647	4	mg/Kg		860	80 - 120		

Lab Sample ID: 820-2361-11 MSD

Matrix: Solid

Analysis Batch: 28748

Client Sample ID: D-4 (2.5-3)

Prep Type: Total/NA

Prep Batch: 28634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8790		100	9647	4	mg/Kg		860	80 - 120	0	20

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

GC/MS VOA

Prep Batch: 28307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-14385-A-6-A MS	Matrix Spike	Total/NA	Solid	5035	

Prep Batch: 28333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
870-3600-B-1-A MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 28433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	8260C	28500
MB 860-28433/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-28433/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-28433/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
860-14385-A-6-A MS	Matrix Spike	Total/NA	Solid	8260C	28307

Analysis Batch: 28453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	8260C	28500
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	8260C	28500
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	8260C	28500
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	8260C	28500
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	8260C	28500
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	8260C	28500
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	8260C	28500
MB 860-28453/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-28453/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-28453/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
870-3600-B-1-A MS	Matrix Spike	Total/NA	Solid	8260C	28333

Prep Batch: 28500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	5035	
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	5035	
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	5035	
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	5035	
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	5035	
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	5035	
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	5035	
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	5035	
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	5035	
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	5035	
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	5035	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

GC/MS VOA (Continued)

Prep Batch: 28500 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	5035	
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	5035	
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	5035	
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	5035	
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	5035	
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	5035	
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	5035	

Analysis Batch: 28673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	Total BTEX	
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	Total BTEX	
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	Total BTEX	
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	Total BTEX	
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	Total BTEX	
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	Total BTEX	
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	Total BTEX	
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 28449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	8015B NM	28527
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	8015B NM	28527
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	8015B NM	28527
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	8015B NM	28527
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	8015B NM	28527
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	8015B NM	28527
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	8015B NM	28527
MB 860-28527/1-A	Method Blank	Total/NA	Solid	8015B NM	28527
LCS 860-28527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28527
LCSD 860-28527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28527
820-2360-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	28527
820-2360-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28527

Prep Batch: 28527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	8015NM Prep	
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

GC Semi VOA (Continued)

Prep Batch: 28527 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-4 - RA	A-5 (1.5-2)	Total/NA	Solid	8015NM Prep	
820-2361-5 - RA	A-5 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-6 - RA	A-5 (3.5-4)	Total/NA	Solid	8015NM Prep	
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	8015NM Prep	
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	8015NM Prep	
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	8015NM Prep	
MB 860-28527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-28527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-28527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-2360-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-2360-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 28529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	8015NM Prep	
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	8015NM Prep	
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	8015NM Prep	
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	8015NM Prep	
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	8015NM Prep	
MB 860-28529/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-28529/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-28529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-2361-11 MS	D-4 (2.5-3)	Total/NA	Solid	8015NM Prep	
820-2361-11 MSD	D-4 (2.5-3)	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-4 - RA	A-5 (1.5-2)	Total/NA	Solid	8015B NM	28527
820-2361-5 - RA	A-5 (2.5-3)	Total/NA	Solid	8015B NM	28527
820-2361-6 - RA	A-5 (3.5-4)	Total/NA	Solid	8015B NM	28527
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	8015B NM	28529

Analysis Batch: 28611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	8015B NM	28529
MB 860-28529/1-A	Method Blank	Total/NA	Solid	8015B NM	28529
LCS 860-28529/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28529
LCSD 860-28529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28529
820-2361-11 MS	D-4 (2.5-3)	Total/NA	Solid	8015B NM	28529
820-2361-11 MSD	D-4 (2.5-3)	Total/NA	Solid	8015B NM	28529

Analysis Batch: 28614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	8015B NM	28529
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	8015B NM	28529
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	8015B NM	28529
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	8015B NM	28529

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

GC Semi VOA (Continued)

Analysis Batch: 28614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	8015B NM	28529
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	8015B NM	28529

Analysis Batch: 28624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	8015 NM	
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	8015 NM	
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	8015 NM	
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	8015 NM	
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	8015 NM	
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	8015 NM	
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	8015 NM	
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	8015 NM	

HPLC/IC

Prep Batch: 28634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	300_Prep	
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	300_Prep	
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	300_Prep	
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	300_Prep	
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	300_Prep	
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	300_Prep	
MB 860-28634/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-28634/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-28634/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
820-2361-1 MS	B-4 (1.5-2)	Total/NA	Solid	300_Prep	
820-2361-1 MSD	B-4 (1.5-2)	Total/NA	Solid	300_Prep	

Eurofins Xenco, Lubbock

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

HPLC/IC (Continued)

Prep Batch: 28634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-11 MS	D-4 (2.5-3)	Total/NA	Solid	300_Prep	
820-2361-11 MSD	D-4 (2.5-3)	Total/NA	Solid	300_Prep	

Analysis Batch: 28690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-6	A-5 (3.5-4)	Total/NA	Solid	300.0	28634
820-2361-13	D-6 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-14	D-6 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-15	D-6 (3.5-4)	Total/NA	Solid	300.0	28634
MB 860-28634/1-A	Method Blank	Total/NA	Solid	300.0	28634
MB 860-28634/1-A	Method Blank	Total/NA	Solid	300.0	28634
LCS 860-28634/2-A	Lab Control Sample	Total/NA	Solid	300.0	28634
LCS 860-28634/2-A	Lab Control Sample	Total/NA	Solid	300.0	28634
LCSD 860-28634/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	28634
LCSD 860-28634/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	28634

Analysis Batch: 28748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2361-1	B-4 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-2	B-4 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-3	B-4 (3.5-4)	Total/NA	Solid	300.0	28634
820-2361-4	A-5 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-5	A-5 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-7	B-5 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-8	B-5 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-9	B-5 (3.5-4)	Total/NA	Solid	300.0	28634
820-2361-10	D-4 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-11	D-4 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-12	D-4 (3.5-4)	Total/NA	Solid	300.0	28634
820-2361-16	C-5 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-17	C-5 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-18	C-5 (3.5-4)	Total/NA	Solid	300.0	28634
MB 860-28634/1-A	Method Blank	Total/NA	Solid	300.0	28634
LCS 860-28634/2-A	Lab Control Sample	Total/NA	Solid	300.0	28634
LCSD 860-28634/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	28634
820-2361-1 MS	B-4 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-1 MSD	B-4 (1.5-2)	Total/NA	Solid	300.0	28634
820-2361-11 MS	D-4 (2.5-3)	Total/NA	Solid	300.0	28634
820-2361-11 MSD	D-4 (2.5-3)	Total/NA	Solid	300.0	28634

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-4 (1.5-2)

Lab Sample ID: 820-2361-1

Date Collected: 10/26/21 12:45

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28433	10/28/21 20:22	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 22:46	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 12:50	ANP	XEN STF

Client Sample ID: B-4 (2.5-3)

Lab Sample ID: 820-2361-2

Date Collected: 10/26/21 12:50

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28433	10/28/21 20:43	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 23:24	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 13:22	ANP	XEN STF

Client Sample ID: B-4 (3.5-4)

Lab Sample ID: 820-2361-3

Date Collected: 10/26/21 12:55

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28433	10/28/21 21:03	CSP	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 23:05	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 13:54	ANP	XEN STF

Client Sample ID: A-5 (1.5-2)

Lab Sample ID: 820-2361-4

Date Collected: 10/26/21 13:00

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 15:39	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: A-5 (1.5-2)

Lab Sample ID: 820-2361-4

Date Collected: 10/26/21 13:00

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.01 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM	RA	1			28609	10/29/21 10:24	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:04	ANP	XEN STF

Client Sample ID: A-5 (2.5-3)

Lab Sample ID: 820-2361-5

Date Collected: 10/26/21 13:05

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 16:01	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.98 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM	RA	1			28609	10/29/21 10:42	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:15	ANP	XEN STF

Client Sample ID: A-5 (3.5-4)

Lab Sample ID: 820-2361-6

Date Collected: 10/26/21 13:10

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 16:23	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.98 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM	RA	1			28609	10/29/21 10:59	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		1			28690	10/29/21 20:37	DTN	XEN STF

Client Sample ID: B-5 (1.5-2)

Lab Sample ID: 820-2361-7

Date Collected: 10/26/21 13:15

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 16:45	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/29/21 00:59	WP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: B-5 (1.5-2)

Lab Sample ID: 820-2361-7

Date Collected: 10/26/21 13:15

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:26	ANP	XEN STF

Client Sample ID: B-5 (2.5-3)

Lab Sample ID: 820-2361-8

Date Collected: 10/26/21 13:20

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 17:07	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/29/21 01:19	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:36	ANP	XEN STF

Client Sample ID: B-5 (3.5-4)

Lab Sample ID: 820-2361-9

Date Collected: 10/26/21 13:25

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 17:29	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/29/21 01:38	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:47	ANP	XEN STF

Client Sample ID: D-4 (1.5-2)

Lab Sample ID: 820-2361-10

Date Collected: 10/26/21 13:30

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	28500	10/28/21 14:24	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 17:51	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 10:26	IS	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/29/21 01:57	WP	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 14:58	ANP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-4 (2.5-3)

Lab Sample ID: 820-2361-11

Date Collected: 10/26/21 13:35

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 18:14	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			1.001 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28611	10/29/21 11:47	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 15:08	ANP	XEN STF

Client Sample ID: D-4 (3.5-4)

Lab Sample ID: 820-2361-12

Date Collected: 10/26/21 13:40

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 18:36	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 10:46	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 16:02	ANP	XEN STF

Client Sample ID: D-6 (1.5-2)

Lab Sample ID: 820-2361-13

Date Collected: 10/26/21 13:45

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 18:58	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 11:06	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		1			28690	10/29/21 23:28	DTN	XEN STF

Client Sample ID: D-6 (2.5-3)

Lab Sample ID: 820-2361-14

Date Collected: 10/26/21 13:50

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 19:20	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: D-6 (2.5-3)

Lab Sample ID: 820-2361-14

Date Collected: 10/26/21 13:50

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 11:26	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		1			28690	10/29/21 23:39	DTN	XEN STF

Client Sample ID: D-6 (3.5-4)

Lab Sample ID: 820-2361-15

Date Collected: 10/26/21 13:55

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 19:42	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 11:47	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		1			28690	10/29/21 23:49	DTN	XEN STF

Client Sample ID: C-5 (1.5-2)

Lab Sample ID: 820-2361-16

Date Collected: 10/26/21 14:00

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 20:04	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.1 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 12:08	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 16:12	ANP	XEN STF

Client Sample ID: C-5 (2.5-3)

Lab Sample ID: 820-2361-17

Date Collected: 10/26/21 14:05

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 20:26	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28614	10/29/21 12:28	IS	XEN STF

Eurofins Xenco, Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Client Sample ID: C-5 (2.5-3)

Lab Sample ID: 820-2361-17

Date Collected: 10/26/21 14:05

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 16:23	ANP	XEN STF

Client Sample ID: C-5 (3.5-4)

Lab Sample ID: 820-2361-18

Date Collected: 10/26/21 14:10

Matrix: Solid

Date Received: 10/27/21 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	28500	10/28/21 14:25	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28453	10/28/21 20:48	KLV	XEN STF
Total/NA	Analysis	Total BTEX		1			28673	10/29/21 15:24	CSP	XEN STF
Total/NA	Analysis	8015 NM		1			28624	10/29/21 13:35	IS	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	28529	10/28/21 16:16	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28609	10/29/21 11:17	IS	XEN STF
Total/NA	Prep	300_Prep			5 g	50 mL	28634	10/29/21 08:00	DTN	XEN STF
Total/NA	Analysis	300.0		10			28748	11/01/21 16:34	ANP	XEN STF

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Laboratory: Eurofins Xenco, Stafford

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-21-44	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	C6-C10
8015B NM	8015NM Prep	Solid	Over C10-C28
8015B NM	8015NM Prep	Solid	Over C28-C36
Total BTEX		Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	XEN STF
Total BTEX	Total BTEX Calculation	TAL SOP	XEN STF
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN STF
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	MCAWW	XEN STF
5035	Closed System Purge and Trap	SW846	XEN STF
8015NM Prep	Microextraction	SW846	XEN STF

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I 16 AR217001

Job ID: 820-2361-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-2361-1	B-4 (1.5-2)	Solid	10/26/21 12:45	10/27/21 08:36	1.5 - 2
820-2361-2	B-4 (2.5-3)	Solid	10/26/21 12:50	10/27/21 08:36	2.5 - 3
820-2361-3	B-4 (3.5-4)	Solid	10/26/21 12:55	10/27/21 08:36	3.5 - 4
820-2361-4	A-5 (1.5-2)	Solid	10/26/21 13:00	10/27/21 08:36	1.5 - 2
820-2361-5	A-5 (2.5-3)	Solid	10/26/21 13:05	10/27/21 08:36	2.5 - 3
820-2361-6	A-5 (3.5-4)	Solid	10/26/21 13:10	10/27/21 08:36	3.5 - 4
820-2361-7	B-5 (1.5-2)	Solid	10/26/21 13:15	10/27/21 08:36	1.5 - 2
820-2361-8	B-5 (2.5-3)	Solid	10/26/21 13:20	10/27/21 08:36	2.5 - 3
820-2361-9	B-5 (3.5-4)	Solid	10/26/21 13:25	10/27/21 08:36	3.5 - 4
820-2361-10	D-4 (1.5-2)	Solid	10/26/21 13:30	10/27/21 08:36	1.5 - 2
820-2361-11	D-4 (2.5-3)	Solid	10/26/21 13:35	10/27/21 08:36	2.5 - 3
820-2361-12	D-4 (3.5-4)	Solid	10/26/21 13:40	10/27/21 08:36	3.5 - 4
820-2361-13	D-6 (1.5-2)	Solid	10/26/21 13:45	10/27/21 08:36	1.5 - 2
820-2361-14	D-6 (2.5-3)	Solid	10/26/21 13:50	10/27/21 08:36	2.5 - 3
820-2361-15	D-6 (3.5-4)	Solid	10/26/21 13:55	10/27/21 08:36	3.5 - 4
820-2361-16	C-5 (1.5-2)	Solid	10/26/21 14:00	10/27/21 08:36	1.5 - 2
820-2361-17	C-5 (2.5-3)	Solid	10/26/21 14:05	10/27/21 08:36	2.5 - 3
820-2361-18	C-5 (3.5-4)	Solid	10/26/21 14:10	10/27/21 08:36	3.5 - 4

Loc: 820
2361



820-2361 Chain of Custody

הפרנסה

Address: 6701 ADRIEN
Lubbock, Texas 79424

Office Location	Lubbock	Phone:	
		Contact:	J. Guesnier 805-544-9276
Project Manager	J. Guesnier	SRS #:	
Sampler's Name	J. Guesnier	Sampler's Signature	

CHAIN OF CUSTODY RECORD

[illegible]

Lubbock Office ■ 5827 50th Street, Suite 1 ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable

Eurofins Xenco, Lubbock

6701 Aberdeen Ave, Suite 8
Lubbock, TX 79424
Phone: 806-794-1296

Chain of Custody Record



Environment Testing
America

Client Information (Sub Contract Lab)		Lab File: Kramer Jessica		Carrier Tracking No(s): 820-2361 1		COC No: 820-2361 1	
Client Contact: Jessica Kramer		E-Mail: jessica.kramer@eurofinet.com		State of Origin: Texas		Page: Page 1 of 2	
Shipping/Receiving		Phone: 820-2361 1		Job #:		Preservation Codes:	
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #:		Preservation Codes:	
Address: 4145 Greenbriar Dr		City: Starford		State: TX		Zip: 77477	
Phone: 820-240-4200(Tel)		Email: 820-240-4200(Tel)		Project #:		Project Name:	
State: TX		Site: State 1 16 AR217001		SSOW#:		SSOW#:	
Due Date Requested: 10/29/2021		TAT Requested (days):		Analysis Requested		Special Instructions/Note:	
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (New, Used, Swab, Solid, Liquid, Other)	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
B-4 (1.5-2) (820-2361-1)		10/26/21		12:45 Central		Solid	
B-4 (2.5-3) (820-2361-2)		10/26/21		12:50 Central		Solid	
B-4 (3.5-4) (820-2361-3)		10/26/21		12:55 Central		Solid	
A-5 (1.5-2) (820-2361-4)		10/26/21		13:00 Central		Solid	
A-5 (2.5-3) (820-2361-5)		10/26/21		13:05 Central		Solid	
A-5 (3.5-4) (820-2361-6)		10/26/21		13:10 Central		Solid	
B-5 (1.5-2) (820-2361-7)		10/26/21		13:15 Central		Solid	
B-5 (2.5-3) (820-2361-8)		10/26/21		13:20 Central		Solid	
B-5 (3.5-4) (820-2361-9)		10/26/21		13:25 Central		Solid	
Note: Since laboratory accreditation is subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.							
Possible Hazard Identification							
Unconfirmed							
Deliverable Requested: I, II, III, IV Other (specify):		Primary Deliverable Rank: 2					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: Teddy Kendall Lee		Date/Time: 10/29/21 1700		Company:		Company:	
Relinquished by: EE		Date/Time: 10/29/21 1039		Company:		Company:	
Relinquished by:		Date/Time:		Company:		Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.		Temp. 10 IR ID: HOU-223		Ver: 06/08/2021	

Client Information (Sub Contract Lab) Lab P/N: Kramer Jessica E-Mail: Jessica.kramer@eurofins.com State of Origin: Texas Carrier Tracking No(s): 820-2381.2 Page: Page 2 of 2 Job #: 820-2381-1			CDD No: 820-2381.2 Page: Page 2 of 2 Job #: 820-2381-1		
Address: 4145 Greenbriar Dr City: Stafford State, Zip: TX, 77477 Phone: 281-240-4200(Tel) Email: State I 16 AR217001 Project Name: State I 16 AR217001 SOW#: State I 16 AR217001			Accredited: NELAP Texas Preservation Codes: A HCL B NaOH C Zn Acetate D Nitric Acid E NaHSO4 F MeOH G Anchlor H Ascorbic Acid I Ice J DI Water K EDTA L EDA Other:		
Analysis Requested Due Date Requested: 10/29/2021 TAT Requested (days): PO #: WO #: Project #: SOW#:			8260C/503SFP_Calc (MOD) BTEX 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 8015MOD_Calc 300_ORGM_28D/300_Prep Chloride Total BTEX		
Sample Identification - Client ID (Lab ID)			Special Instructions/Note:		
D-4 (1 5-2) (820-2361-10) D-4 (2.5-3) (820-2361-11) D-4 (3.5-4) (820-2361-12) D-6 (1.5-2) (820-2361-13) D-6 (2.5-3) (820-2361-14) D-6 (3.5-4) (820-2361-15) C-5 (1.5-2) (820-2361-16) C-5 (2.5-3) (820-2361 17) C-5 (3.5-4) (820-2361-18)	Sample Date 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21 10/26/21	Sample Time 13:30 Central 13:35 Central 13:40 Central 13:45 Central 13:50 Central 13:55 Central 14:00 Central 14:05 Central 14:10 Central	Sample Type (C=Comp, G=grab) Solid Solid Solid Solid Solid Solid Solid Solid Solid	Matrix (Volatile, Semivolatile, Organics, Metals) Solid Solid Solid Solid Solid Solid Solid Solid Solid	Special Instructions/Note: 8260C/503SFP_Calc (MOD) BTEX 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH 8015MOD_Calc 300_ORGM_28D/300_Prep Chloride Total BTEX
Note: Since laboratory accreditation is subject to change, Eurofins Xenco LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Xenco LLC.					
Possible Hazard Identification Unconfirmed Deliverable Requested: I II III, IV Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:					
Primary Deliverable Rank: 2					
Empty Kit Relinquished by:					
Relinquished by: <i>Teddy Randall</i> Date: <i>10/27/21</i> Time: <i>1700</i>					
Relinquished by: <i>Lee</i> Date: <i>10/28/21</i> Time: <i>1039</i>					
Relinquished by: _____ Date: _____ Time: _____					
Custody Seal No. <i>10</i> IR ID: <i>HOU-223</i>					

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2361-1

Login Number: 2361

List Source: Eurofins Xenco, Lubbock

List Number: 1

Creator: Lee, Randell

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

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-2361-1

Login Number: 2361

List Source: Eurofins Xenco, Stafford

List Number: 2

List Creation: 10/28/21 01:46 PM

Creator: Palmar, Pedro

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

APPENDIX E – TERRACON STANDARD OF CARE, LIMITATION, AND RELIANCE

Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, Spur Energy Partners LLC, as reflected in our proposal (PAR217001).

Additional Scope Limitations

The development of this RAP is based upon information provided by the Client and Terracon's remediation and construction services line. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by the Client. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

Reliance

This report has been prepared for the exclusive use of Spur Energy Partners, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Spur Energy Partners and Terracon. Any unauthorized distribution or reuse is at Spur Energy Partner's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Spur Energy Partners and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Spur Energy Partners and all relying parties unless otherwise agreed in writing.

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 69853

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 69853
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Bore hole requested in the area of sample point T-4. Bore required to depth of water with soil samples taken every 5 feet intervals until 30 foot. Samples past 30ft sample interval will increase to every 10ft.	3/11/2022
chensley	Set bore with PVC, 20 foot mesh screen will be placed, 10 ft above water zone and 10 ft below.	3/11/2022
chensley	Fully delineate impacted area to table one 100 ft or greater.	3/11/2022
chensley	Confirmation composite sample size not to exceed 500 sq/ft.	3/11/2022
chensley	Test groundwater for TDS, cation, and anions, chloride specific.	3/11/2022
chensley	NOTE: The OCD requires a copy of all correspondence relative to remedial projects be included in all proposal and/or final closure reports. Correspondence required to be included in reports may include, but not necessarily limited to, extension requests, liner inspection notifications, sample event notifications, spill/release/fire notifications, and variance requests. This will allow for notifications and requests to become a documented part of the incident file.	3/11/2022
chensley	Remediation\ Closure report due 06/23/2022	3/11/2022