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.

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Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
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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 not 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: Joseph Guesnier Title: Staff Scientist

Signature: Date: 4/12/2021

email: jrguesnier@terracon.com Telephone: 806-544-9276

OCD Only

Received by: Date:

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State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility 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.

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Page 4

State of New Mexico
Oil Conservation Division

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

Printed Name: Joseph Guednier Title: Staff Scientist

Signature: Date: 12-29-21

email: JGuednier@Tetratech.com Telephone: 806-544-9276

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Joseph Gwenier Title: Staff Scientist

Signature: Date: 12-29-22

email: JRGwenier@Terralon.com Telephone: 806-544-9276

OCD Only

Received by: Date:

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

Signature: Date:

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Katherine Purvis Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range 29E
NMOCD Reference # nAPP2110253617
Terracon Project # AR217001

Attn: New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

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

To Whom It May Concern:

Terracon Consultants, Inc. (Terracon) is pleased to submit our Closure Report for the site referenced above. The Closure Report was 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 Terracon's release investigation assessment and the execution of the NMOCD-approved Remediation Action Plan (RAP), Terracon recommends closing the incident number nAPP2110253617, based on the below actions that were taken to achieve the protection of fresh water and the environment in accordance with NMOCD regulations. Terracon developed the Closure Report in general accordance with our scope of work (AR217001) dated December 23, 2020.

Action Items

Completed Actions

1) Vertical and Horizontal delineation was completed to determine the total area (ft^2) of impacts. Several sampling events took place to delineate the site, utilizing hand augers, a backhoe, and an air rotary drill rig.
2) Soil samples collected from the delineation activities were submitted to an approved Lab to determine levels of impact vertically and horizontally.
3) All conditions needed for approval of our remedial action plan (RAP) were met and approved on December 29, 2021.
4) Variances granted in the RAP approval were as follows: All confirmation samples were collected every 500 ft^2 as approved in the NMOCD RAP approval dated December 29, 2021, and the liner was deemed unwarranted following the completed vertical soil delineation.
5) Excavation of the impacted soils was completed with the intent to remove soils that exhibited concentrations above the NMOCD remediation action level (RAL), as determined by the Closure Criteria set by NMOCD.
6) All soil stockpiles on site were placed on plastic and bermed around the edges to reduce loss.
7) All Maps and associated data have been provided for approval.

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110253617
Terracon Project # AR217001

8) Remedial activities were terminated when all confirmation samples were collected, and laboratory analysis confirmed all constituents were below the NMOCD RALs for Oil and Gas impacted soils. The approximate depth of the excavation ranged from 4 ft to 5 ft below grade surface (bgs).

Anticipated Actions

1) Following the approval of the closure report by the NMOCD, all areas of the excavation activities have been backfilled, brought to the surrounding grade, and reseeded.
2) Closure approval by the NMOCD.

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

Sincerely,
Terracon Consultants, Inc.

Joseph Guesnier
Senior Staff Scientist
Office Manager - Carlsbad

Erin Loyd, P.G. (TX)
Senior Principal
Office Manager – Lubbock

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Section 6 – Conclusion and Closure Request 6

Attachments:

Appendix A – Exhibits
Exhibit 1 – Topographic Map
Exhibit 2 – Site Location Map
Exhibit 3 – Initial Site Investigation Map
Exhibit 4 – Confirmation Soil Sampling Map
Exhibit 5 – Terracon Boring Log
Exhibit 6 – Cave Karst
Appendix B – Tables, Procedures, and Figures
Table 1 – Closure Criteria for Soils Impacted by a release
Table 2 – Soil Sample Analytical Results
A**ppendix C – Photographic Log**
Appendix D – Analytical Report and Chain of Custody
Appendix E – NMOCD Communication
Appendix F – Terracon Standard of Care, Limitation, and Reliance

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110213617
Terracon Project # AR217001

Section 1 – Incident Information

The following table provides detailed information regarding the June 29, 2018, natural gas site in Eddy County, New Mexico:

Required Information	Site and Release information	
Responsible party	The facility was operated by Spur Energy Partners, LLC.	
Local contact	Contact: Mr. Braidy Moulder	P: (713)264-2517 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 23rd, 2020. Incident number NMAP1825641927 was assigned to the release. This was submitted under the Spur OGRID number.	
Time of incident	December 23rd, 2020, discovered at 10:00 am.	
Discharge event	The cause of the brine leak is unknown and was discovered seeping to the surface by aerial investigation services.	
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.	
Quantity of spilled material	Total Fluids: 100,500 bbls	Recovered: 100,000 bbls
Immediate corrective actions	Brine water was recovered utilizing vac trucks and pumps to fill roll-off containers. A backhoe was utilized to expose the source of the seep, and no source was discovered.	

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110213617
Terracon Project # AR217001

Section 2 – General Site Characteristics

Physical Characteristic	Site Ranking Characteristics
Groundwater **NMOSE POD Location Map** Terracon Boring Log – (Exhibit 5 in Appendix A)	Well ID: B-1 Depth to Groundwater: 132 ft. bgs Total Depth: 152 ft. bgs. Date Drilled: 6/17/2020
	Groundwater Quality: Surrounding groundwater quality at the site is predominately used for livestock production and is being utilized for sanitary purposes in conjunction with commercial use.
Surface Water	Lake McMillan (South-eastern Eddy County, NM) is approximately 7.5 miles to the southwest.
Site Characteristics Topographic Map – (Exhibit 1 in Appendix A)	Relatively flat with drainage following native ground surface; very gently sloping to the Southeast.
Soil Characteristics	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 loam. 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.
Karst Characterization Cave Karst Public UCP Map – (Exhibit 8 in Appendix A)	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 rea.

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110213617
Terracon Project # AR217001

Section 3 – 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, on 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 detailed below the applicability of these guidance documents to the site-specific characteristics associated with the State I #16 Brine Seep site.

Section 3.1 – 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

Section 3.2 – 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 Limits
Chloride	20,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110213617
Terracon Project # AR217001

Section 4 – Remediation Activities

On April 1st, 2021, Terracon mobilized to the site and collected 25 samples ranging from the surface level down to 5 ft. bgs. that were all run for BTEX, TPH, and Chlorides.

On May 3rd, 2021, Terracon mobilized back onto the site and dug trenches on site down to 14 ft. bgs. and collected an additional total of 40 samples that were analyzed for BTEX, TPH, and Chlorides. Two additional samples were collected on May 21st, 2021 at a depth of 14-15 ft. bgs. and 15-16 ft. bgs. and were analyzed for Chlorides.

On October 5th, 2021, Terracon returned to the site to reassess the release to determine any potential natural attenuation. A staff scientist collected 33 sub-surface samples at a depth of 0.5–1 ft. bgs. and all samples were analyzed for BTEX, TPH, and Chlorides.

On October 26th, 2021, additional sampling was completed. A total of 18 samples were collected at depths ranging from 2-4 ft. bgs. All samples were analyzed for BTEX, TPH, and Chlorides.

On June 17th, 2022, Terracon was back on-site to vertically delineate chloride impacts and oversee the installation of the soil boring to assess groundwater depth at the site. A total of 19 samples were collected ranging from the surface to 150 ft. bgs. All samples were analyzed for chlorides while 5 samples were also analyzed for both BTEX and TPH. (WB-1(0’), WB-1(9’-10’), WB-1(19’-20’), WB-1(29’-30’), WB-1(49’-50’)). Additionally, 72 hours after the installation of the well, water was measured at 132 ft. bgs.

From October 24th through December 5th, 2022, Terracon mobilized to the site to conduct remedial efforts and sampling of the areas that had been excavated. A total of 59 confirmation composite samples were collected and analyzed for BTEX, TPH, and Chlorides.

Section 5 – Analytical Results

The samples collected from April 1st, 2021, all came back below NMOCD action levels for BTEX and TPH. The chloride detections ranged from 8.41 mg/kg (BG2-3 1.5’-2.0’) up to 71,900 mg/kg (HA-2 0’-0.5’). For chlorides, 15 were above the NMOCD action levels, HA5-1, HA5-2, HA5-3, HA4-1, HA4-2, HA4-3, HA3-1, HA3-2, HA3-3, HA3-4, HA2-1, HA2-2, HA2-3, HA1-4, HA1-5.

From the combined 42 samples collected on May 3rd, 2021, and May 21st, 2021, none came back above NMOCD action levels for TPH or for Total BTEX. For Chlorides, 11 were above NMOCD action levels, T-3(6’), T-4(6’), T-4(8’), T-4(10’), T-4(12’), T-4(14’), T-7(6’), T-7(10’), T-8(6’), T-8(8’), T-8(10’), ranging from 22,500 (T-4 8’) to 27,300 (T-7 6’).

Spur Energy Partners LLC
State I #16 Brine Seep
Unit: M, Section: 28 Township: 17S Range: 29E
NMOCD Reference # nAPP2110213617
Terracon Project # AR217001

The 33 soil samples from 1 ft. bgs, taken on October 5th, 2021, all tested below NMOCD action levels for BTEX and TPH. For chlorides, 6 samples, A5, B4, B5, C5, D4, D6, were above NMOCD action limits ranging from 1,150 (C5 1') to 6,540 (D6 1').

The samples collected on October 26th, 2021; all came back below NMOCD action levels for BTEX. For TPH, sample A5(1.5-2) came out at 143 mg/kg which fell above the NMOCD action levels. For chlorides, 15 of the samples, B-4(1.5-2), B-4(2.5-3), B-4(3.5-4), A-5(1.5-2), A-5(2.5-3), A-5(3.5-4), B-5(1.5-2), B-5(2.5-3), B-5(3.5-4), D-4(1.5-2), D-4(2.5-3), D-4(3.5-4), C-5(1.5-2), C-5(2.5-3), C-5(3.5-4) were above NMOCD action levels ranging from sample A-5 (3.5'-4') at 1,220 mg/kg to sample A-5 (2.5'-3') at 41,700 mg/kg.

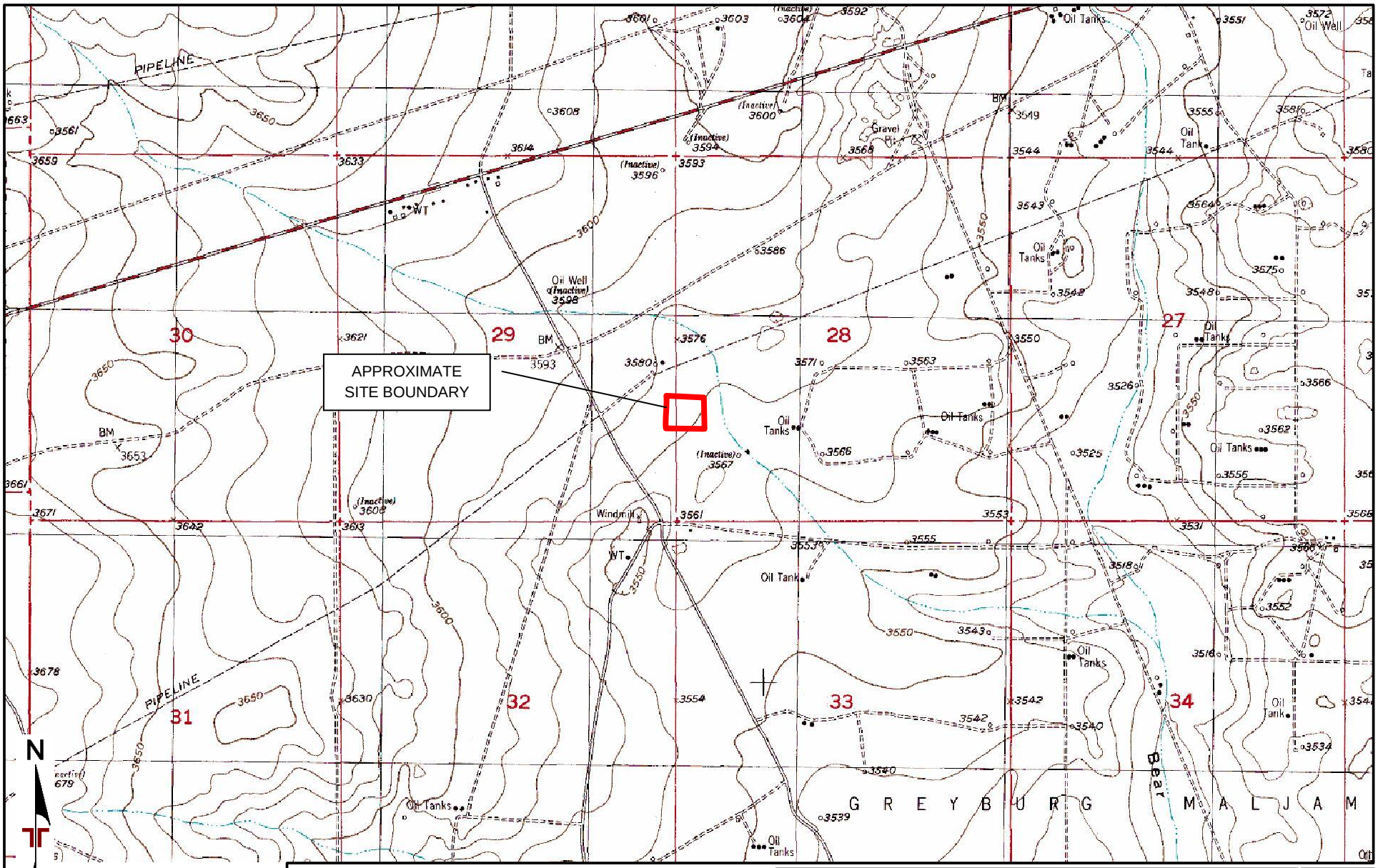
On June 17th, 2022, 17 samples were collected during the well installation. Of the 5 samples that were run for BTEX and TPH, all 5 were below NMOCD action levels. For chlorides, one sample, WB-1(0'), was above NMOCD action levels at 934 mg/kg.

Terracon personnel sampled on 7 different days throughout October, November, and December for a combined total of 59 composite samples. All samples were under the NMOCD remediation action levels for BTEX, TPH, and Chlorides.

Section 6 – Conclusion and Closure Request

Based on the review of the above remedial completion analytical results, petroleum hydrocarbon constituents (BTEX/TPH) were not detected at concentrations above applicable NMOCD Reclamation and/or Remediation Action Limits. None of the soil samples analyzed for chlorides exceeded the NMOCD Remediation Action Limits for the confirmation sidewall or floor samples. Consistent with these findings Terracon and Spur respectfully request closure of Incident: nAPP2110253617.

APPENDIX A – EXHIBITS



TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: RED LAKE SE, NM (1/1/1955).

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager:	Guesnier
Drawn by:	Austin Worley
Checked by:	Joseph Guesnier
Approved by:	Joseph Guesnier

Project No.	AR217001
Scale:	1"=2,000'
File Name:	Exhibit 1
Date:	2-15-23

Terracon

5847 50th Street

Lubbock, Texas 79424

TOPOGRAPHIC MAP

State I 16

32.80166°, -104.08769°

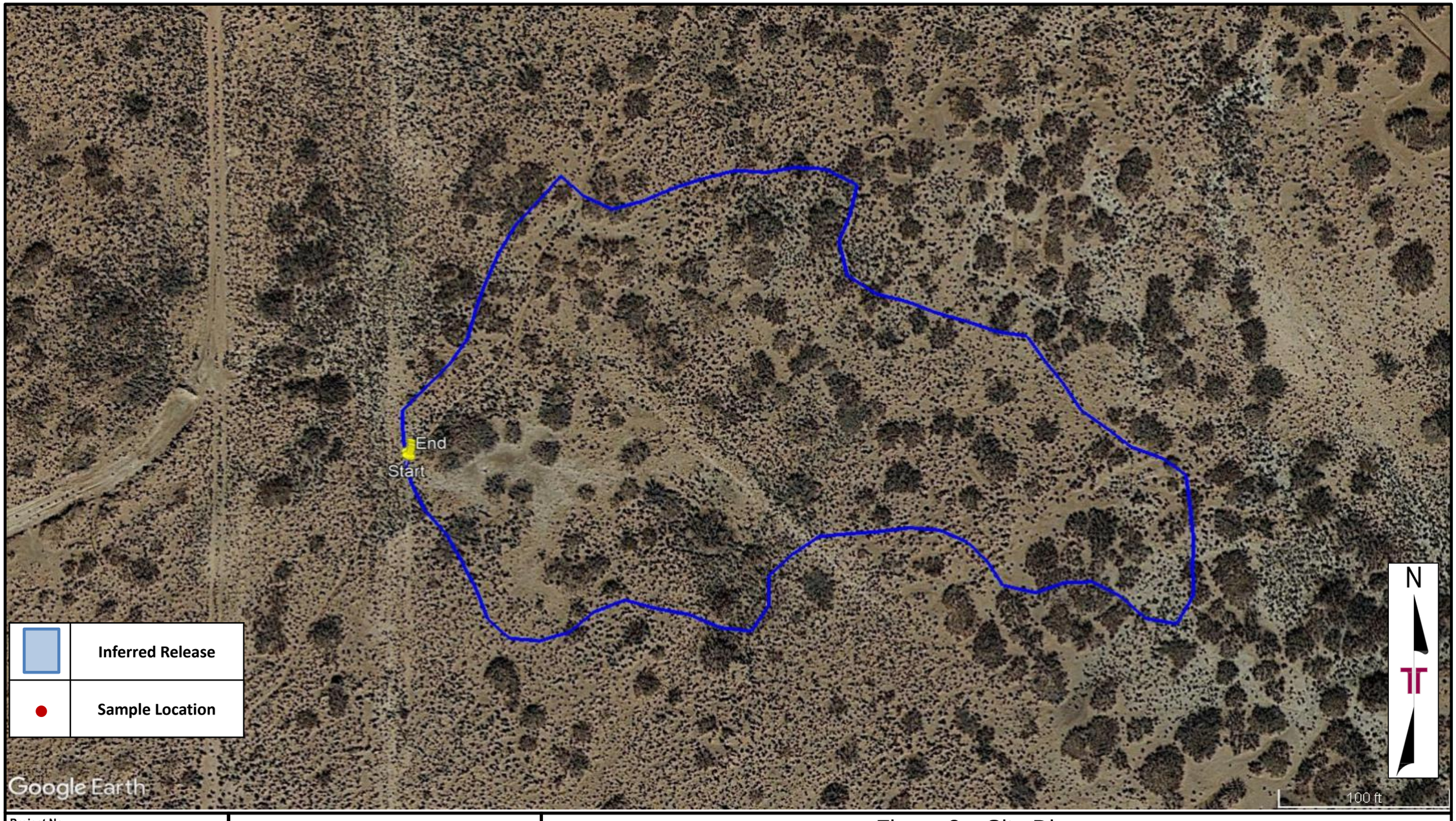
Eddy County, New Mexico

Exhibit

1

Project No. AR217001	Terracon	Site Map	Exhibit
Scale: As Shown		State I 16	2
Source: Google Earth		32.80166°, -104.08769°	
Date: 5/6/2020		Eddy County, New Mexico	

5847 50th St. Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

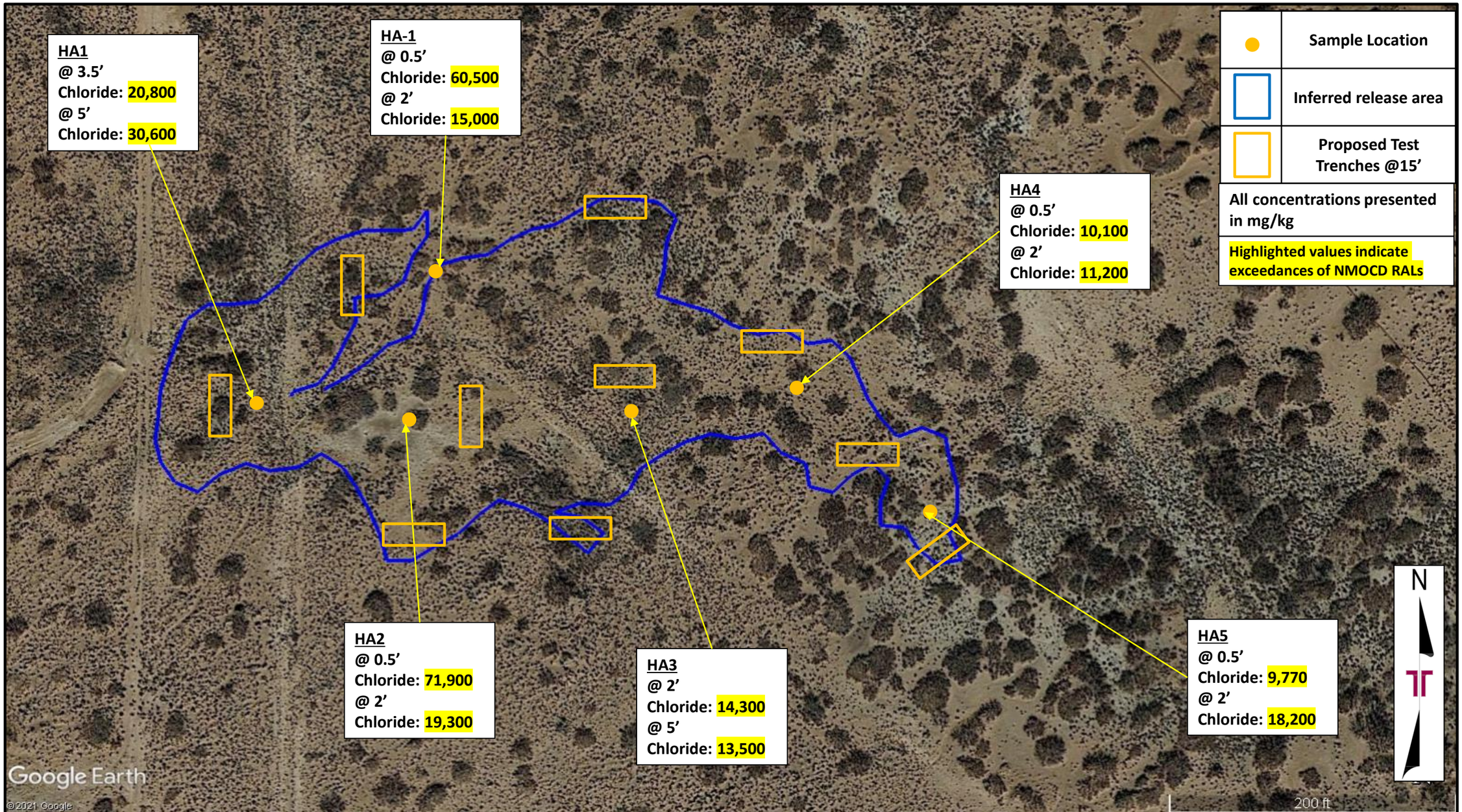


Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	01/31/2020

Terracon
Consulting Engineers & Scientists
5847 50th St. Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

Figure 2 – Site Diagram

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



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	11/02/2017

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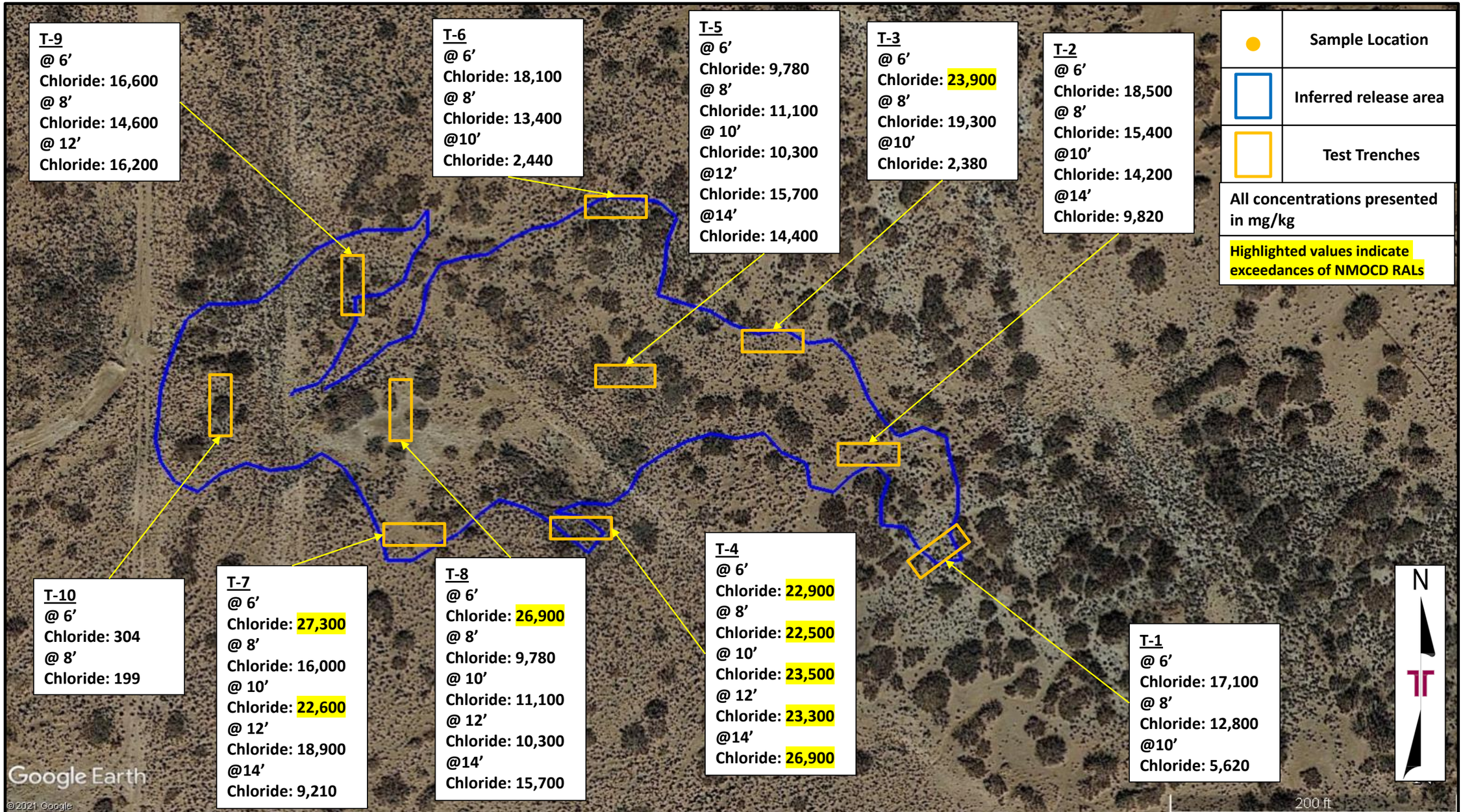
Figure 3 - Initial Site Investigation Map

State I 16 (Brine Seep)
32.801667°, -104.088134°
Eddy County, New Mexico



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	11/02/2017

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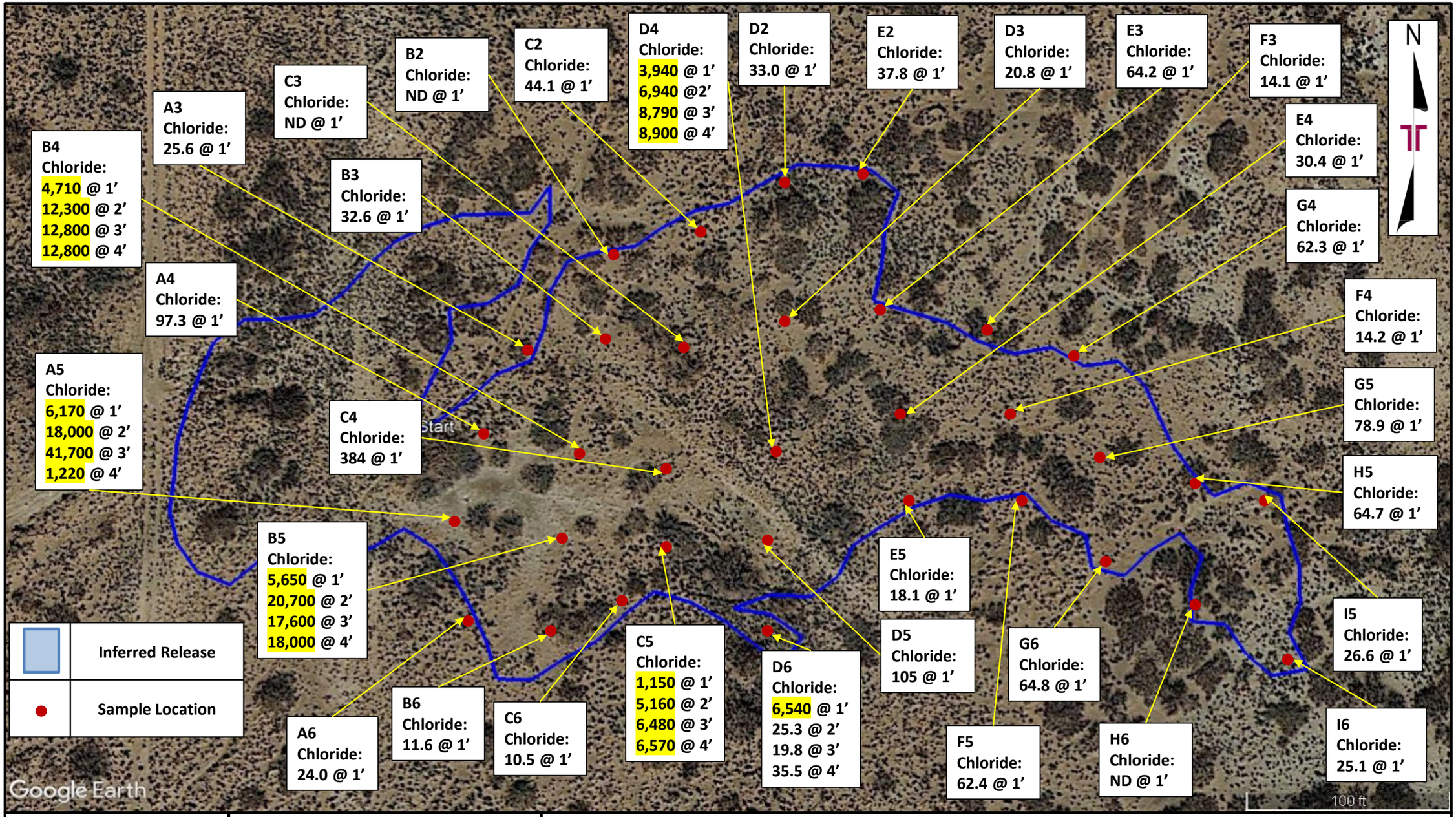
Figure 4 - Trenching Site Investigation Map

State I 16 (Brine Seep)
32.801667°, -104.088134°
Eddy County, New Mexico



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	01/31/2020

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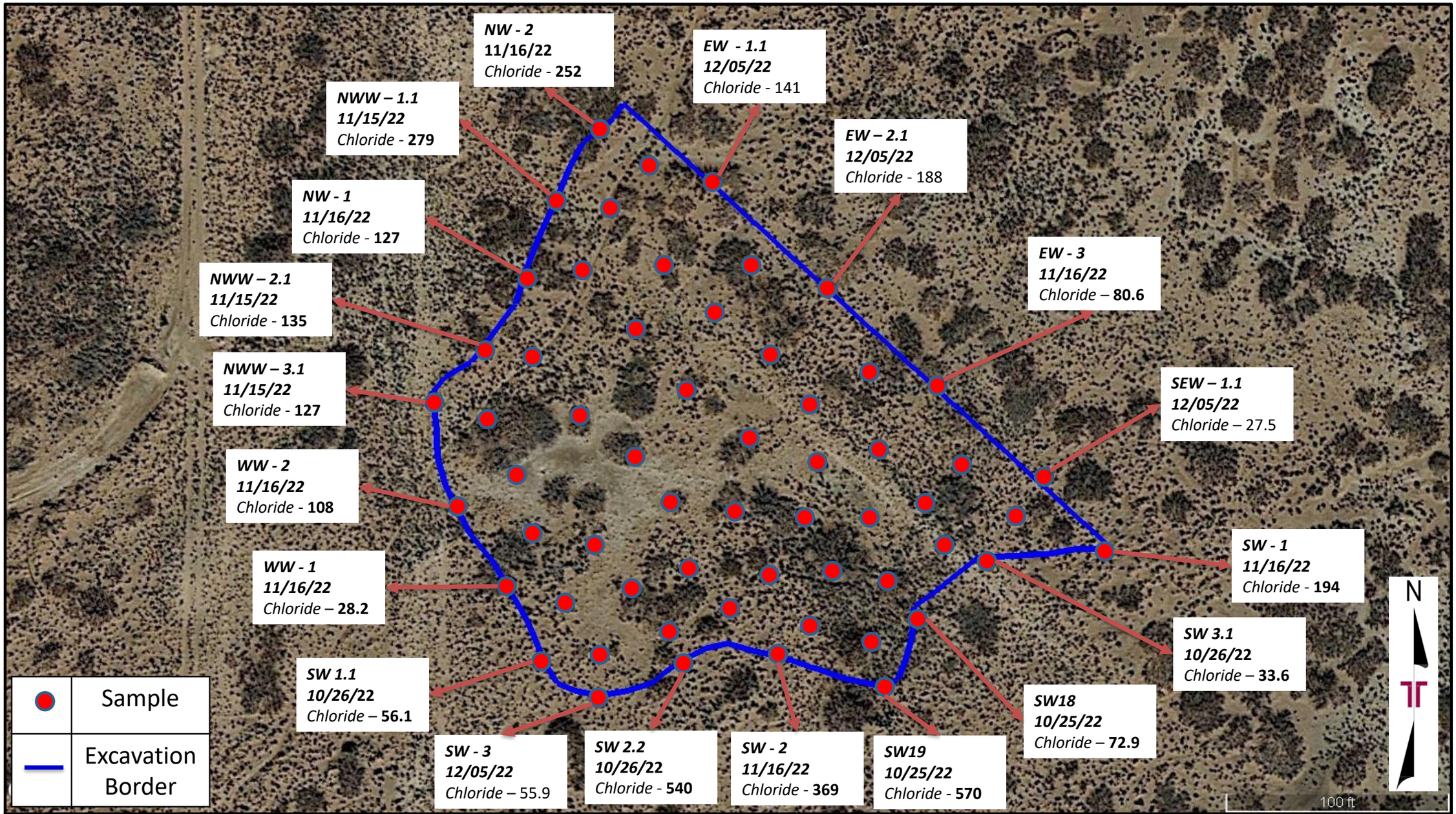
Figure 5 – Supplemental Investigation Map

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



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	5/6/2020

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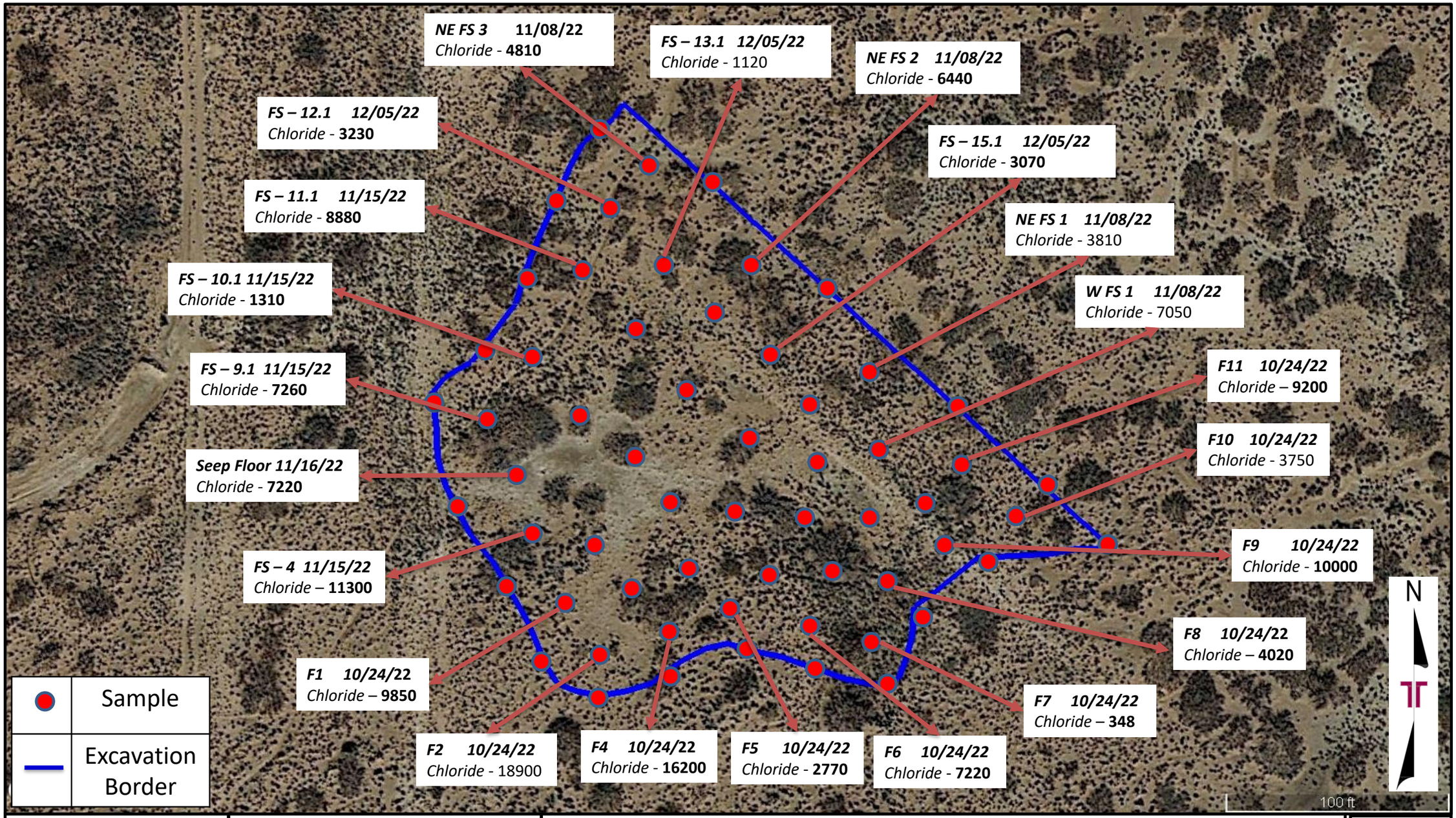
Confirmation Soil Sampling Map (WALL)

State I 16
32.80166°, -104.08769°
Eddy County, New Mexico

Exhibit 4



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	5/6/2020

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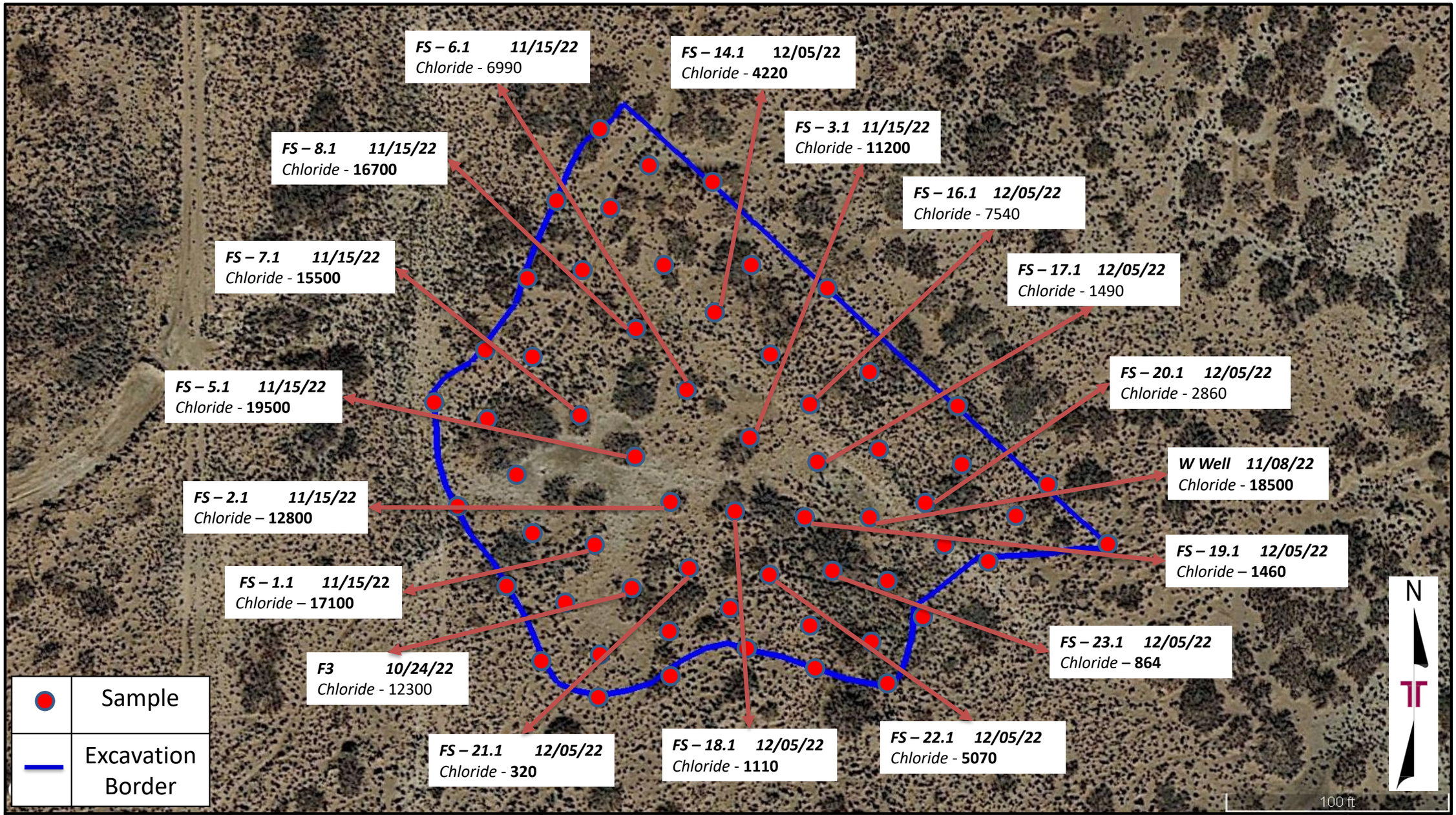
Confirmation Soil Sampling Map (FLOOR pt.1)

State I 16
32.80166°, -104.08769°
Eddy County, New Mexico

Exhibit 4



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	5/6/2020

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Confirmation Soil Sampling Map (FLOOR pt. 2)

State I 16
32.80166°, -104.08769°
Eddy County, New Mexico

Exhibit 4

SOIL BORING / MONITORING WELL LOG

PROJECT:	State I #16	**DRILLING COMPANY:**	HCI
PROJECT NUMBER:	AR207106	**DRILLER:**	Kenny Cooper
CLIENT:	Spur Energy Partners	**DRILLING METHOD:**	Air Rotary
BORING/WELL NUMBER:	B-1	**BORE HOLE DIAMETER:**	4"
TOTAL DEPTH:	152'	**SCREEN:**	0.1"
CASING:	PVC	**CASING:**	2"
PERSONNEL:	J. Guesnier	**DATE DRILLED:**	6/17/2020

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
0			0		X	X	brownish red, sand, dry, no odor	0
					X	X	pale orangish brown, clayey sand, moist, NO	
							light redish orange, sand with calcareous	
10			0		X	X	orangish brown, clayey sand w/ calcareous	10
							nodules, moist, chlorine odor	
					X	X	orangish brown, clayey sand w/calcareous	
							nodules, moist, chlorine odor	
20			0		X	X		20
					X	X	redish brown, clayey sand w/calcareous nodules,	
							moist, no odor	
30			0		X	X	dark redish brown, clayey sand w/calcareous	30
							nodules, moist clorine odor	
40			0		X	X	dark redish brown, clayey sand, moist, no odor	40
50			0		X	X	redish brown,, clayey sand, moist, no odor	50
60			0		X	X	redish orange, clayey sand w/calcareous	60
							nodules, moist, no odor	
70			0		X	X		70

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.

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SOIL BORING / MONITORING WELL LOG

PROJECT:	State I #16	**DRILLING COMPANY:**	HCI
PROJECT NUMBER:	AR207106	**DRILLER:**	Kenny Cooper
CLIENT:	Spur Energy Partners	**DRILLING METHOD:**	Air Rotary
BORING/WELL NUMBER:	B-1	**BORE HOLE DIAMETER:**	4"
TOTAL DEPTH:	152'	**SCREEN:**	0.1"
CASING:	PVC	**CASING:**	2"
PERSONNEL:	J. Guesnier	**DATE DRILLED:**	6/17/2020

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
80			0		X	X	clayey sand, pale orangish brown, moist, NO	80
90			0		X	X	clayey sand, pale orangish brown, moist, NO	90
100			0		X	X	clayey sand, pale orangish brown, moist, NO	100
110			0		X	X	sand w/caliche, pale pinkish white, moist, NO	110
120			0		X	X	sand w/caliche, pale pinkish white, moist, NO	120
130			0		X	X	sand w/caliche, pale pinkish white, moist, NO	130
							Water Level @ 132' (6/17/2022)	
140			0		X	X	sand w/caliche, pale pinkish white, moist, NO	140
150			0		X	X	sand w/caliche, pale grayish brown, moist, NO	150

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.

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SOIL BORING / MONITORING WELL LOG

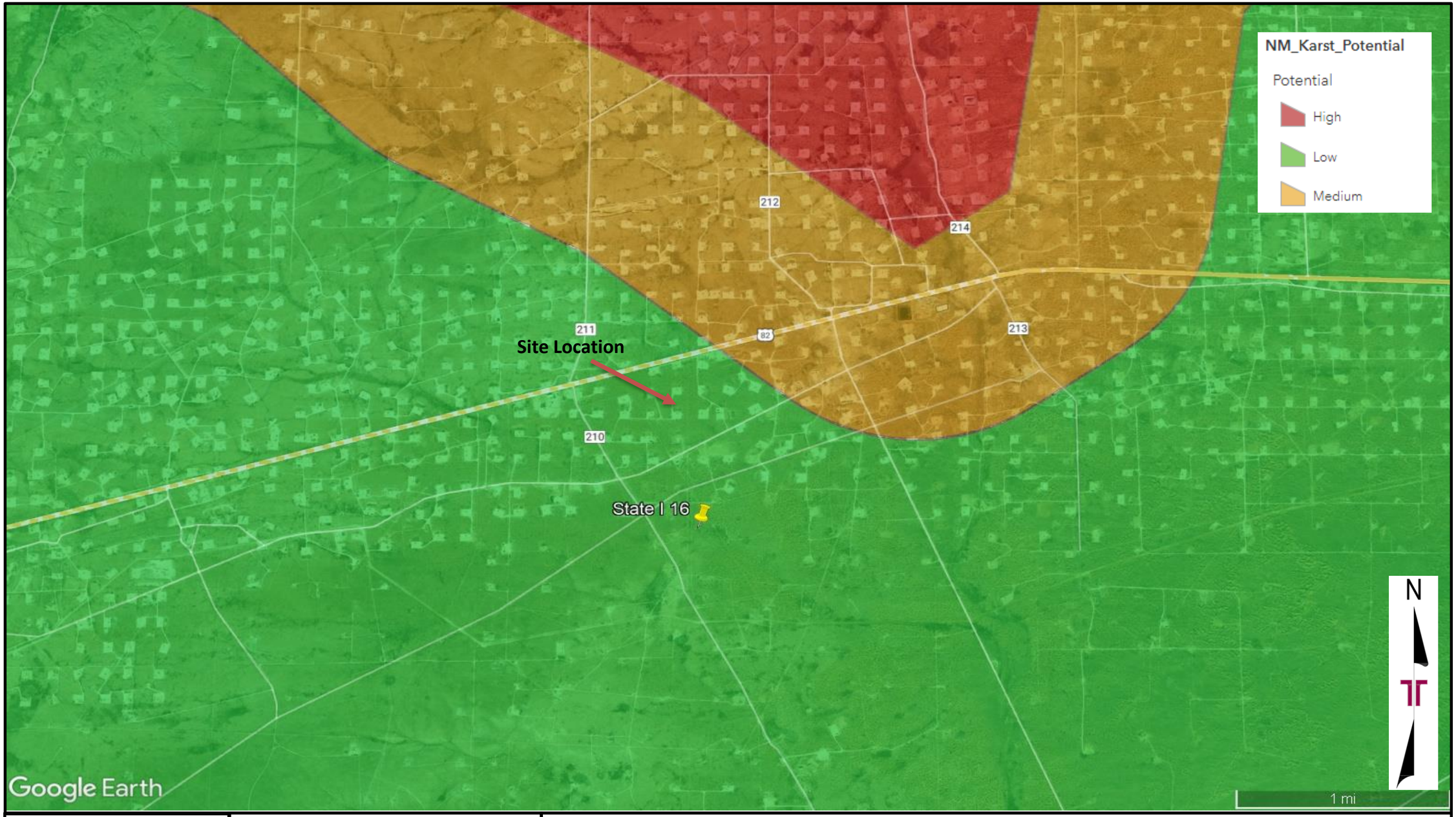
PROJECT:	State I #16	**DRILLING COMPANY:**	HCI
PROJECT NUMBER:	AR217001	**DRILLER:**	Kenny Cooper
CLIENT:	Spur Energy Partners	**DRILLING METHOD:**	Air Rotary
BORING/WELL NUMBER:	B-1	**BORE HOLE DIAMETER:**	4"
TOTAL DEPTH:	152'	**SCREEN:**	0.1"
CASING:	PVC	**CASING:**	2"
PERSONNEL:	J. Guesnier	**DATE DRILLED:**	6/17/2022

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	DESCRIPTION OF STRATUM	DEPTH (FT)
150								150
			0				sand w/caliche, pale grayish brown, moist, NO	
							BORING TERMINATED @152'	

REMARKS:

THIS LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.

Terracon



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	11/03/2022

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Exhibit 6 – Cave Karst Public UCP Map

State I 16
32.80166°, -104.08769°
Eddy County, New Mexico

APPENDIX B – TABLES, PROCEDURES, AND FIGURES

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 Total BTEX - ND	84.4	ND	ND	ND	ND
	0.5 - 1'	Grab	04/01/21	Benzene - ND Total BTEX - ND	13.8	ND	ND	ND	ND
	1.5-2'	Grab	04/01/21	Benzene - ND Total BTEX - ND	12.8	ND	ND	ND	ND
	3.5 - 4'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**20,800**	65	ND	ND	65
	4.5 - 5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**30,600**	51.4	ND	ND	51.4
HA-2	0 - 0.5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**71,900**	ND	ND	ND	ND
	0.5 - 1'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**23,600**	ND	ND	ND	ND
	1.5-2'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**19,300**	75.1	ND	ND	ND
HA-3	0 - 0.5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**14,600**	52.4	ND	ND	54.7
	0.5 - 1'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**13,000**	54.7	ND	ND	54.7
	1.5-2'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**14,300**	52.9	ND	ND	52.9
	3.5 - 4'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**22,000**	53.5	ND	ND	53.5
	4.5 - 5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	13,500	55	ND	ND	ND
HA-4	0-0.5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**10,100**	71.8	ND	ND	71.8
	0.5 - 1'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**14,700**	ND	ND	ND	ND
	1.5 - 2'	Grab	04/01/21	Benzene - ND Total BTEX - ND	**11,200**	54.3	ND	ND	ND
Release Margin Samples									
HA-5	0-0.5'	Composite	04/01/21	Benzene - ND Total BTEX - ND	**9,770**	ND	ND	ND	ND
	0.5 - 1'	Composite	04/01/21	Benzene - ND Total BTEX - ND	**10,900**	ND	ND	ND	ND
	1.5-2'	Composite	04/01/21	Benzene - ND Total BTEX - ND	**18,200**	ND	ND	ND	ND
HA-1 (0-0.5)	0-0.5'	Composite	01/06/21	Benzene - ND Total BTEX - ND	**60,500**	ND	ND	ND	ND
HA-1 (1.5-2)	1.5 - 2'	Composite	01/06/21	Benzene - ND Total BTEX - ND	**15,000**	ND	154	51.6	**206**
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 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-1	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	17,100	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	12,800	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	5,620	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	7,650	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	5,620	ND	ND	ND	ND
T-2	6'	Grab	05/03/21	Benzene - 0.00261 Total BTEX - 0.00261	18,500	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	15,400	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	14,200	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	9,820	ND	ND	ND	ND
T-3	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**23,900**	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	19,300	ND	ND	ND	ND
T-3	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	2,380	ND	ND	ND	ND
T-4	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**22,900**	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**22,500**	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**23,500**	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**23,300**	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**26,900**	ND	ND	ND	ND
T-5	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	9,780	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	11,100	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	10,300	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	15,700	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	14,400	ND	ND	ND	ND
T-6	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	18,100	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	13,400	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	2,440	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 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 Total BTEX - ND	**27,300**	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	16,000	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**22,600**	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	18,900	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	9,210	ND	ND	ND	ND
T-8	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	**26,900**	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	9,780	ND	ND	ND	ND
	10'	Grab	05/03/21	Benzene - ND Total BTEX - ND	11,100	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	10,300	ND	ND	ND	ND
	14'	Grab	05/03/21	Benzene - ND Total BTEX - ND	15,700	ND	ND	ND	ND
T-9	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	16,600	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	14,600	ND	ND	ND	ND
	12'	Grab	05/03/21	Benzene - ND Total BTEX - ND	16,200	ND	ND	ND	ND
T-10	6'	Grab	05/03/21	Benzene - ND Total BTEX - ND	304	ND	ND	ND	ND
	8'	Grab	05/03/21	Benzene - ND Total BTEX - ND	199	ND	ND	ND	ND
Geoprobe Samples									
GP-1	14'-15'	Grab	05/21/21	Benzene - ND Total BTEX - ND	9.52	ND	ND	ND	ND
	15'-16'	Grab	05/21/21	Benzene - ND Total BTEX - ND	ND	ND	ND	ND	ND
Background Samples									
BG1-1	0-0.5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	49.0	ND	ND	ND	ND
BG1-2	0.5-1.0'	Grab	04/01/21	Benzene - ND Total BTEX - ND	ND	ND	ND	ND	ND
BG1-3	1.5-2.0'	Grab	04/01/21	Benzene - ND Total BTEX - ND	9.67	ND	ND	ND	ND
BG2-1	0-0.5'	Grab	04/01/21	Benzene - ND Total BTEX - ND	109	ND	ND	ND	ND
BG2-2	0.5-1.0'	Grab	04/01/21	Benzene - 0.00376 Total BTEX - 0.00577	9.05	ND	ND	ND	ND
BG2-3	1.5-2.0'	Grab	04/01/21	Benzene - ND Total BTEX - ND	8.41	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 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
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
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 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
Supplemental Investigation									
B-4 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**12,300**	ND	ND	ND	ND
B-4 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**12,800**	ND	ND	ND	ND
B-4 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**12,800**	ND	ND	ND	ND
A-5 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**18,000**	**143**	ND	ND	**143**
A-5 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**41,700**	ND	ND	ND	ND
A-5 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**1,220**	ND	ND	ND	ND
B-5 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**20,700**	ND	ND	ND	ND
B-5 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**17,600**	ND	ND	ND	ND
B-5 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**18,000**	ND	ND	ND	ND
D-4 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**6,940**	ND	ND	ND	ND
D-4 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**8,790**	ND	ND	ND	ND
D-4 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**8,900**	ND	ND	ND	ND
D-6 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	25.3	ND	ND	ND	ND
D-6 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	19.8	ND	ND	ND	ND
D-6 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	35.5	ND	ND	ND	ND
C-5 (1.5-2)	2'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**5,160**	ND	ND	ND	ND
C-5 (2.5-3)	3'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**6,480**	ND	ND	ND	ND
C-5 (3.5-4)	4'	Grab	10/26/21	Benzene - ND Total BTEX - ND	**6,570**	ND	ND	ND	ND
Well Boring Investigation									
WB-1 (0')	0'	Grab	06/17/22	Benzene - ND Total BTEX - ND	**934**	ND	ND	ND	ND
WB-1 (4-5)	4' - 5'	Grab	06/17/22	Benzene - NA Total BTEX - NA	967	NA	NA	NA	NA
WB-1 (9-10)	9' - 10'	Grab	06/17/22	Benzene - ND Total BTEX - ND	7,480	ND	ND	ND	ND
WB-1 (14-15)	14' - 15'	Grab	06/17/22	Benzene - NA Total BTEX - NA	7,640	NA	NA	NA	NA
WB-1 (19-20)	19' - 20'	Grab	06/17/22	Benzene - ND Total BTEX - ND	1,460	ND	ND	ND	ND
WB-1 (24-25)	24' - 25'	Grab	06/17/22	Benzene - NA Total BTEX - NA	5,840	NA	NA	NA	NA
WB-1 (29-30)	29' - 30'	Grab	06/17/22	Benzene - ND Total BTEX - ND	8,240	ND	ND	ND	ND
WB-1 (39-40)	39' - 40'	Grab	06/17/22	Benzene - NA Total BTEX - NA	1,240	NA	NA	NA	NA
WB-1 (49-50)	49' - 50'	Grab	06/17/22	Benzene - ND Total BTEX - ND	248	ND	ND	ND	ND
WB-1 (59-60)	59' - 60'	Grab	06/17/22	Benzene - NA Total BTEX - NA	305	NA	NA	NA	NA
WB-1 (69-70)	69' - 70'	Grab	06/17/22	Benzene - NA Total BTEX - NA	259	NA	NA	NA	NA
WB-1 (79-80)	79' - 80'	Grab	06/17/22	Benzene - NA Total BTEX - NA	75.6	NA	NA	NA	NA
WB-1 (89-90)	89' - 90'	Grab	06/17/22	Benzene - NA Total BTEX - NA	44.4	NA	NA	NA	NA
WB-1 (99-100)	99' - 100'	Grab	06/17/22	Benzene - NA Total BTEX - NA	67.6	NA	NA	NA	NA
WB-1 (109-110)	109' - 110'	Grab	06/17/22	Benzene - NA Total BTEX - NA	434	NA	NA	NA	NA
WB-1 (119-120)	119' - 120'	Grab	06/17/22	Benzene - NA Total BTEX - NA	268	NA	NA	NA	NA
WB-1 (129-130)	129' - 130'	Grab	06/17/22	Benzene - NA Total BTEX - NA	205	NA	NA	NA	NA
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 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 16
Terracon Project No. AR217001

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Soil Status	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)		
							GRO	DRO	EXT DRO
Confirmation Samples									
F1	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	9850	ND	ND	ND
F2	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	18900	ND	ND	ND
F3	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	12300	ND	ND	ND
F4	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	16200	ND	ND	ND
F5	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	2770	ND	ND	ND
F6	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	7220	ND	ND	ND
F7	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	348	ND	ND	ND
F8	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	4020	ND	ND	ND
F9	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	10000	ND	ND	ND
F10	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	3750	ND	ND	ND
F11	5'	Comp	In-Situ	10/24/22	Benzene - ND Total BTEX - ND	9200	ND	ND	ND
SW18	0'-5'	Comp	In-Situ	10/25/22	Benzene - ND Total BTEX - ND	72.9	ND	ND	ND
SW19	0'-5'	Comp	In-Situ	10/25/22	Benzene - ND Total BTEX - ND	570	ND	ND	ND
SW 1.1	0'-5'	Comp	In-Situ	10/26/22	Benzene - ND Total BTEX - ND	56.1	ND	ND	ND
SW 2.2	0'-5'	Comp	In-Situ	10/26/22	Benzene - ND Total BTEX - ND	540	ND	ND	ND
SW 3.1	0'-5'	Comp	In-Situ	10/26/22	Benzene - ND Total BTEX - ND	33.6	ND	ND	ND
NE FS 1	4'-5'	Comp	In-Situ	11/08/22	Benzene - ND Total BTEX - ND	3810	ND	ND	ND
NE FS 2	4'-5'	Comp	In-Situ	11/08/22	Benzene - ND Total BTEX - ND	6440	ND	ND	ND
NE FS 3	4'-5'	Comp	In-Situ	11/08/22	Benzene - ND Total BTEX - ND	4810	59.4	ND	ND
W FS 1	4'-5'	Comp	In-Situ	11/08/22	Benzene - ND Total BTEX - ND	7050	50.9	ND	ND
W Well	4'-5'	Comp	In-Situ	11/08/22	Benzene - ND Total BTEX - ND	18500	ND	ND	ND
FS - 1.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	17100	ND	ND	77.6
FS - 2.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	12800	ND	ND	ND
FS - 3.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	11200	ND	ND	ND
FS - 4.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	11300	ND	ND	ND
FS - 5.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	19500	ND	ND	ND
FS - 6.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	6990	ND	ND	ND
FS - 7.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	15500	ND	ND	ND
FS - 8.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	16700	ND	ND	ND
FS - 9.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	7260	ND	ND	ND
FS - 10.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	1310	ND	ND	ND
FS - 11.1	4'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	8880	ND	ND	ND
NMOCD Reclamation Standards[4] **(Applicable for Soils from the Surface to 4 ft. Below Grade Surface)**					**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**		**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/MRO)

4. 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

5. New Mexico Oil Conservation Division (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 = Not Applicable

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

TABLE 2

SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
State I 16
Terracon Project No. AR217001

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Soil Status	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)		
							GRO	DRO	EXT DRO
NWW - 1.1	0'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	279	ND	ND	ND
NWW - 2.1	0'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	135	ND	ND	ND
NWW - 3.1	0'-5'	Comp	In-Situ	11/15/22	Benzene - ND Total BTEX - ND	127	ND	ND	ND
WW - 1	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	28.2	ND	ND	ND
WW - 2	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	108	ND	ND	ND
NW - 1	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	127	ND	ND	ND
NW - 2	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	252	ND	ND	ND
EW - 3	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	80.6	ND	ND	ND
SW - 1	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	194	ND	ND	ND
SW - 2	2'-4'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	369	ND	ND	ND
Seep-Floor	4'-4.5'	Comp	In-Situ	11/16/22	Benzene - ND Total BTEX - ND	7220	ND	ND	ND
EW - 1.1	2'-4'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	141	ND	ND	ND
EW - 2.1	2'-4'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	188	ND	ND	ND
SEW - 1.1	2'-4'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	27.5	ND	ND	ND
SW - 3	2'-4'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	55.9	ND	ND	ND
FS - 12.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	3230	ND	ND	ND
FS - 13.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	1120	ND	ND	ND
FS - 14.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	4220	ND	ND	ND
FS - 15.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	3070	ND	ND	ND
FS - 16.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	7540	ND	ND	ND
FS - 17.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	1490	ND	ND	ND
FS - 18.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	1110	ND	ND	ND
FS - 19.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	1460	ND	ND	ND
FS - 20.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	2860	ND	ND	ND
FS - 21.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	320	ND	ND	ND
FS - 22.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	5070	ND	ND	ND
FS - 23.1	4'-5'	Comp	In-Situ	12/05/22	Benzene - ND Total BTEX - ND	864	ND	ND	ND
NMOCD Reclamation Standards[4] (Applicable for Soils from the Surface to 4 ft. Below Grade Surface)					**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**		**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/MRO)

4. 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

5. New Mexico Oil Conservation Division (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 = Not Applicable

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

APPENDIX C – PHOTOGRAPHIC LOG

PHOTO 1: View of seep and sump

PHOTO 2: View of Seep impacts south

PHOTO 3: View of seep impacts east.

PHOTO 4: View of disposal setup at seep.

PHOTO 5: View of seep impacts north.

PHOTO 6: View of seep impacts

PHOTO 7: View of seep and sump

PHOTO 8: View of Seep impacts.

PHOTO 9: View of seep impacts.

PHOTO 10: View of seep impacts.

PHOTO 11: View of seep impacts.

PHOTO 12: View of seep impacts

PHOTO 13: View of seep after it had ceased.

PHOTO 14: View of delineating.

PHOTO 15: View of trenching.

PHOTO 16: View of trenching.

PHOTO 17: View of trenching.

PHOTO 18: View of previous trench.

PHOTO 19: View of site.

PHOTO 20: View of on site well.

PHOTO 21: View of on site well.

PHOTO 22: View of site.

PHOTO 23: View of site.

PHOTO 24: View of site.

PHOTO 25: View of excavation.

PHOTO 26: View of excavation.

PHOTO 27: View of excavation.

PHOTO 28: View of excavation.

PHOTO 29: View of excavation.

APPENDIX D – ANALYTICAL REPORT AND CHAIN OF CUSTODY

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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

JKramer

Authorized for release by:
11/1/2021 5:37:53 PM

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

LINKS

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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.

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).

JKramer

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 Job ID: 820-2361-1
Project/Site: State I 16 AR217001

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.
¤	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 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
Matrix: Solid
Date Collected: 10/26/21 12:45
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
Matrix: Solid
Date Collected: 10/26/21 12:50
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*

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
Matrix: Solid
Date Collected: 10/26/21 12:50
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
Matrix: Solid
Date Collected: 10/26/21 12:55
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

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
Matrix: Solid
Date Collected: 10/26/21 12:55
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
Matrix: Solid
Date Collected: 10/26/21 13:00
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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-2361-1
Project/Site: State I 16 AR217001

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

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
Matrix: Solid
Date Collected: 10/26/21 13:10
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
Matrix: Solid
Date Collected: 10/26/21 13:15
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*

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

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
Matrix: Solid
Date Collected: 10/26/21 13:20
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
Matrix: Solid
Date Collected: 10/26/21 13:25
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

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
Matrix: Solid
Date Collected: 10/26/21 13:25
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
Matrix: Solid
Date Collected: 10/26/21 13:30
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

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
Matrix: Solid
Date Collected: 10/26/21 13:35
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
Matrix: Solid
Date Collected: 10/26/21 13:40
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*

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
Matrix: Solid
Date Collected: 10/26/21 13:40
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
Matrix: Solid
Date Collected: 10/26/21 13:45
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

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
Matrix: Solid

Date Collected: 10/26/21 13:45
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
Matrix: Solid

Date Collected: 10/26/21 13:50
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

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
Matrix: Solid
Date Collected: 10/26/21 13:50
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
Matrix: Solid
Date Collected: 10/26/21 13:55
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

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*

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
Matrix: Solid
Date Collected: 10/26/21 14:05
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
Matrix: Solid
Date Collected: 10/26/21 14:10
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

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)
Date Collected: 10/26/21 14:10
Date Received: 10/27/21 08:36
Sample Depth: 3.5 - 4

Lab Sample ID: 820-2361-18
Matrix: Solid

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**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(56-150)	(68-152)	(53-142)	(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**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(65-130)	(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

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

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*

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*

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*

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		

Surrogate	*LCS %Recovery*	*LCS 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

Surrogate	*LCSD %Recovery*	*LCSD 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		

Surrogate	*MS %Recovery*	*MS 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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*65 - 130*
o-Terphenyl	*94*		*65 - 130*

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*

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

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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28690 — **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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28690 — **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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28748 — **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 — **Client Sample ID: B-4 (1.5-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28748 — **Prep Batch: 28634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	12300		100	12890	4	mg/Kg		608	80 - 120		

Lab Sample ID: 820-2361-1 MSD — **Client Sample ID: B-4 (1.5-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28748 — **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 — **Client Sample ID: D-4 (2.5-3)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28748 — **Prep Batch: 28634**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	8790		100	9647	4	mg/Kg		860	80 - 120		

Lab Sample ID: 820-2361-11 MSD — **Client Sample ID: D-4 (2.5-3)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 28748 — **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

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	

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	

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

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	

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

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
Matrix: Solid
Date Collected: 10/26/21 12:45
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
Matrix: Solid
Date Collected: 10/26/21 12:50
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
Matrix: Solid
Date Collected: 10/26/21 12:55
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
Matrix: Solid
Date Collected: 10/26/21 13:00
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

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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

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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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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

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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

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
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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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Date Received: 10/27/21 08:36

Matrix: Solid

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
Job ID: 820-2361-1
Project/Site: State I 16 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	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

Released to Imaging: 9/12/2023 1:28:29 PM

Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
2361

820-2361 Chain of Custody

IR-4
-8.6 / -8.6F

CHAIN OF CUSTODY RECORD

terracon

Address: 6701 Aberdeen
Lubbock, Texas 79424

Phone:
Contact: J. Guesnier 806-544-9276
SRS #:

Office Location: Lubbock
Project Manager: J. Guesnier
Sampler's Name: J. Guesnier
Sampler's Signature

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 1

Project Number: AR217001
Project Name: State I 16

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8260B)	TPH Extended 8015	Hold	Lab Sample ID
S	10/26/2021	12:45		X	B-4 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	12:50		X	B-4 (2.5-3)	2.5'	3'	X				X	X	X		
S	10/26/2021	12:55		X	B-4 (3.5-4)	3.5'	4'	X				X	X	X		
S	10/26/2021	13:00		X	A-5 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	13:05		X	A-5 (2.5-3)	2.5'	3'	X				X	X	X		
S	10/26/2021	13:10		X	A-5 (3.5-4)	3.5'	4'	X				X	X	X		
S	10/26/2021	13:15		X	B-5 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	13:20		X	B-5 (2.5-3)	2.5'	3'	X				X	X	X		
S	10/26/2021	13:25		X	B-5 (3.5-4)	3.5'	4'	X				X	X	X		
S	10/26/2021	13:30		X	D-4 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	13:35		X	D-4 (2.5-3)	2.5'	3'	X				X	X	X		
S	10/26/2021	13:40		X	D-4 (3.5-4)	3.5'	4'	X				X	X	X		
S	10/26/2021	13:45		X	D-6 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	13:50		X	D-6 (2.5-3)	2.5'	3'	X				X	X	X		
S	10/26/2021	13:55		X	D-6 (3.5-4)	3.5'	4'	X				X	X	X		
S	10/26/2021	14:00		X	C-5 (1.5-2)	1.5'	2'	X				X	X	X		
S	10/26/2021	14:05		X	C-5 (2.5-3)	2.5'	3'	X				X	X	X		
	10/26/2021	14:10		X	C-5 (3.5-4)	3.5'	4'	X				X	X	X		

TAT 10/27/21

TURNAROUND TIME: ☐ Normal ☑ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date: 10-27-21	Time: 5:30	Received by (Signature)	Date: 10/27/21 Time: 0836
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:

NOTES: Client:

e-mail results to:
brett.dennis@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other _____

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2381 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 2
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2361 1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/29/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I 16 AR217001	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	8260C/5035FP_Calc (MOD) BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	Total_BTEX	Special Instructions/Note:
				Preservation Code:								
B-4 (1.5-2) (820-2361-1)	10/26/21	12:45 Central		Solid			X	X	X	X	X	
B-4 (2.5-3) (820-2361-2)	10/26/21	12:50 Central		Solid			X	X	X	X	X	
B-4 (3.5-4) (820-2361-3)	10/26/21	12:55 Central		Solid			X	X	X	X	X	
A-5 (1 5-2) (820-2361-4)	10/26/21	13:00 Central		Solid			X	X	X	X	X	
A-5 (2.5-3) (820-2361-5)	10/26/21	13:05 Central		Solid			X	X	X	X	X	
A-5 (3.5-4) (820-2361-6)	10/26/21	13:10 Central		Solid			X	X	X	X	X	
B-5 (1.5-2) (820-2361-7)	10/26/21	13:15 Central		Solid			X	X	X	X	X	
B-5 (2.5-3) (820-2361-6)	10/26/21	13:20 Central		Solid			X	X	X	X	X	
B-5 (3.5-4) (820-2361-9)	10/26/21	13:25 Central		Solid			X	X	X	X	X	

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Teddy Kendall Lee	10/27/21 1700		FEX		
2	FEX	Date/Time:	Company	Received by:	Date/Time: 10/28/21 1039	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other	Temp. 1.0 IR ID:HOU-223 C/F:+0.0 Corrected Temp: 1.0

Ver: 06/08/2021

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2381.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 2 of 2
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2361-1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/29/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I 16 AR217001	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	Field Filtered Sample (Yes or No)	8260C/5035FP_Calc (MOD) BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	Total_BTEX									Special Instructions/Note:
D-4 (1 5-2) (820-2361-10)	10/26/21	13:30 Central		Solid			X	X	X	X	X									
D-4 (2.5-3) (820-2361-11)	10/26/21	13:35 Central		Solid			X	X	X	X	X									
D-4 (3.5-4) (820-2361-12)	10/26/21	13.40 Central		Solid			X	X	X	X	X									
D-6 (1.5-2) (820-2361-13)	10/26/21	13:45 Central		Solid			X	X	X	X	X									
D-6 (2.5-3) (820-2361-14)	10/26/21	13:50 Central		Solid			X	X	X	X	X									
D-6 (3.5-4) (820-2361-15)	10/26/21	13:55 Central		Solid			X	X	X	X	X									
C-5 (1.5-2) (820-2361-16)	10/26/21	14:00 Central		Solid			X	X	X	X	X									
C-5 (2.5-3) (820-2361 17)	10/26/21	14:05 Central		Solid			X	X	X	X	X									
C-5 (3.5-4) (820-2361-18)	10/26/21	14.10 Central		Solid			X	X	X	X	X									

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Teddy Randell Lee	10/27/21 1700				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10/28/21 1039	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:	Temp 1.0 IR ID:HOU-223 C/F:+0.0 Corrected Temp: 1.0

Ver: 06/08/2021

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 Number: 2
Creator: Palmar, Pedro

List Source: Eurofins Xenco, Stafford
List Creation: 10/28/21 01:46 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 820-4681-1
Laboratory Sample Delivery Group: AR217001
Client Project/Site: State I #16 (Brine Seep)

For:
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Attn: Joseph Guesnier

JKramer

Authorized for release by:
6/22/2022 3:34:15 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

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.

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).

JKramer

Jessica Kramer
Project Manager
6/22/2022 3:34:15 PM

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

Laboratory Job ID: 820-4681-1
SDG: AR217001

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Definitions/Glossary

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

Job ID: 820-4681-1
SDG: AR217001

Qualifiers

GC VOA

Qualifier	Qualifier Description
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: 820-4681-1
SDG: AR217001

Job ID: 820-4681-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-4681-1

Receipt
The samples were received on 6/17/2022 4:52 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 5.2°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 and precision for preparation batch 880-28055 and analytical batch 880-28107 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (0')

Date Collected: 06/17/22 09:10
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-1
Matrix: Soil

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		06/20/22 16:31	06/21/22 13:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:23	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		06/20/22 16:31	06/21/22 13:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/20/22 16:31	06/21/22 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/20/22 16:31*	*06/21/22 13:23*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/20/22 16:31*	*06/21/22 13:23*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			06/21/22 14:49	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			06/22/22 11:20	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		06/21/22 11:35	06/22/22 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/22/22 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/22/22 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*06/21/22 11:35*	*06/22/22 01:24*	*1*
o-Terphenyl (Surr)	*122*		*70 - 130*	*06/21/22 11:35*	*06/22/22 01:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**934**	**F1**	4.96		mg/Kg			06/21/22 22:11	1

Client Sample ID: WB-1 (4-5)

Date Collected: 06/17/22 09:15
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-2
Matrix: Soil

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**967**		5.00		mg/Kg			06/21/22 22:34	1

Client Sample ID: WB-1 (9-10)

Date Collected: 06/17/22 09:20
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-3
Matrix: Soil

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		06/20/22 16:31	06/21/22 13:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:44	1

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (9-10)

Date Collected: 06/17/22 09:20
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-3
Matrix: Soil

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		06/20/22 16:31	06/21/22 13:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 13:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/20/22 16:31	06/21/22 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/20/22 16:31*	*06/21/22 13:44*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/20/22 16:31*	*06/21/22 13:44*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/21/22 14:49	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			06/22/22 11:20	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		06/21/22 11:35	06/22/22 01:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 01:45	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*06/21/22 11:35*	*06/22/22 01:45*	*1*
o-Terphenyl (Surr)	*116*		*70 - 130*	*06/21/22 11:35*	*06/22/22 01:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7480**		99.8		mg/Kg			06/21/22 22:42	20

Client Sample ID: WB-1 (14-15)

Date Collected: 06/17/22 09:25
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-4
Matrix: Soil

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7640**		101		mg/Kg			06/21/22 22:50	20

Client Sample ID: WB-1 (19-20)

Date Collected: 06/17/22 09:30
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-5
Matrix: Soil

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		06/20/22 16:31	06/21/22 14:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:04	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		06/20/22 16:31	06/21/22 14:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/22 16:31	06/21/22 14:04	1

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (19-20)

Date Collected: 06/17/22 09:30
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-5
Matrix: Soil

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:04*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:04*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/21/22 14:49	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			06/22/22 11:20	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		06/21/22 11:35	06/22/22 02:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 02:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*113*		*70 - 130*	*06/21/22 11:35*	*06/22/22 02:05*	*1*
o-Terphenyl (Surr)	*128*		*70 - 130*	*06/21/22 11:35*	*06/22/22 02:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1460**		24.9		mg/Kg			06/21/22 22:58	5

Client Sample ID: WB-1 (24-25)

Date Collected: 06/17/22 09:35
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-6
Matrix: Soil

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5840**		49.5		mg/Kg			06/21/22 23:22	10

Client Sample ID: WB-1 (29-30)

Date Collected: 06/17/22 09:40
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-7
Matrix: Soil

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		06/20/22 16:31	06/21/22 14:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 14:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 14:24	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		06/20/22 16:31	06/21/22 14:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 14:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/20/22 16:31	06/21/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:24*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:24*	*1*

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (29-30)

Lab Sample ID: 820-4681-7
Matrix: Soil
Date Collected: 06/17/22 09:40
Date Received: 06/17/22 16:52

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/21/22 14:49	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			06/22/22 11:20	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		06/21/22 11:35	06/22/22 02:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/22/22 02:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/22/22 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*06/21/22 11:35*	*06/22/22 02:26*	*1*
o-Terphenyl (Surr)	*129*		*70 - 130*	*06/21/22 11:35*	*06/22/22 02:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8240**		99.0		mg/Kg			06/21/22 23:29	20

Client Sample ID: WB-1 (39-40)

Lab Sample ID: 820-4681-8
Matrix: Soil
Date Collected: 06/17/22 09:45
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1240**		24.9		mg/Kg			06/21/22 23:37	5

Client Sample ID: WB-1 (49-50)

Lab Sample ID: 820-4681-9
Matrix: Soil
Date Collected: 06/17/22 09:50
Date Received: 06/17/22 16:52

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		06/20/22 16:31	06/21/22 14:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:45	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		06/20/22 16:31	06/21/22 14:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/20/22 16:31	06/21/22 14:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/22 16:31	06/21/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:45*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/20/22 16:31*	*06/21/22 14:45*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/21/22 14:49	1

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (49-50)

Lab Sample ID: 820-4681-9
Date Collected: 06/17/22 09:50
Matrix: Soil
Date Received: 06/17/22 16:52

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			06/22/22 11:20	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		06/21/22 11:35	06/22/22 03:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 03:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/21/22 11:35	06/22/22 03:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*109*		*70 - 130*	*06/21/22 11:35*	*06/22/22 03:07*	*1*
o-Terphenyl (Surr)	*123*		*70 - 130*	*06/21/22 11:35*	*06/22/22 03:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**248**		4.95		mg/Kg			06/21/22 23:45	1

Client Sample ID: WB-1 (59-60)

Lab Sample ID: 820-4681-10
Date Collected: 06/17/22 09:55
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**305**		4.98		mg/Kg			06/21/22 23:53	1

Client Sample ID: WB-1 (69-70)

Lab Sample ID: 820-4681-11
Date Collected: 06/17/22 10:00
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**259**		5.04		mg/Kg			06/22/22 00:01	1

Client Sample ID: WB-1 (79-80)

Lab Sample ID: 820-4681-12
Date Collected: 06/17/22 10:05
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.6**		4.97		mg/Kg			06/22/22 00:24	1

Client Sample ID: WB-1 (89-90)

Lab Sample ID: 820-4681-13
Date Collected: 06/17/22 10:10
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.4**		4.96		mg/Kg			06/22/22 00:32	1

Client Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (99-100)
Lab Sample ID: 820-4681-14
Date Collected: 06/17/22 10:15
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.6		5.00		mg/Kg			06/22/22 00:56	1

Client Sample ID: WB-1 (109-110)
Lab Sample ID: 820-4681-15
Date Collected: 06/17/22 10:20
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	434		5.00		mg/Kg			06/22/22 12:22	1

Client Sample ID: WB-1 (119-120)
Lab Sample ID: 820-4681-16
Date Collected: 06/17/22 10:25
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	268		4.98		mg/Kg			06/22/22 12:30	1

Client Sample ID: WB-1 (129-130)
Lab Sample ID: 820-4681-17
Date Collected: 06/17/22 10:30
Matrix: Soil
Date Received: 06/17/22 16:52

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	205		5.02		mg/Kg			06/22/22 12:38	1

Surrogate Summary

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

Job ID: 820-4681-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Soil **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
820-4681-1	WB-1 (0')	112	92
820-4681-3	WB-1 (9-10)	112	91
820-4681-5	WB-1 (19-20)	112	91
820-4681-7	WB-1 (29-30)	100	87
820-4681-9	WB-1 (49-50)	111	91

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 (70-130)	DFBZ1 (70-130)
880-15967-A-1-D MS	Matrix Spike	117	95
880-15967-A-1-E MSD	Matrix Spike Duplicate	108	98
LCS 880-27986/1-A	Lab Control Sample	109	99
LCSD 880-27986/2-A	Lab Control Sample Dup	109	98
MB 880-27986/5-A	Method Blank	101	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Soil **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
820-4681-1	WB-1 (0')	110	122
820-4681-3	WB-1 (9-10)	99	116
820-4681-5	WB-1 (19-20)	113	128
820-4681-7	WB-1 (29-30)	110	129
820-4681-9	WB-1 (49-50)	109	123

Surrogate Legend

1CO = 1-Chlorooctane (Surr)
OTPH = o-Terphenyl (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)
880-16078-A-21-B MS	Matrix Spike	82	79
880-16078-A-21-C MSD	Matrix Spike Duplicate	86	82
LCS 880-28045/2-A	Lab Control Sample	104	110
LCSD 880-28045/3-A	Lab Control Sample Dup	104	113

Surrogate Summary

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

Job ID: 820-4681-1
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)								
MB 880-28045/1-A	Method Blank	102	119								

Surrogate Legend

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

QC Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27986/5-A
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 27986

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 12:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 12:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 12:20	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		06/20/22 16:31	06/21/22 12:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/22 16:31	06/21/22 12:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/20/22 16:31	06/21/22 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*06/20/22 16:31*	*06/21/22 12:20*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/20/22 16:31*	*06/21/22 12:20*	*1*

Lab Sample ID: LCS 880-27986/1-A
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 27986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1056		mg/Kg		106	70 - 130
Toluene	0.100	0.1036		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1095		mg/Kg		110	70 - 130
m,p-Xylenes	0.200	0.2214		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-27986/2-A
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 27986

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1081		mg/Kg		108	70 - 130	2	35
Toluene	0.100	0.1076		mg/Kg		108	70 - 130	4	35
Ethylbenzene	0.100	0.1125		mg/Kg		113	70 - 130	3	35
m,p-Xylenes	0.200	0.2307		mg/Kg		115	70 - 130	4	35
o-Xylene	0.100	0.1162		mg/Kg		116	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-15967-A-1-D MS
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 27986

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.09619		mg/Kg		96	70 - 130
Toluene	<0.00199	U	0.100	0.1013		mg/Kg		101	70 - 130

QC Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

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

Lab Sample ID: 880-15967-A-1-D MS
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 27986

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.1048		mg/Kg		105	70 - 130
m,p-Xylenes	<0.00398	U	0.200	0.2176		mg/Kg		109	70 - 130
o-Xylene	<0.00199	U	0.100	0.1103		mg/Kg		110	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-15967-A-1-E MSD
Matrix: Solid
Analysis Batch: 28004

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 27986

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.1046		mg/Kg		105	70 - 130	8	35
Toluene	<0.00199	U	0.0996	0.1013		mg/Kg		102	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0996	0.1027		mg/Kg		103	70 - 130	2	35
m,p-Xylenes	<0.00398	U	0.199	0.2104		mg/Kg		106	70 - 130	3	35
o-Xylene	<0.00199	U	0.0996	0.1053		mg/Kg		106	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-28045/1-A
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 28045

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		06/21/22 11:35	06/21/22 21:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/21/22 21:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/21/22 11:35	06/21/22 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*06/21/22 11:35*	*06/21/22 21:37*	*1*
o-Terphenyl (Surr)	*119*		*70 - 130*	*06/21/22 11:35*	*06/21/22 21:37*	*1*

Lab Sample ID: LCS 880-28045/2-A
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 28045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	992.5		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1042		mg/Kg		104	70 - 130

Eurofins Lubbock

QC Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

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

Lab Sample ID: LCS 880-28045/2-A
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 28045

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	110		70 - 130

Lab Sample ID: LCSD 880-28045/3-A
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 28045

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1036		mg/Kg		104	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	104		70 - 130
o-Terphenyl (Surr)	113		70 - 130

Lab Sample ID: 880-16078-A-21-B MS
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 28045

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	905.3		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	799.1		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane (Surr)	82		70 - 130
o-Terphenyl (Surr)	79		70 - 130

Lab Sample ID: 880-16078-A-21-C MSD
Matrix: Solid
Analysis Batch: 27998

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 28045

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	999	933.1		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	845.4		mg/Kg		85	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane (Surr)	86		70 - 130
o-Terphenyl (Surr)	82		70 - 130

QC Sample Results

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

Job ID: 820-4681-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-28055/1-A
Matrix: Solid
Analysis Batch: 28107

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			06/21/22 21:47	1

Lab Sample ID: LCS 880-28055/2-A
Matrix: Solid
Analysis Batch: 28107

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.9		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-28055/3-A
Matrix: Solid
Analysis Batch: 28107

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	255.8		mg/Kg		102	90 - 110	3	20

Lab Sample ID: 820-4681-1 MS
Matrix: Soil
Analysis Batch: 28107

Client Sample ID: WB-1 (0')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	934	F1	248	1132	F1	mg/Kg		80	90 - 110		

Lab Sample ID: 820-4681-1 MSD
Matrix: Soil
Analysis Batch: 28107

Client Sample ID: WB-1 (0')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	934	F1	248	1139	F1	mg/Kg		83	90 - 110	1	20

Lab Sample ID: 820-4681-11 MS
Matrix: Soil
Analysis Batch: 28107

Client Sample ID: WB-1 (69-70)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	259		252	498.9		mg/Kg		95	90 - 110		

Lab Sample ID: 820-4681-11 MSD
Matrix: Soil
Analysis Batch: 28107

Client Sample ID: WB-1 (69-70)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	259		252	499.3		mg/Kg		95	90 - 110	0	20

QC Association Summary

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

Job ID: 820-4681-1
SDG: AR217001

GC VOA

Prep Batch: 27986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	5035	
820-4681-3	WB-1 (9-10)	Total/NA	Soil	5035	
820-4681-5	WB-1 (19-20)	Total/NA	Soil	5035	
820-4681-7	WB-1 (29-30)	Total/NA	Soil	5035	
820-4681-9	WB-1 (49-50)	Total/NA	Soil	5035	
MB 880-27986/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-27986/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-27986/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-15967-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-15967-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	8021B	27986
820-4681-3	WB-1 (9-10)	Total/NA	Soil	8021B	27986
820-4681-5	WB-1 (19-20)	Total/NA	Soil	8021B	27986
820-4681-7	WB-1 (29-30)	Total/NA	Soil	8021B	27986
820-4681-9	WB-1 (49-50)	Total/NA	Soil	8021B	27986
MB 880-27986/5-A	Method Blank	Total/NA	Solid	8021B	27986
LCS 880-27986/1-A	Lab Control Sample	Total/NA	Solid	8021B	27986
LCSD 880-27986/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	27986
880-15967-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	27986
880-15967-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	27986

Analysis Batch: 28065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	Total BTEX	
820-4681-3	WB-1 (9-10)	Total/NA	Soil	Total BTEX	
820-4681-5	WB-1 (19-20)	Total/NA	Soil	Total BTEX	
820-4681-7	WB-1 (29-30)	Total/NA	Soil	Total BTEX	
820-4681-9	WB-1 (49-50)	Total/NA	Soil	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	8015B NM	28045
820-4681-3	WB-1 (9-10)	Total/NA	Soil	8015B NM	28045
820-4681-5	WB-1 (19-20)	Total/NA	Soil	8015B NM	28045
820-4681-7	WB-1 (29-30)	Total/NA	Soil	8015B NM	28045
820-4681-9	WB-1 (49-50)	Total/NA	Soil	8015B NM	28045
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015B NM	28045
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28045
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28045
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28045
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	8015NM Prep	
820-4681-3	WB-1 (9-10)	Total/NA	Soil	8015NM Prep	

QC Association Summary

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

Job ID: 820-4681-1
SDG: AR217001

GC Semi VOA (Continued)

Prep Batch: 28045 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-5	WB-1 (19-20)	Total/NA	Soil	8015NM Prep	
820-4681-7	WB-1 (29-30)	Total/NA	Soil	8015NM Prep	
820-4681-9	WB-1 (49-50)	Total/NA	Soil	8015NM Prep	
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Total/NA	Soil	8015 NM	
820-4681-3	WB-1 (9-10)	Total/NA	Soil	8015 NM	
820-4681-5	WB-1 (19-20)	Total/NA	Soil	8015 NM	
820-4681-7	WB-1 (29-30)	Total/NA	Soil	8015 NM	
820-4681-9	WB-1 (49-50)	Total/NA	Soil	8015 NM	

HPLC/IC

Leach Batch: 28055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Soluble	Soil	DI Leach	
820-4681-2	WB-1 (4-5)	Soluble	Soil	DI Leach	
820-4681-3	WB-1 (9-10)	Soluble	Soil	DI Leach	
820-4681-4	WB-1 (14-15)	Soluble	Soil	DI Leach	
820-4681-5	WB-1 (19-20)	Soluble	Soil	DI Leach	
820-4681-6	WB-1 (24-25)	Soluble	Soil	DI Leach	
820-4681-7	WB-1 (29-30)	Soluble	Soil	DI Leach	
820-4681-8	WB-1 (39-40)	Soluble	Soil	DI Leach	
820-4681-9	WB-1 (49-50)	Soluble	Soil	DI Leach	
820-4681-10	WB-1 (59-60)	Soluble	Soil	DI Leach	
820-4681-11	WB-1 (69-70)	Soluble	Soil	DI Leach	
820-4681-12	WB-1 (79-80)	Soluble	Soil	DI Leach	
820-4681-13	WB-1 (89-90)	Soluble	Soil	DI Leach	
820-4681-14	WB-1 (99-100)	Soluble	Soil	DI Leach	
820-4681-15	WB-1 (109-110)	Soluble	Soil	DI Leach	
820-4681-16	WB-1 (119-120)	Soluble	Soil	DI Leach	
820-4681-17	WB-1 (129-130)	Soluble	Soil	DI Leach	
MB 880-28055/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-28055/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-28055/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-4681-1 MS	WB-1 (0')	Soluble	Soil	DI Leach	
820-4681-1 MSD	WB-1 (0')	Soluble	Soil	DI Leach	
820-4681-11 MS	WB-1 (69-70)	Soluble	Soil	DI Leach	
820-4681-11 MSD	WB-1 (69-70)	Soluble	Soil	DI Leach	

Analysis Batch: 28107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-1	WB-1 (0')	Soluble	Soil	300.0	28055
820-4681-2	WB-1 (4-5)	Soluble	Soil	300.0	28055
820-4681-3	WB-1 (9-10)	Soluble	Soil	300.0	28055

QC Association Summary

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

Job ID: 820-4681-1
SDG: AR217001

HPLC/IC (Continued)

Analysis Batch: 28107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4681-4	WB-1 (14-15)	Soluble	Soil	300.0	28055
820-4681-5	WB-1 (19-20)	Soluble	Soil	300.0	28055
820-4681-6	WB-1 (24-25)	Soluble	Soil	300.0	28055
820-4681-7	WB-1 (29-30)	Soluble	Soil	300.0	28055
820-4681-8	WB-1 (39-40)	Soluble	Soil	300.0	28055
820-4681-9	WB-1 (49-50)	Soluble	Soil	300.0	28055
820-4681-10	WB-1 (59-60)	Soluble	Soil	300.0	28055
820-4681-11	WB-1 (69-70)	Soluble	Soil	300.0	28055
820-4681-12	WB-1 (79-80)	Soluble	Soil	300.0	28055
820-4681-13	WB-1 (89-90)	Soluble	Soil	300.0	28055
820-4681-14	WB-1 (99-100)	Soluble	Soil	300.0	28055
820-4681-15	WB-1 (109-110)	Soluble	Soil	300.0	28055
820-4681-16	WB-1 (119-120)	Soluble	Soil	300.0	28055
820-4681-17	WB-1 (129-130)	Soluble	Soil	300.0	28055
MB 880-28055/1-A	Method Blank	Soluble	Solid	300.0	28055
LCS 880-28055/2-A	Lab Control Sample	Soluble	Solid	300.0	28055
LCSD 880-28055/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	28055
820-4681-1 MS	WB-1 (0')	Soluble	Soil	300.0	28055
820-4681-1 MSD	WB-1 (0')	Soluble	Soil	300.0	28055
820-4681-11 MS	WB-1 (69-70)	Soluble	Soil	300.0	28055
820-4681-11 MSD	WB-1 (69-70)	Soluble	Soil	300.0	28055

Lab Chronicle

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (0')
Date Collected: 06/17/22 09:10
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-1
Matrix: Soil

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	27986	06/20/22 16:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28004	06/21/22 13:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28065	06/21/22 14:49	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28126	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 01:24	SM	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/21/22 22:11	CH	XEN MID

Client Sample ID: WB-1 (4-5)
Date Collected: 06/17/22 09:15
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-2
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/21/22 22:34	CH	XEN MID

Client Sample ID: WB-1 (9-10)
Date Collected: 06/17/22 09:20
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-3
Matrix: Soil

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	27986	06/20/22 16:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28004	06/21/22 13:44	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28065	06/21/22 14:49	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28126	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 01:45	SM	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		20			28107	06/21/22 22:42	CH	XEN MID

Client Sample ID: WB-1 (14-15)
Date Collected: 06/17/22 09:25
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-4
Matrix: Soil

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	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		20			28107	06/21/22 22:50	CH	XEN MID

Lab Chronicle

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (19-20)
Date Collected: 06/17/22 09:30
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-5
Matrix: Soil

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	27986	06/20/22 16:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28004	06/21/22 14:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28065	06/21/22 14:49	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28126	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 02:05	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		5			28107	06/21/22 22:58	CH	XEN MID

Client Sample ID: WB-1 (24-25)
Date Collected: 06/17/22 09:35
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-6
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		10			28107	06/21/22 23:22	CH	XEN MID

Client Sample ID: WB-1 (29-30)
Date Collected: 06/17/22 09:40
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-7
Matrix: Soil

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	27986	06/20/22 16:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28004	06/21/22 14:24	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28065	06/21/22 14:49	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28126	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 02:26	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		20			28107	06/21/22 23:29	CH	XEN MID

Client Sample ID: WB-1 (39-40)
Date Collected: 06/17/22 09:45
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-8
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		5			28107	06/21/22 23:37	CH	XEN MID

Lab Chronicle

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (49-50)
Date Collected: 06/17/22 09:50
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-9
Matrix: Soil

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	27986	06/20/22 16:31	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28004	06/21/22 14:45	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28065	06/21/22 14:49	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28126	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 03:07	SM	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/21/22 23:45	CH	XEN MID

Client Sample ID: WB-1 (59-60)
Date Collected: 06/17/22 09:55
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-10
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/21/22 23:53	CH	XEN MID

Client Sample ID: WB-1 (69-70)
Date Collected: 06/17/22 10:00
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-11
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 00:01	CH	XEN MID

Client Sample ID: WB-1 (79-80)
Date Collected: 06/17/22 10:05
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-12
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 00:24	CH	XEN MID

Client Sample ID: WB-1 (89-90)
Date Collected: 06/17/22 10:10
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-13
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 00:32	CH	XEN MID

Lab Chronicle

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

Job ID: 820-4681-1
SDG: AR217001

Client Sample ID: WB-1 (99-100)

Date Collected: 06/17/22 10:15
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-14
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 00:56	CH	XEN MID

Client Sample ID: WB-1 (109-110)

Date Collected: 06/17/22 10:20
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-15
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 12:22	CH	XEN MID

Client Sample ID: WB-1 (119-120)

Date Collected: 06/17/22 10:25
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-16
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 12:30	CH	XEN MID

Client Sample ID: WB-1 (129-130)

Date Collected: 06/17/22 10:30
Date Received: 06/17/22 16:52

Lab Sample ID: 820-4681-17
Matrix: Soil

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	28055	06/21/22 13:25	SC	XEN MID
Soluble	Analysis	300.0		1			28107	06/22/22 12:38	CH	XEN MID

Laboratory References:

XEN MID = Eurofins 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 (Brine Seep)

Job ID: 820-4681-1
SDG: AR217001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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		Soil	Total TPH
Total BTEX		Soil	Total BTEX

Method Summary

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

Job ID: 820-4681-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	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.

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 MID = Eurofins 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: 820-4681-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-4681-1	WB-1 (0')	Soil	06/17/22 09:10	06/17/22 16:52
820-4681-2	WB-1 (4-5)	Soil	06/17/22 09:15	06/17/22 16:52
820-4681-3	WB-1 (9-10)	Soil	06/17/22 09:20	06/17/22 16:52
820-4681-4	WB-1 (14-15)	Soil	06/17/22 09:25	06/17/22 16:52
820-4681-5	WB-1 (19-20)	Soil	06/17/22 09:30	06/17/22 16:52
820-4681-6	WB-1 (24-25)	Soil	06/17/22 09:35	06/17/22 16:52
820-4681-7	WB-1 (29-30)	Soil	06/17/22 09:40	06/17/22 16:52
820-4681-8	WB-1 (39-40)	Soil	06/17/22 09:45	06/17/22 16:52
820-4681-9	WB-1 (49-50)	Soil	06/17/22 09:50	06/17/22 16:52
820-4681-10	WB-1 (59-60)	Soil	06/17/22 09:55	06/17/22 16:52
820-4681-11	WB-1 (69-70)	Soil	06/17/22 10:00	06/17/22 16:52
820-4681-12	WB-1 (79-80)	Soil	06/17/22 10:05	06/17/22 16:52
820-4681-13	WB-1 (89-90)	Soil	06/17/22 10:10	06/17/22 16:52
820-4681-14	WB-1 (99-100)	Soil	06/17/22 10:15	06/17/22 16:52
820-4681-15	WB-1 (109-110)	Soil	06/17/22 10:20	06/17/22 16:52
820-4681-16	WB-1 (119-120)	Soil	06/17/22 10:25	06/17/22 16:52
820-4681-17	WB-1 (129-130)	Soil	06/17/22 10:30	06/17/22 16:52

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
4681

4681

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact:
Project Manager: J. Guesnier
SRS #:
Sampler's Name: J. Guesnier
Sampler's Signature

Project Number: AR217001
Project Name: State I #16 (Brine Seep)

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 5.3/5.2

Page 1 of 1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	2 oz Glass	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8021B)	TPH Extended 8015	Hold				Lab Sample ID
S	6/17/2022	9:10		X	WB-1 (0')	-	-	X				X	X	X					
S	6/17/2022	9:15		X	WB-1 (4-5)			X				X							
S	6/17/2022	9:20		X	WB-1 (9-10)			X				X	X	X					
S	6/17/2022	9:25		X	WB-1 (14-15)			X				X							
S	6/17/2022	9:30		X	WB-1 (19-20)			X				X	X	X					
S	6/17/2022	9:35		X	WB-1 (24-25)			X				X							
S	6/17/2022	9:40		X	WB-1 (29-30)			X				X	X	X					
S	6/17/2022	9:45		X	WB-1 (39-40)			X				X							
S	6/17/2022	9:50		X	WB-1 (49-50)			X				X	X	X					
S	6/17/2022	9:55		X	WB-1 (59-60)			X				X							
S	6/17/2022	10:00		X	WB-1 (69-70)			X				X							
S	6/17/2022	10:05		X	WB-1 (79-80)			X				X							
S	6/17/2022	10:10		X	WB-1 (89-90)			X				X							
S	6/17/2022	10:15		X	WB-1 (99-100)			X				X							
S	6/17/2022	10:20		X	WB-1 (109-110)			X				X							
S	6/17/2022	10:25		X	WB-1 (119-120)			X				X							
S	6/17/2022	10:30		X	WB-1 (129-130)			X				X	X	X					
S	6/17/2022	10:35		X	WB-1 (139-140)			X				~~X~~ 56	~~X~~	~~X~~	X				
S	6/17/2022	10:40		X	WB-1 (149-150)			X				~~X~~ 56	~~X~~	~~X~~	X				

TURNAROUND TIME: ☐ Normal ☑ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist: ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
	6-17-22	16:52	Teddy Randolph	6/17/22	16:52
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:

BILL TO: Spur Energy Partners LLC

e-mail results to:
joseph.guesnier@terraconc.om
erin.loyd@terracon.com
brady.thornton@terracon.com

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml - Glass wide mouth P/O - Plastic or other _____

820-4681 Chain of Custody

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-4681-1
SDG Number: AR217001

Login Number: 4681
List Number: 1
Creator: Ruggles, Ashley

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.	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: 820-4681-1
SDG Number: AR217001

Login Number: 4681
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 06/21/22 10:52 AM

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 820-4714-1
Laboratory Sample Delivery Group: AR217001
Client Project/Site: State I #16 (Brine Seep)

For:
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Attn: Joseph Guesnier

JKramer

Authorized for release by:
6/30/2022 7:51:41 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

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.

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).

JKramer

Jessica Kramer
Project Manager
6/30/2022 7:51:41 PM

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

Laboratory Job ID: 820-4714-1
SDG: AR217001

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Definitions/Glossary

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

Job ID: 820-4714-1
SDG: AR217001

Qualifiers

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.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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: 820-4714-1
SDG: AR217001

Job ID: 820-4714-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-4714-1

Receipt
The sample was received on 6/22/2022 11:20 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C

HPLC/IC
Method 300_ORGFM_28D: The following sample was diluted due to the nature of the sample matrix: B-1 (820-4714-1). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6010C: Due to the high concentration of calcium, magnesium, and sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-58627 and analytical batch 860-59044 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

General Chemistry
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: 820-4714-1
SDG: AR217001

Client Sample ID: B-1

Date Collected: 06/20/22 15:55
Date Received: 06/22/22 11:20

Lab Sample ID: 820-4714-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10900		50.0		mg/L			06/23/22 13:17	100
Nitrate as N	3.86	H	1.00		mg/L			06/23/22 13:05	10
Fluoride	<5.00	U	5.00		mg/L			06/23/22 13:05	10
Nitrite as N	<1.00	U H	1.00		mg/L			06/23/22 13:05	10
Sulfate	2200		5.00		mg/L			06/23/22 13:05	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1910		10.0		mg/L		06/27/22 09:00	06/28/22 19:33	50
Magnesium	695		10.0		mg/L		06/27/22 09:00	06/28/22 19:33	50
Potassium	46.7		0.500		mg/L		06/27/22 09:00	06/28/22 19:15	1
Sodium	4610		25.0		mg/L		06/27/22 09:00	06/28/22 19:33	50
SiO2	35.4	F1	1.07		mg/L		06/27/22 09:00	06/28/22 19:15	1

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Anion/Cation Balance	-0.333				%			06/24/22 09:23	1
pH	7.2	HF			SU			06/28/22 15:26	1
Temperature	18.4	HF			Celsius			06/28/22 15:26	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	94.3		4.00		mg/L			06/23/22 16:32	1
Bicarbonate Alkalinity as CaCO3	94.3		4.00		mg/L			06/23/22 16:32	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00		mg/L			06/23/22 16:32	1
Hydroxide Alkalinity	<4.00	U	4.00		mg/L			06/23/22 16:32	1
Phenolphthalein Alkalinity	<4.00	U	4.00		mg/L			06/23/22 16:32	1
Specific Conductance	30800		10.0		umho/cm @ 25C			06/23/22 16:23	1
Total Dissolved Solids	29700		200		mg/L			06/23/22 15:47	1

QC Sample Results

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

Job ID: 820-4714-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-58122/3
Matrix: Water
Analysis Batch: 58122

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			06/23/22 11:38	1
Fluoride	<0.500	U	0.500		mg/L			06/23/22 11:38	1
Sulfate	<0.500	U	0.500		mg/L			06/23/22 11:38	1

Lab Sample ID: LCS 860-58122/6
Matrix: Water
Analysis Batch: 58122

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	9.550		mg/L		95	90 - 110		
Fluoride			10.0	10.23		mg/L		102	90 - 110		
Sulfate			10.0	9.608		mg/L		96	90 - 110		

Lab Sample ID: LCSD 860-58122/7
Matrix: Water
Analysis Batch: 58122

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
Chloride			10.0	9.516		mg/L		95	90 - 110	0	20
Fluoride			10.0	10.26		mg/L		103	90 - 110	0	20
Sulfate			10.0	9.583		mg/L		96	90 - 110	0	20

Lab Sample ID: LLCS 860-58122/5
Matrix: Water
Analysis Batch: 58122

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.5242		mg/L		105	50 - 150		
Fluoride			0.500	0.3896	J	mg/L		78	50 - 150		
Sulfate			0.500	0.4805	J	mg/L		96	50 - 150		

Lab Sample ID: 890-2449-A-1 MS
Matrix: Water
Analysis Batch: 58122

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			10.0	42.28		mg/L					
Fluoride			10.0	11.98		mg/L					
Sulfate	43.0		10.0	52.19	4	mg/L		92	90 - 110		

Lab Sample ID: 890-2449-A-1 MSD
Matrix: Water
Analysis Batch: 58122

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			10.0	42.34		mg/L					
Fluoride			10.0	12.04		mg/L					
Sulfate	43.0		10.0	52.23	4	mg/L		93	90 - 110	0	20

QC Sample Results

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

Job ID: 820-4714-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 860-58123/3
Matrix: Water
Analysis Batch: 58123

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.100	U	0.100		mg/L			06/23/22 11:38	1
Nitrite as N	<0.100	U	0.100		mg/L			06/23/22 11:38	1

Lab Sample ID: LCS 860-58123/6
Matrix: Water
Analysis Batch: 58123

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	10.0	9.750		mg/L		97	80 - 120
Nitrite as N	5.00	4.945		mg/L		99	80 - 120

Lab Sample ID: LCSD 860-58123/7
Matrix: Water
Analysis Batch: 58123

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
Nitrate as N	10.0	9.790		mg/L		98	80 - 120	0	20
Nitrite as N	5.00	4.977		mg/L		100	80 - 120	1	20

Lab Sample ID: LLCS 860-58123/4
Matrix: Water
Analysis Batch: 58123

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.100	0.1153		mg/L		115	50 - 150
Nitrite as N	0.100	0.08787	J	mg/L		88	50 - 150

Lab Sample ID: 890-2449-A-1 MS
Matrix: Water
Analysis Batch: 58123

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.210		10.0	9.927		mg/L		97	80 - 120
Nitrite as N			2.50	2.258		mg/L			

Lab Sample ID: 890-2449-A-1 MSD
Matrix: Water
Analysis Batch: 58123

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.210		10.0	9.962		mg/L		98	80 - 120	0	15
Nitrite as N			2.50	2.270		mg/L					

QC Sample Results

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

Job ID: 820-4714-1
SDG: AR217001

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 860-58627/1-A
Matrix: Water
Analysis Batch: 59044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.200	U	0.200		mg/L		06/27/22 09:00	06/28/22 19:04	1
Magnesium	<0.200	U	0.200		mg/L		06/27/22 09:00	06/28/22 19:04	1
Potassium	<0.500	U	0.500		mg/L		06/27/22 09:00	06/28/22 19:04	1
Sodium	<0.500	U	0.500		mg/L		06/27/22 09:00	06/28/22 19:04	1
SiO2	<1.07	U	1.07		mg/L		06/27/22 09:00	06/28/22 19:04	1

Lab Sample ID: LCS 860-58627/2-A
Matrix: Water
Analysis Batch: 59044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25.0	26.85		mg/L		107	80 - 120
Magnesium	25.0	26.51		mg/L		106	80 - 120
Potassium	10.0	10.74		mg/L		107	80 - 120
Sodium	25.0	26.59		mg/L		106	80 - 120
SiO2	21.4	22.34		mg/L		104	80 - 120

Lab Sample ID: LCSD 860-58627/3-A
Matrix: Water
Analysis Batch: 59044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58627

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	25.0	26.79		mg/L		107	80 - 120	0	20
Magnesium	25.0	26.38		mg/L		106	80 - 120	0	20
Potassium	10.0	10.69		mg/L		107	80 - 120	1	20
Sodium	25.0	26.42		mg/L		106	80 - 120	1	20
SiO2	21.4	22.40		mg/L		105	80 - 120	0	20

Lab Sample ID: 820-4714-1 MS
Matrix: Water
Analysis Batch: 59044

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 58627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	1350	E	25.0	1368	E 4	mg/L		88	75 - 125
Magnesium	499	E	25.0	527.2	E 4	mg/L		115	75 - 125
Potassium	46.7		10.0	59.34	4	mg/L		126	75 - 125
Sodium	2540	E	25.0	2528	E 4	mg/L		-49	75 - 125
SiO2	35.4	F1	21.4	62.29	F1	mg/L		126	75 - 125

Lab Sample ID: 820-4714-1 MSD
Matrix: Water
Analysis Batch: 59044

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 58627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	1350	E	25.0	1377	E 4	mg/L		125	75 - 125	1	20
Magnesium	499	E	25.0	527.1	E 4	mg/L		114	75 - 125	0	20
Potassium	46.7		10.0	59.28	4	mg/L		126	75 - 125	0	20
Sodium	2540	E	25.0	2513	E 4	mg/L		-107	75 - 125	1	20
SiO2	35.4	F1	21.4	62.43	F1	mg/L		126	75 - 125	0	20

QC Sample Results

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

Job ID: 820-4714-1
SDG: AR217001

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-58300/11
Matrix: Water
Analysis Batch: 58300

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00		mg/L			06/23/22 12:32	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00		mg/L			06/23/22 12:32	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00		mg/L			06/23/22 12:32	1
Hydroxide Alkalinity	<4.00	U	4.00		mg/L			06/23/22 12:32	1
Phenolphthalein Alkalinity	<4.00	U	4.00		mg/L			06/23/22 12:32	1

Lab Sample ID: LCS 860-58300/12
Matrix: Water
Analysis Batch: 58300

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			250	273.7		mg/L		109	85 - 115		

Lab Sample ID: LCSD 860-58300/13
Matrix: Water
Analysis Batch: 58300

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
Alkalinity			250	265.8		mg/L		106	85 - 115	3	20

Lab Sample ID: 870-8907-C-5 DU
Matrix: Water
Analysis Batch: 58300

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	115			116.7		mg/L				2	20
Bicarbonate Alkalinity as CaCO3	115			116.7		mg/L				2	20
Carbonate Alkalinity as CaCO3	<4.00	U		<4.00	U	mg/L				NC	20
Hydroxide Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20
Phenolphthalein Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-58277/2
Matrix: Water
Analysis Batch: 58277

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<10.0	U	10.0		umho/cm @ 25C			06/23/22 16:23	1

Lab Sample ID: 860-28299-A-2 DU
Matrix: Water
Analysis Batch: 58277

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	2260			2276		umho/cm @ 25C				0.7	20

QC Sample Results

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

Job ID: 820-4714-1
SDG: AR217001

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-58271/1
Matrix: Water
Analysis Batch: 58271

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00		mg/L			06/23/22 15:47	1

Lab Sample ID: LCS 860-58271/2
Matrix: Water
Analysis Batch: 58271

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1110		mg/L		111	80 - 120		

Lab Sample ID: LCSD 860-58271/3
Matrix: Water
Analysis Batch: 58271

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
Total Dissolved Solids			1000	1013		mg/L		101	80 - 120	9	10

Lab Sample ID: LLCS 860-58271/4
Matrix: Water
Analysis Batch: 58271

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			5.00	6.500		mg/L		130	50 - 150		

Lab Sample ID: 860-28299-A-3 DU
Matrix: Water
Analysis Batch: 58271

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	820			871.0		mg/L				6	10

Method: SM 4500 H+ B - pH

Lab Sample ID: 860-28422-A-14 DU
Matrix: Water
Analysis Batch: 58934

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.7			7.7		SU				0.4	20
Temperature	20.2			20.2		Celsius				0	20

QC Association Summary

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

Job ID: 820-4714-1
SDG: AR217001

HPLC/IC

Analysis Batch: 58122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	300.0	
820-4714-1	B-1	Total/NA	Water	300.0	
MB 860-58122/3	Method Blank	Total/NA	Water	300.0	
LCS 860-58122/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-58122/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-58122/5	Lab Control Sample	Total/NA	Water	300.0	
890-2449-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
890-2449-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 58123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	300.0	
MB 860-58123/3	Method Blank	Total/NA	Water	300.0	
LCS 860-58123/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-58123/7	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-58123/4	Lab Control Sample	Total/NA	Water	300.0	
890-2449-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
890-2449-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 58627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	3010A	
MB 860-58627/1-A	Method Blank	Total/NA	Water	3010A	
LCS 860-58627/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 860-58627/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
820-4714-1 MS	B-1	Total/NA	Water	3010A	
820-4714-1 MSD	B-1	Total/NA	Water	3010A	

Analysis Batch: 59044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	6010C	58627
820-4714-1	B-1	Total/NA	Water	6010C	58627
MB 860-58627/1-A	Method Blank	Total/NA	Water	6010C	58627
LCS 860-58627/2-A	Lab Control Sample	Total/NA	Water	6010C	58627
LCSD 860-58627/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	58627
820-4714-1 MS	B-1	Total/NA	Water	6010C	58627
820-4714-1 MSD	B-1	Total/NA	Water	6010C	58627

General Chemistry

Analysis Batch: 58271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	SM 2540C	
MB 860-58271/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-58271/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-58271/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
LLCS 860-58271/4	Lab Control Sample	Total/NA	Water	SM 2540C	
860-28299-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

QC Association Summary

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

Job ID: 820-4714-1
SDG: AR217001

General Chemistry

Analysis Batch: 58277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	SM 2510B	
MB 860-58277/2	Method Blank	Total/NA	Water	SM 2510B	
LCS 860-58277/3	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 860-58277/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
860-28299-A-2 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 58300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	SM 2320B	
MB 860-58300/11	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-58300/12	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-58300/13	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
870-8907-C-5 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 58354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	SM 1030E	

Analysis Batch: 58934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-4714-1	B-1	Total/NA	Water	SM 4500 H+ B	
860-28422-A-14 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 820-4714-1
SDG: AR217001

Client Sample ID: B-1

Date Collected: 06/20/22 15:55
Date Received: 06/22/22 11:20

Lab Sample ID: 820-4714-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10			58122	06/23/22 13:05	A1S	XEN STF
Total/NA	Analysis	300.0		10			58123	06/23/22 13:05	A1S	XEN STF
Total/NA	Analysis	300.0		100			58122	06/23/22 13:17	A1S	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	58627	06/27/22 09:00	MD	XEN STF
Total/NA	Analysis	6010C		1			59044	06/28/22 19:15	AV	XEN STF
Total/NA	Prep	3010A			50 mL	50 mL	58627	06/27/22 09:00	MD	XEN STF
Total/NA	Analysis	6010C		50			59044	06/28/22 19:33	AV	XEN STF
Total/NA	Analysis	SM 1030E		1			58354	06/24/22 09:23	AA	XEN STF
Total/NA	Analysis	SM 2320B		1			58300	06/23/22 16:32	TL	XEN STF
Total/NA	Analysis	SM 2510B		1			58277	06/23/22 16:23	TL	XEN STF
Total/NA	Analysis	SM 2540C		1	5 mL	200 mL	58271	06/23/22 15:47	ADL	XEN STF
Total/NA	Analysis	SM 4500 H+ B		1			58934	06/28/22 15:26	TL	XEN STF

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

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

Job ID: 820-4714-1
SDG: AR217001

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-22-46	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
6010C	3010A	Water	SiO2
SM 1030E		Water	Anion/Cation Balance
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature

Method Summary

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

Job ID: 820-4714-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	XEN STF
6010C	Metals (ICP)	SW846	XEN STF
SM 1030E	Cation Anion Balance	SM	XEN STF
SM 2320B	Alkalinity	SM	XEN STF
SM 2510B	Conductivity, Specific Conductance	SM	XEN STF
SM 2540C	Solids, Total Dissolved (TDS)	SM	XEN STF
SM 4500 H+ B	pH	SM	XEN STF
3010A	Preparation, Total Metals	SW846	XEN STF

Protocol References:

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

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

XEN STF = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

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

Job ID: 820-4714-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-4714-1	B-1	Water	06/20/22 15:55	06/22/22 11:20

Loc: 820
4714

4714

Released to Imaging: 9/12/2023 1:28:29 PM

Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact:
Project Manager: J. Guesnier
SRS #:
Sampler's Name: J. Guesnier
Sampler's Signature

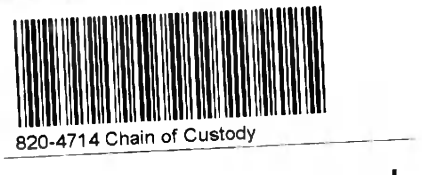
Project Number: AR217001
Project Name: State I #16 (Brine Seep)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	2 oz Glass	250 ml Poly	1 L Poly	Chloride (EPA Method 300)	Total Dissolved Solids (TDS)	Alkalinity	Na, Ca, Mg, K, SO4	F, Br, NO3, NO2	Lab Sample ID
GW	6/20/2022	15:55		X	B-1	-	-			X		X	X				

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 4.4/4.3°C

Page 1 of 1



TURNAROUND TIME: ☐ Normal ☐ 48-Hour Rush ☑ 24-Hour Rush

TRRP Laboratory Review Checklist: ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	6-22-22	11:20	Ashley Ward	6/22/22	11:20

BILL TO: Spur Energy Partners LLC

e-mail results to:
joseph.guesnier@terraconc.com
erin.loyd@terracon.com
brady.thornton@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other _____

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Received by OCD: 4/14/2023 1:19:50 PM

Eurofins Lubbock
6701 Aberdeen Ave. Suite 8
Lubbock, TX 79424
Phone: 806-794-1296

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-4126.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 820-4714-1
Address: 4145 Greenbriar Dr	Due Date Requested: 6/23/2022			
City: Stafford	TAT Requested (days): 1 day rush!			
State, Zip: TX, 77477	PO #:			
Phone: 281-240-4200(Tel)	WO #:			
Email:				
Project Name: State I #16 (Brine Seep)	Project #: 82000284			
Site:	SSOW#:			

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 AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	Cation_Anion	300_ORGFM_28D/ (MOD) Custom List	300_ORGFMS/ Nitrate and Nitrite as N	2510B/ Specific Conductance	2540C_Calcd	2320B	6010C/3010A (MOD) Custom List	Total Number of containers	Special Instructions/Note:
				Preservation Code:										
B-1 (820-4714-1)	6/20/22	15:55 Central		Water		X	X	X	X	X	X	X		

Temp: 3.6 IR ID:HOU-332
C/F: -0.2
Corrected Temp: 3.4

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, 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/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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: 6/22/22 1050	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-4714-1
SDG Number: AR217001

Login Number: 4714
List Number: 1
Creator: Ruggles, Ashley

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.	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: 820-4714-1
SDG Number: AR217001

Login Number: 4714
List Number: 2
Creator: Milone, Jeancarlo

List Source: Eurofins Houston
List Creation: 06/23/22 11:56 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?	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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424
Generated 11/28/2022 4:28:37 PM

JOB DESCRIPTION

State I
SDG NUMBER AR217001

JOB NUMBER

820-6532-1

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock TX 79424

See page two for job notes and contact information.

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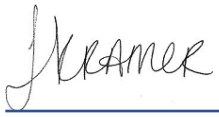
my EOL

Eurofins Lubbock

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Eurofins Lubbock

Compliance Statement

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 Eurofins Philadelphia 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. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia 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 Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

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Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Laboratory Job ID: 820-6532-1
SDG: AR217001

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
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

Job ID: 820-6532-1
SDG: AR217001

Job ID: 820-6532-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-6532-1

Receipt
The samples were received on 11/16/2022 4:32 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA
Method 8021B: The method blank for preparation batch 880-40316 and analytical batch 880-40265 contained o-Xylene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40340 and analytical batch 880-40265 were outside control limits. Non-homogeneity is 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.

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 880-39835 and analytical batch 880-40240 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.The associated samples are: FS-1.1 (820-6532-1), FS-2.1 (820-6532-2), FS-3.1 (820-6532-3), FS-4.1 (820-6532-4), FS-5.1 (820-6532-5), FS-7.1 (820-6532-7), FS-8.1 (820-6532-8), FS-9.1 (820-6532-9), FS-10.1 (820-6532-10), (820-6532-A-1-B MS) and (820-6532-A-1-C MSD).

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

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-1.1

Date Collected: 11/15/22 13:15
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 12:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 12:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 12:14	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		11/23/22 14:51	11/24/22 12:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 12:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/23/22 14:51	11/24/22 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:14*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/28/22 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**77.6**		49.9		mg/Kg			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 11:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 11:35	1
Oil Range Organics (Over C28-C36)	**77.6**		49.9		mg/Kg		11/22/22 08:14	11/22/22 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*91*		*70 - 130*	*11/22/22 08:14*	*11/22/22 11:35*	*1*
o-Terphenyl (Surr)	*93*		*70 - 130*	*11/22/22 08:14*	*11/22/22 11:35*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17100**	**F1**	251		mg/Kg			11/22/22 23:30	50

Client Sample ID: FS-2.1

Date Collected: 11/15/22 13:17
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 12:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 12:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 12:34	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		11/23/22 14:51	11/24/22 12:34	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 12:34	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/23/22 14:51	11/24/22 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:34*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:34*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-2.1

Date Collected: 11/15/22 13:17
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 12:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 12:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*87*		*70 - 130*	*11/22/22 08:14*	*11/22/22 12:38*	*1*
o-Terphenyl (Surr)	*88*		*70 - 130*	*11/22/22 08:14*	*11/22/22 12:38*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12800**		100		mg/Kg			11/22/22 23:47	20

Client Sample ID: FS-3.1

Date Collected: 11/15/22 13:19
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 12:55	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 12:55	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 12:55	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 12:55	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 12:55	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:55*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*11/23/22 14:51*	*11/24/22 12:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 12:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 12:59	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-3.1

Date Collected: 11/15/22 13:19
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 12:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*95*		*70 - 130*	*11/22/22 08:14*	*11/22/22 12:59*	*1*
o-Terphenyl (Surr)	*97*		*70 - 130*	*11/22/22 08:14*	*11/22/22 12:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11200**		99.8		mg/Kg			11/22/22 23:53	20

Client Sample ID: FS-4.1

Date Collected: 11/15/22 13:21
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 13:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 13:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 13:15	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		11/23/22 14:51	11/24/22 13:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 13:15	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/23/22 14:51	11/24/22 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*11/23/22 14:51*	*11/24/22 13:15*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*11/23/22 14:51*	*11/24/22 13:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 13:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 13:20	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*105*		*70 - 130*	*11/22/22 08:14*	*11/22/22 13:20*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*11/22/22 08:14*	*11/22/22 13:20*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11300**		99.0		mg/Kg			11/22/22 23:58	20

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-5.1

Lab Sample ID: 820-6532-5
Matrix: Solid
Date Collected: 11/15/22 13:23
Date Received: 11/16/22 16:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 14:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 14:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 14:38	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		11/23/22 14:51	11/24/22 14:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 14:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/23/22 14:51	11/24/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*11/23/22 14:51*	*11/24/22 14:38*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/23/22 14:51*	*11/24/22 14:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 13:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 13:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 13:41*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 13:41*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19500**		253		mg/Kg			11/23/22 00:04	50

Client Sample ID: FS-6.1

Lab Sample ID: 820-6532-6
Matrix: Solid
Date Collected: 11/15/22 13:25
Date Received: 11/16/22 16:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 14:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 14:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 14:58	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		11/23/22 14:51	11/24/22 14:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 14:58	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/23/22 14:51	11/24/22 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*11/23/22 14:51*	*11/24/22 14:58*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/23/22 14:51*	*11/24/22 14:58*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-6.1

Date Collected: 11/15/22 13:25
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 14:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 14:02	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*91*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:02*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:02*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6990**		50.2		mg/Kg			11/23/22 00:21	10

Client Sample ID: FS-7.1

Date Collected: 11/15/22 13:27
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 15:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 15:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 15:19	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		11/23/22 14:51	11/24/22 15:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 15:19	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/23/22 14:51	11/24/22 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*11/23/22 14:51*	*11/24/22 15:19*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*11/23/22 14:51*	*11/24/22 15:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 14:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 14:23	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-7.1

Date Collected: 11/15/22 13:27
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:23*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:23*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15500**		99.6		mg/Kg			11/23/22 00:26	20

Client Sample ID: FS-8.1

Date Collected: 11/15/22 13:29
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 15:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 15:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 15:39	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		11/23/22 14:51	11/24/22 15:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 15:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/23/22 14:51	11/24/22 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*11/23/22 14:51*	*11/24/22 15:39*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/23/22 14:51*	*11/24/22 15:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 14:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 14:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*92*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:44*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*11/22/22 08:14*	*11/22/22 14:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16700**		250		mg/Kg			11/23/22 00:32	50

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-9.1

Date Collected: 11/15/22 15:25
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 16:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 16:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 16:00	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		11/23/22 14:51	11/24/22 16:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 16:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/23/22 14:51	11/24/22 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:00*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 15:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 15:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*11/22/22 08:14*	*11/22/22 15:05*	*1*
o-Terphenyl (Surr)	*93*		*70 - 130*	*11/22/22 08:14*	*11/22/22 15:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7260**		49.8		mg/Kg			11/23/22 00:38	10

Client Sample ID: FS-10.1

Date Collected: 11/15/22 13:33
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 16:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 16:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 16:20	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 16:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 16:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:20*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:20*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-10.1

Date Collected: 11/15/22 13:33
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 15:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 15:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 08:14	11/22/22 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*11/22/22 08:14*	*11/22/22 15:27*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*11/22/22 08:14*	*11/22/22 15:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1310**		24.9		mg/Kg			11/23/22 00:43	5

Client Sample ID: FS-11.1

Date Collected: 11/15/22 13:35
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 16:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 16:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 16:41	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 16:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 16:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:41*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/23/22 14:51*	*11/24/22 16:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 16:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:12	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-11.1

Lab Sample ID: 820-6532-11
Matrix: Solid
Date Collected: 11/15/22 13:35
Date Received: 11/16/22 16:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:12*	*1*
o-Terphenyl (Surr)	*98*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:12*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8880**		49.5		mg/Kg			11/23/22 00:49	10

Client Sample ID: NWW-1.1

Lab Sample ID: 820-6532-12
Matrix: Solid
Date Collected: 11/15/22 13:37
Date Received: 11/16/22 16:32

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 17:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 17:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 17:01	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		11/23/22 14:51	11/24/22 17:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/23/22 14:51	11/24/22 17:01	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/23/22 14:51	11/24/22 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:01*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 16:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*88*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:32*	*1*
o-Terphenyl (Surr)	*87*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:32*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**279**		5.00		mg/Kg			11/23/22 01:06	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: NWW-2.1

Date Collected: 11/15/22 13:39
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 17:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 17:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 17:21	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		11/23/22 14:51	11/24/22 17:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/23/22 14:51	11/24/22 17:21	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/23/22 14:51	11/24/22 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:21*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 16:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:53*	*1*
o-Terphenyl (Surr)	*92*		*70 - 130*	*11/22/22 08:14*	*11/22/22 16:53*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**135**		4.99		mg/Kg			11/23/22 01:12	1

Client Sample ID: NWW-3.1

Date Collected: 11/15/22 13:41
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 17:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 17:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 17:42	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 17:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 17:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:42*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*11/23/22 14:51*	*11/24/22 17:42*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: NWW-3.1

Date Collected: 11/15/22 13:41
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-14

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/28/22 16:23	1

Method: SW846 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			11/23/22 11:11	1

Method: SW846 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		11/22/22 08:14	11/22/22 17:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 17:15	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 08:14	11/22/22 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*85*		*70 - 130*	*11/22/22 08:14*	*11/22/22 17:15*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*11/22/22 08:14*	*11/22/22 17:15*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**127**		5.04		mg/Kg			11/23/22 01:29	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
820-6532-1	FS-1.1	109	91
820-6532-2	FS-2.1	113	90
820-6532-3	FS-3.1	115	90
820-6532-4	FS-4.1	101	108
820-6532-5	FS-5.1	93	110
820-6532-6	FS-6.1	96	92
820-6532-7	FS-7.1	120	90
820-6532-8	FS-8.1	100	105
820-6532-9	FS-9.1	96	109
820-6532-10	FS-10.1	120	95
820-6532-11	FS-11.1	118	104
820-6532-12	NWW-1.1	99	107
820-6532-13	NWW-2.1	97	109
820-6532-14	NWW-3.1	92	107
890-3486-A-21-C MS	Matrix Spike	95	114
890-3486-A-21-D MSD	Matrix Spike Duplicate	94	115
LCS 880-40340/1-A	Lab Control Sample	90	115
LCSD 880-40340/2-A	Lab Control Sample Dup	97	117
MB 880-40316/5-A	Method Blank	79	93
MB 880-40340/5-A	Method Blank	80	105

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)
820-6532-1	FS-1.1	91	93
820-6532-1 MS	FS-1.1	108	98
820-6532-1 MSD	FS-1.1	112	101
820-6532-2	FS-2.1	87	88
820-6532-3	FS-3.1	95	97
820-6532-4	FS-4.1	105	106
820-6532-5	FS-5.1	90	90
820-6532-6	FS-6.1	91	90
820-6532-7	FS-7.1	90	90
820-6532-8	FS-8.1	92	90
820-6532-9	FS-9.1	93	93
820-6532-10	FS-10.1	88	86
820-6532-11	FS-11.1	99	98
820-6532-12	NWW-1.1	88	87
820-6532-13	NWW-2.1	93	92
820-6532-14	NWW-3.1	85	84
LCS 880-40176/2-A	Lab Control Sample	78	79
LCSD 880-40176/3-A	Lab Control Sample Dup	81	80
MB 880-40176/1-A	Method Blank	121	127

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Surrogate Legend

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

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40316/5-A
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/22 12:33	11/23/22 23:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*11/23/22 12:33*	*11/23/22 23:16*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*11/23/22 12:33*	*11/23/22 23:16*	*1*

Lab Sample ID: MB 880-40340/5-A
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 09:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*11/23/22 14:51*	*11/24/22 09:49*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/23/22 14:51*	*11/24/22 09:49*	*1*

Lab Sample ID: LCS 880-40340/1-A
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1099		mg/Kg		110	70 - 130
Toluene	0.100	0.09245		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08415		mg/Kg		84	70 - 130
m,p-Xylenes	0.200	0.1680		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08555		mg/Kg		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: LCSD 880-40340/2-A
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40340

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1085		mg/Kg		109	70 - 130	1	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

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

Lab Sample ID: LCSD 880-40340/2-A
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40340

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09171		mg/Kg		92	70 - 130	1	35
Ethylbenzene			0.100	0.08790		mg/Kg		88	70 - 130	4	35
m,p-Xylenes			0.200	0.1779		mg/Kg		89	70 - 130	6	35
o-Xylene			0.100	0.08965		mg/Kg		90	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: 890-3486-A-21-C MS
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.101	0.1037		mg/Kg		103	70 - 130
Toluene	<0.00201	U	0.101	0.08446		mg/Kg		83	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.07870		mg/Kg		78	70 - 130
m,p-Xylenes	<0.00402	U F1	0.202	0.1560		mg/Kg		77	70 - 130
o-Xylene	<0.00201	U	0.101	0.07896		mg/Kg		78	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 890-3486-A-21-D MSD
Matrix: Solid
Analysis Batch: 40265

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0994	0.09297		mg/Kg		94	70 - 130	11	35
Toluene	<0.00201	U	0.0994	0.07654		mg/Kg		76	70 - 130	10	35
Ethylbenzene	<0.00201	U	0.0994	0.06992		mg/Kg		70	70 - 130	12	35
m,p-Xylenes	<0.00402	U F1	0.199	0.1377	F1	mg/Kg		69	70 - 130	12	35
o-Xylene	<0.00201	U	0.0994	0.07025		mg/Kg		70	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

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

Lab Sample ID: MB 880-40176/1-A
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40176

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		11/22/22 08:14	11/22/22 08:39	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

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

Lab Sample ID: MB 880-40176/1-A
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40176

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 08:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:14	11/22/22 08:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*121*		*70 - 130*	*11/22/22 08:14*	*11/22/22 08:39*	*1*
o-Terphenyl (Surr)	*127*		*70 - 130*	*11/22/22 08:14*	*11/22/22 08:39*	*1*

Lab Sample ID: LCS 880-40176/2-A
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40176

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	968.9		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	773.9		mg/Kg		77	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*78*		*70 - 130*
o-Terphenyl (Surr)	*79*		*70 - 130*

Lab Sample ID: LCSD 880-40176/3-A
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40176

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1000		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	785.6		mg/Kg		79	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*81*		*70 - 130*
o-Terphenyl (Surr)	*80*		*70 - 130*

Lab Sample ID: 820-6532-1 MS
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: FS-1.1
Prep Type: Total/NA
Prep Batch: 40176

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	951.4		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	787.3		mg/Kg		79	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*108*		*70 - 130*
o-Terphenyl (Surr)	*98*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

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

Lab Sample ID: 820-6532-1 MSD
Matrix: Solid
Analysis Batch: 40164

Client Sample ID: FS-1.1
Prep Type: Total/NA
Prep Batch: 40176

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	997	991.1		mg/Kg		97	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	815.9		mg/Kg		82	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*112*		*70 - 130*
o-Terphenyl (Surr)	*101*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39835/1-A
Matrix: Solid
Analysis Batch: 40240

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			11/22/22 23:13	1

Lab Sample ID: LCS 880-39835/2-A
Matrix: Solid
Analysis Batch: 40240

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	262.9		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-39835/3-A
Matrix: Solid
Analysis Batch: 40240

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	261.8		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 820-6532-1 MS
Matrix: Solid
Analysis Batch: 40240

Client Sample ID: FS-1.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	17100	F1	12600	32680	F1	mg/Kg		124	90 - 110

Lab Sample ID: 820-6532-1 MSD
Matrix: Solid
Analysis Batch: 40240

Client Sample ID: FS-1.1
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	12600	32630	F1	mg/Kg		123	90 - 110	0	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-6532-11 MS
Matrix: Solid
Analysis Batch: 40240

Client Sample ID: FS-11.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8880		2480	11320		mg/Kg		99	90 - 110		

Lab Sample ID: 820-6532-11 MSD
Matrix: Solid
Analysis Batch: 40240

Client Sample ID: FS-11.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8880		2480	11330		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

GC VOA

Analysis Batch: 40265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	8021B	40340
820-6532-2	FS-2.1	Total/NA	Solid	8021B	40340
820-6532-3	FS-3.1	Total/NA	Solid	8021B	40340
820-6532-4	FS-4.1	Total/NA	Solid	8021B	40340
820-6532-5	FS-5.1	Total/NA	Solid	8021B	40340
820-6532-6	FS-6.1	Total/NA	Solid	8021B	40340
820-6532-7	FS-7.1	Total/NA	Solid	8021B	40340
820-6532-8	FS-8.1	Total/NA	Solid	8021B	40340
820-6532-9	FS-9.1	Total/NA	Solid	8021B	40340
820-6532-10	FS-10.1	Total/NA	Solid	8021B	40340
820-6532-11	FS-11.1	Total/NA	Solid	8021B	40340
820-6532-12	NWW-1.1	Total/NA	Solid	8021B	40340
820-6532-13	NWW-2.1	Total/NA	Solid	8021B	40340
820-6532-14	NWW-3.1	Total/NA	Solid	8021B	40340
MB 880-40316/5-A	Method Blank	Total/NA	Solid	8021B	40316
MB 880-40340/5-A	Method Blank	Total/NA	Solid	8021B	40340
LCS 880-40340/1-A	Lab Control Sample	Total/NA	Solid	8021B	40340
LCSD 880-40340/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40340
890-3486-A-21-C MS	Matrix Spike	Total/NA	Solid	8021B	40340
890-3486-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40340

Prep Batch: 40316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40316/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	5035	
820-6532-2	FS-2.1	Total/NA	Solid	5035	
820-6532-3	FS-3.1	Total/NA	Solid	5035	
820-6532-4	FS-4.1	Total/NA	Solid	5035	
820-6532-5	FS-5.1	Total/NA	Solid	5035	
820-6532-6	FS-6.1	Total/NA	Solid	5035	
820-6532-7	FS-7.1	Total/NA	Solid	5035	
820-6532-8	FS-8.1	Total/NA	Solid	5035	
820-6532-9	FS-9.1	Total/NA	Solid	5035	
820-6532-10	FS-10.1	Total/NA	Solid	5035	
820-6532-11	FS-11.1	Total/NA	Solid	5035	
820-6532-12	NWW-1.1	Total/NA	Solid	5035	
820-6532-13	NWW-2.1	Total/NA	Solid	5035	
820-6532-14	NWW-3.1	Total/NA	Solid	5035	
MB 880-40340/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40340/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40340/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3486-A-21-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3486-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	Total BTEX	
820-6532-2	FS-2.1	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

GC VOA (Continued)

Analysis Batch: 40510 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-3	FS-3.1	Total/NA	Solid	Total BTEX	
820-6532-4	FS-4.1	Total/NA	Solid	Total BTEX	
820-6532-5	FS-5.1	Total/NA	Solid	Total BTEX	
820-6532-6	FS-6.1	Total/NA	Solid	Total BTEX	
820-6532-7	FS-7.1	Total/NA	Solid	Total BTEX	
820-6532-8	FS-8.1	Total/NA	Solid	Total BTEX	
820-6532-9	FS-9.1	Total/NA	Solid	Total BTEX	
820-6532-10	FS-10.1	Total/NA	Solid	Total BTEX	
820-6532-11	FS-11.1	Total/NA	Solid	Total BTEX	
820-6532-12	NWW-1.1	Total/NA	Solid	Total BTEX	
820-6532-13	NWW-2.1	Total/NA	Solid	Total BTEX	
820-6532-14	NWW-3.1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	8015B NM	40176
820-6532-2	FS-2.1	Total/NA	Solid	8015B NM	40176
820-6532-3	FS-3.1	Total/NA	Solid	8015B NM	40176
820-6532-4	FS-4.1	Total/NA	Solid	8015B NM	40176
820-6532-5	FS-5.1	Total/NA	Solid	8015B NM	40176
820-6532-6	FS-6.1	Total/NA	Solid	8015B NM	40176
820-6532-7	FS-7.1	Total/NA	Solid	8015B NM	40176
820-6532-8	FS-8.1	Total/NA	Solid	8015B NM	40176
820-6532-9	FS-9.1	Total/NA	Solid	8015B NM	40176
820-6532-10	FS-10.1	Total/NA	Solid	8015B NM	40176
820-6532-11	FS-11.1	Total/NA	Solid	8015B NM	40176
820-6532-12	NWW-1.1	Total/NA	Solid	8015B NM	40176
820-6532-13	NWW-2.1	Total/NA	Solid	8015B NM	40176
820-6532-14	NWW-3.1	Total/NA	Solid	8015B NM	40176
MB 880-40176/1-A	Method Blank	Total/NA	Solid	8015B NM	40176
LCS 880-40176/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40176
LCSD 880-40176/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40176
820-6532-1 MS	FS-1.1	Total/NA	Solid	8015B NM	40176
820-6532-1 MSD	FS-1.1	Total/NA	Solid	8015B NM	40176

Prep Batch: 40176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	8015NM Prep	
820-6532-2	FS-2.1	Total/NA	Solid	8015NM Prep	
820-6532-3	FS-3.1	Total/NA	Solid	8015NM Prep	
820-6532-4	FS-4.1	Total/NA	Solid	8015NM Prep	
820-6532-5	FS-5.1	Total/NA	Solid	8015NM Prep	
820-6532-6	FS-6.1	Total/NA	Solid	8015NM Prep	
820-6532-7	FS-7.1	Total/NA	Solid	8015NM Prep	
820-6532-8	FS-8.1	Total/NA	Solid	8015NM Prep	
820-6532-9	FS-9.1	Total/NA	Solid	8015NM Prep	
820-6532-10	FS-10.1	Total/NA	Solid	8015NM Prep	
820-6532-11	FS-11.1	Total/NA	Solid	8015NM Prep	
820-6532-12	NWW-1.1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

GC Semi VOA (Continued)

Prep Batch: 40176 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-13	NWW-2.1	Total/NA	Solid	8015NM Prep	
820-6532-14	NWW-3.1	Total/NA	Solid	8015NM Prep	
MB 880-40176/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40176/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40176/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-6532-1 MS	FS-1.1	Total/NA	Solid	8015NM Prep	
820-6532-1 MSD	FS-1.1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Total/NA	Solid	8015 NM	
820-6532-2	FS-2.1	Total/NA	Solid	8015 NM	
820-6532-3	FS-3.1	Total/NA	Solid	8015 NM	
820-6532-4	FS-4.1	Total/NA	Solid	8015 NM	
820-6532-5	FS-5.1	Total/NA	Solid	8015 NM	
820-6532-6	FS-6.1	Total/NA	Solid	8015 NM	
820-6532-7	FS-7.1	Total/NA	Solid	8015 NM	
820-6532-8	FS-8.1	Total/NA	Solid	8015 NM	
820-6532-9	FS-9.1	Total/NA	Solid	8015 NM	
820-6532-10	FS-10.1	Total/NA	Solid	8015 NM	
820-6532-11	FS-11.1	Total/NA	Solid	8015 NM	
820-6532-12	NWW-1.1	Total/NA	Solid	8015 NM	
820-6532-13	NWW-2.1	Total/NA	Solid	8015 NM	
820-6532-14	NWW-3.1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Soluble	Solid	DI Leach	
820-6532-2	FS-2.1	Soluble	Solid	DI Leach	
820-6532-3	FS-3.1	Soluble	Solid	DI Leach	
820-6532-4	FS-4.1	Soluble	Solid	DI Leach	
820-6532-5	FS-5.1	Soluble	Solid	DI Leach	
820-6532-6	FS-6.1	Soluble	Solid	DI Leach	
820-6532-7	FS-7.1	Soluble	Solid	DI Leach	
820-6532-8	FS-8.1	Soluble	Solid	DI Leach	
820-6532-9	FS-9.1	Soluble	Solid	DI Leach	
820-6532-10	FS-10.1	Soluble	Solid	DI Leach	
820-6532-11	FS-11.1	Soluble	Solid	DI Leach	
820-6532-12	NWW-1.1	Soluble	Solid	DI Leach	
820-6532-13	NWW-2.1	Soluble	Solid	DI Leach	
820-6532-14	NWW-3.1	Soluble	Solid	DI Leach	
MB 880-39835/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39835/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39835/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-6532-1 MS	FS-1.1	Soluble	Solid	DI Leach	
820-6532-1 MSD	FS-1.1	Soluble	Solid	DI Leach	
820-6532-11 MS	FS-11.1	Soluble	Solid	DI Leach	
820-6532-11 MSD	FS-11.1	Soluble	Solid	DI Leach	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

HPLC/IC

Analysis Batch: 40240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6532-1	FS-1.1	Soluble	Solid	300.0	39835
820-6532-2	FS-2.1	Soluble	Solid	300.0	39835
820-6532-3	FS-3.1	Soluble	Solid	300.0	39835
820-6532-4	FS-4.1	Soluble	Solid	300.0	39835
820-6532-5	FS-5.1	Soluble	Solid	300.0	39835
820-6532-6	FS-6.1	Soluble	Solid	300.0	39835
820-6532-7	FS-7.1	Soluble	Solid	300.0	39835
820-6532-8	FS-8.1	Soluble	Solid	300.0	39835
820-6532-9	FS-9.1	Soluble	Solid	300.0	39835
820-6532-10	FS-10.1	Soluble	Solid	300.0	39835
820-6532-11	FS-11.1	Soluble	Solid	300.0	39835
820-6532-12	NWW-1.1	Soluble	Solid	300.0	39835
820-6532-13	NWW-2.1	Soluble	Solid	300.0	39835
820-6532-14	NWW-3.1	Soluble	Solid	300.0	39835
MB 880-39835/1-A	Method Blank	Soluble	Solid	300.0	39835
LCS 880-39835/2-A	Lab Control Sample	Soluble	Solid	300.0	39835
LCSD 880-39835/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39835
820-6532-1 MS	FS-1.1	Soluble	Solid	300.0	39835
820-6532-1 MSD	FS-1.1	Soluble	Solid	300.0	39835
820-6532-11 MS	FS-11.1	Soluble	Solid	300.0	39835
820-6532-11 MSD	FS-11.1	Soluble	Solid	300.0	39835

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-1.1

Date Collected: 11/15/22 13:15
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-1

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 12:14	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 11:35	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	40240	11/22/22 23:30	SMC	EET MID

Client Sample ID: FS-2.1

Date Collected: 11/15/22 13:17
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-2

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 12:34	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 12:38	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40240	11/22/22 23:47	SMC	EET MID

Client Sample ID: FS-3.1

Date Collected: 11/15/22 13:19
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-3

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 12:55	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 12:59	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40240	11/22/22 23:53	SMC	EET MID

Client Sample ID: FS-4.1

Date Collected: 11/15/22 13:21
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-4

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 13:15	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-4.1

Lab Sample ID: 820-6532-4
Matrix: Solid
Date Collected: 11/15/22 13:21
Date Received: 11/16/22 16:32

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			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 13:20	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40240	11/22/22 23:58	SMC	EET MID

Client Sample ID: FS-5.1

Lab Sample ID: 820-6532-5
Matrix: Solid
Date Collected: 11/15/22 13:23
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 14:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 13:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	40240	11/23/22 00:04	SMC	EET MID

Client Sample ID: FS-6.1

Lab Sample ID: 820-6532-6
Matrix: Solid
Date Collected: 11/15/22 13:25
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 14:58	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 14:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40240	11/23/22 00:21	SMC	EET MID

Client Sample ID: FS-7.1

Lab Sample ID: 820-6532-7
Matrix: Solid
Date Collected: 11/15/22 13:27
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 15:19	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 14:23	SM	EET MID

Eurofins Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-7.1

Date Collected: 11/15/22 13:27
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-7

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			5.02 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40240	11/23/22 00:26	SMC	EET MID

Client Sample ID: FS-8.1

Date Collected: 11/15/22 13:29
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-8

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 15:39	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 14:44	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	40240	11/23/22 00:32	SMC	EET MID

Client Sample ID: FS-9.1

Date Collected: 11/15/22 15:25
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-9

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 16:00	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 15:05	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40240	11/23/22 00:38	SMC	EET MID

Client Sample ID: FS-10.1

Date Collected: 11/15/22 13:33
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-10

Matrix: Solid

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 16:20	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 15:27	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	40240	11/23/22 00:43	SMC	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: FS-11.1

Lab Sample ID: 820-6532-11

Date Collected: 11/15/22 13:35
Matrix: Solid
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 16:41	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 16:12	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40240	11/23/22 00:49	SMC	EET MID

Client Sample ID: NWW-1.1

Lab Sample ID: 820-6532-12

Date Collected: 11/15/22 13:37
Matrix: Solid
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 17:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 16:32	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40240	11/23/22 01:06	SMC	EET MID

Client Sample ID: NWW-2.1

Lab Sample ID: 820-6532-13

Date Collected: 11/15/22 13:39
Matrix: Solid
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 17:21	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 16:53	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40240	11/23/22 01:12	SMC	EET MID

Client Sample ID: NWW-3.1

Lab Sample ID: 820-6532-14

Date Collected: 11/15/22 13:41
Matrix: Solid
Date Received: 11/16/22 16:32

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 17:42	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40510	11/28/22 16:23	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Client Sample ID: NWW-3.1

Date Collected: 11/15/22 13:41
Date Received: 11/16/22 16:32

Lab Sample ID: 820-6532-14

Matrix: Solid

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			40287	11/23/22 11:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40176	11/22/22 08:14	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40164	11/22/22 17:15	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	39835	11/17/22 14:52	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40240	11/23/22 01:29	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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:

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

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I

Job ID: 820-6532-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-6532-1	FS-1.1	Solid	11/15/22 13:15	11/16/22 16:32
820-6532-2	FS-2.1	Solid	11/15/22 13:17	11/16/22 16:32
820-6532-3	FS-3.1	Solid	11/15/22 13:19	11/16/22 16:32
820-6532-4	FS-4.1	Solid	11/15/22 13:21	11/16/22 16:32
820-6532-5	FS-5.1	Solid	11/15/22 13:23	11/16/22 16:32
820-6532-6	FS-6.1	Solid	11/15/22 13:25	11/16/22 16:32
820-6532-7	FS-7.1	Solid	11/15/22 13:27	11/16/22 16:32
820-6532-8	FS-8.1	Solid	11/15/22 13:29	11/16/22 16:32
820-6532-9	FS-9.1	Solid	11/15/22 15:25	11/16/22 16:32
820-6532-10	FS-10.1	Solid	11/15/22 13:33	11/16/22 16:32
820-6532-11	FS-11.1	Solid	11/15/22 13:35	11/16/22 16:32
820-6532-12	NWW-1.1	Solid	11/15/22 13:37	11/16/22 16:32
820-6532-13	NWW-2.1	Solid	11/15/22 13:39	11/16/22 16:32
820-6532-14	NWW-3.1	Solid	11/15/22 13:41	11/16/22 16:32

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Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
6532

CHAIN OF CUSTODY RECORD

terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact:
Project Manager: Joseph Guesnier
Sampler's Name: Austin Worley
Sampler's Signature: Austin Worley

Project Number: AR217001
Project Name: State I

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 4.1/4.0°C
Page 1 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers: 4 oz Glass				BTEX (8021) Cl	TPH 8015 extended	Chloride (EPA Method 300)					Lab Sample ID
S	11/15/2022	13:15	X		FS-1.1	4	5	X				X	X	X					
S	11/15/2022	13:17	X		FS-2.1	4	5	X				X	X	X					
S	11/15/2022	13:19	X		FS-3.1	4	5	X				X	X	X					
S	11/15/2022	13:21	X		FS-4.1	4	5	X				X	X	X					
S	11/15/2022	13:23	X		FS-5.1	4	5	X				X	X	X					
S	11/15/2022	13:25	X		FS-6.1	4	5	X				X	X	X					
S	11/15/2022	13:27	X		FS-7.1	4	5	X				X	X	X					
S	11/15/2022	13:29	X		FS-8.1	4	5	X				X	X	X					
S	11/15/2022	15:25	X		FS-9.1	4	5	X				X	X	X					
S	11/15/2022	13:33	X		FS-10.1	4	5	X				X	X	X					
S	11/15/2022	13:35	X		FS-11.1	4	5	X				X	X	X					

820-6532 Chain of Custody

TURNAROUND TIME: [X] Normal [ ] 48-Hour Rush [ ] 24-Hour Rush
TRRP Laboratory Review Checklist: [ ] Yes [ ] No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Austin Worley	11-16-22	16:32	Anthony Ruggles	11/16/22	16:32

Bill To: Terracon

e-mail results to:
austin.worley@terracon.com
joseph.guesnier@terracon.com
travis.casey@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other: Wipe

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Project Manager: Joseph Guesnier
Contact:
Sampler's Name: Austin Worley
Sampler's Signature: Austin Worley

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C): 4.1/4.0C

Page 2 of 2

Project Number: AR217001
Project Name: State I

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers: 4 oz Glass				BTEX (8021) (8260)	TPH 8015 extended	Chloride (EPA Method 300)					Lab Sample ID
S	11/15/2022	13:37	X		NWW-1.1	0	5	X				X	X	X					
S	11/15/2022	13:39	X		NWW-2.1	0	5	X				X	X	X					
S	11/15/2022	13:41	X		NWW-3.1	0	5	X				X	X	X					

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Austin Worley	11-16-22	16:32	Ashley M. Ruggles	11/16/22	16:32

Bill To: Terracon

e-mail results to:
austin.worley@terracon.com
joseph.guesnier@terracon.com
travis.casey@terracon.com

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other Wipe

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-6532-1
SDG Number: AR217001

Login Number: 6532
List Number: 1
Creator: Ruggles, Ashley

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.	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: 820-6532-1
SDG Number: AR217001

Login Number: 6532
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/18/22 11:02 AM

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.	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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Generated 11/29/2022 8:48:05 AM

JOB DESCRIPTION

State I #16
SDG NUMBER AR217001

JOB NUMBER

820-6565-1

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock TX 79424

See page two for job notes and contact information.

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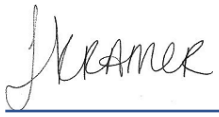
Eurofins Lubbock

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Eurofins Lubbock

Compliance Statement

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 Eurofins Philadelphia 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. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia 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 Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 820-6565-1
SDG: AR217001

Job ID: 820-6565-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-6565-1

Receipt
The samples were received on 11/18/2022 3:48 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 5.4°C

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40412 and analytical batch 880-40361 were outside control limits. Non-homogeneity is 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.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40185/2-A) and (LCSD 880-40185/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-40015 and analytical batch 880-40329 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: WW-1 (2-4)

Date Collected: 11/16/22 15:00
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 13:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 13:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 13:38	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		11/28/22 10:23	11/28/22 13:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 13:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/22 10:23	11/28/22 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*11/28/22 10:23*	*11/28/22 13:38*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*11/28/22 10:23*	*11/28/22 13:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/28/22 16:52	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 13:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 13:54	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*80*		*70 - 130*	*11/22/22 09:47*	*11/22/22 13:54*	*1*
o-Terphenyl (Surr)	*91*		*70 - 130*	*11/22/22 09:47*	*11/22/22 13:54*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.2**	**F1**	4.98		mg/Kg			11/28/22 11:09	1

Client Sample ID: WW-2 (2-4)

Date Collected: 11/16/22 15:10
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 15:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 15:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 15:38	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		11/28/22 09:59	11/28/22 15:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 15:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/22 09:59	11/28/22 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*11/28/22 09:59*	*11/28/22 15:38*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/28/22 09:59*	*11/28/22 15:38*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: WW-2 (2-4)

Date Collected: 11/16/22 15:10
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			11/28/22 16:59	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 14:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 09:47	11/22/22 14:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 09:47	11/22/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*79*		*70 - 130*	*11/22/22 09:47*	*11/22/22 14:16*	*1*
o-Terphenyl (Surr)	*93*		*70 - 130*	*11/22/22 09:47*	*11/22/22 14:16*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**108**		5.00		mg/Kg			11/28/22 11:33	1

Client Sample ID: NW-1 (2-4)

Date Collected: 11/16/22 15:20
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:01	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 17:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:01*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 14:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 09:47	11/22/22 14:38	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: NW-1 (2-4)

Lab Sample ID: 820-6565-3
Matrix: Solid
Date Collected: 11/16/22 15:20
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 09:47	11/22/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*91*		*70 - 130*	*11/22/22 09:47*	*11/22/22 14:38*	*1*
o-Terphenyl (Surr)	*105*		*70 - 130*	*11/22/22 09:47*	*11/22/22 14:38*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**127**		4.97		mg/Kg			11/28/22 11:41	1

Client Sample ID: NW-2 (2-4)

Lab Sample ID: 820-6565-4
Matrix: Solid
Date Collected: 11/16/22 15:30
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:22	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 17:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 17:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:22*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/22/22 09:47	11/22/22 15:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/22/22 09:47	11/22/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*81*		*70 - 130*	*11/22/22 09:47*	*11/22/22 15:00*	*1*
o-Terphenyl (Surr)	*93*		*70 - 130*	*11/22/22 09:47*	*11/22/22 15:00*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**252**		4.95		mg/Kg			11/28/22 12:06	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: EW-3 (2-4)

Lab Sample ID: 820-6565-5
Matrix: Solid
Date Collected: 11/16/22 15:40
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 17:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 17:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 17:42	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		11/28/22 09:59	11/28/22 17:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 17:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/28/22 09:59	11/28/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:42*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/28/22 09:59*	*11/28/22 17:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 15:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 15:45	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*77*		*70 - 130*	*11/22/22 09:47*	*11/22/22 15:45*	*1*
o-Terphenyl (Surr)	*84*		*70 - 130*	*11/22/22 09:47*	*11/22/22 15:45*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.6**		5.02		mg/Kg			11/28/22 12:14	1

Client Sample ID: SW-1 (2-4)

Lab Sample ID: 820-6565-6
Matrix: Solid
Date Collected: 11/16/22 15:50
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:03	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 18:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:03*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:03*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: SW-1 (2-4)

Lab Sample ID: 820-6565-6
Matrix: Solid
Date Collected: 11/16/22 15:50
Date Received: 11/18/22 15:48

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 16:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*79*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:07*	*1*
o-Terphenyl (Surr)	*86*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:07*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	194		5.00		mg/Kg			11/28/22 12:22	1

Client Sample ID: SW-2 (2-4)

Lab Sample ID: 820-6565-7
Matrix: Solid
Date Collected: 11/16/22 16:00
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/28/22 09:59	11/28/22 18:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/28/22 09:59	11/28/22 18:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/28/22 09:59	11/28/22 18:23	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		11/28/22 09:59	11/28/22 18:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/28/22 09:59	11/28/22 18:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/28/22 09:59	11/28/22 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:23*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 16:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:29	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: SW-2 (2-4)

Lab Sample ID: 820-6565-7
Matrix: Solid
Date Collected: 11/16/22 16:00
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*75*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:29*	*1*
o-Terphenyl (Surr)	*85*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**369**		4.98		mg/Kg			11/28/22 12:30	1

Client Sample ID: Seep-Floor (4-4.5)

Lab Sample ID: 820-6565-8
Matrix: Solid
Date Collected: 11/16/22 16:15
Date Received: 11/18/22 15:48

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:44	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 18:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 09:59	11/28/22 18:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 09:59	11/28/22 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:44*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*11/28/22 09:59*	*11/28/22 18:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/29/22 09:20	1

Method: SW846 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			11/23/22 12:17	1

Method: SW846 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		11/22/22 09:47	11/22/22 16:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:51	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/22/22 09:47	11/22/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*94*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:51*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*11/22/22 09:47*	*11/22/22 16:51*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7220**		50.5		mg/Kg			11/28/22 13:08	10

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
820-6565-1	WW-1 (2-4)	85	117										
820-6565-2	WW-2 (2-4)	84	92										
820-6565-3	NW-1 (2-4)	91	111										
820-6565-4	NW-2 (2-4)	94	110										
820-6565-5	EW-3 (2-4)	111	103										
820-6565-6	SW-1 (2-4)	94	110										
820-6565-7	SW-2 (2-4)	95	111										
820-6565-8	Seep-Floor (4-4.5)	108	99										
880-21724-A-1-B MS	Matrix Spike	86	105										
880-21724-A-1-C MSD	Matrix Spike Duplicate	87	110										
890-3503-A-1-C MS	Matrix Spike	105	110										
890-3503-A-1-D MSD	Matrix Spike Duplicate	100	110										
LCS 880-40407/1-A	Lab Control Sample	107	105										
LCS 880-40412/1-A	Lab Control Sample	86	107										
LCSD 880-40407/2-A	Lab Control Sample Dup	103	114										
LCSD 880-40412/2-A	Lab Control Sample Dup	88	101										
MB 880-40407/5-A	Method Blank	80	103										
MB 880-40412/5-A	Method Blank	74	110										

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)										
820-6565-1	WW-1 (2-4)	80	91										
820-6565-2	WW-2 (2-4)	79	93										
820-6565-3	NW-1 (2-4)	91	105										
820-6565-4	NW-2 (2-4)	81	93										
820-6565-5	EW-3 (2-4)	77	84										
820-6565-6	SW-1 (2-4)	79	86										
820-6565-7	SW-2 (2-4)	75	85										
820-6565-8	Seep-Floor (4-4.5)	94	107										
890-3499-A-1-C MS	Matrix Spike	96	101										
890-3499-A-1-D MSD	Matrix Spike Duplicate	113	118										
LCS 880-40185/2-A	Lab Control Sample	163 S1+	190 S1+										
LCSD 880-40185/3-A	Lab Control Sample Dup	157 S1+	180 S1+										
MB 880-40185/1-A	Method Blank	108	126										

Surrogate Legend

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

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40407/5-A
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 12:11	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		11/28/22 09:59	11/28/22 12:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 09:59	11/28/22 12:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*11/28/22 09:59*	*11/28/22 12:11*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/28/22 09:59*	*11/28/22 12:11*	*1*

Lab Sample ID: LCS 880-40407/1-A
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40407

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09393		mg/Kg		94	70 - 130
Toluene	0.100	0.1006		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1080		mg/Kg		108	70 - 130
m,p-Xylenes	0.200	0.2161		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1070		mg/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-40407/2-A
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40407

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	13	35
Toluene	0.100	0.1006		mg/Kg		101	70 - 130	0	35
Ethylbenzene	0.100	0.1024		mg/Kg		102	70 - 130	5	35
m,p-Xylenes	0.200	0.2084		mg/Kg		104	70 - 130	4	35
o-Xylene	0.100	0.1031		mg/Kg		103	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 890-3503-A-1-C MS
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40407

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.09904		mg/Kg		99	70 - 130
Toluene	<0.00201	U	0.100	0.08596		mg/Kg		86	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

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

Lab Sample ID: 890-3503-A-1-C MS
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40407

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.08173		mg/Kg		81	70 - 130
m,p-Xylenes	<0.00402	U	0.201	0.1679		mg/Kg		84	70 - 130
o-Xylene	<0.00201	U	0.100	0.08293		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-3503-A-1-D MSD
Matrix: Solid
Analysis Batch: 40362

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40407

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.1026		mg/Kg		104	70 - 130	3	35
Toluene	<0.00201	U	0.0990	0.09200		mg/Kg		93	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.0990	0.08517		mg/Kg		86	70 - 130	4	35
m,p-Xylenes	<0.00402	U	0.198	0.1742		mg/Kg		88	70 - 130	4	35
o-Xylene	<0.00201	U	0.0990	0.08588		mg/Kg		87	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: MB 880-40412/5-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 10:23	11/28/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*11/28/22 10:23*	*11/28/22 12:29*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*11/28/22 10:23*	*11/28/22 12:29*	*1*

Lab Sample ID: LCS 880-40412/1-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09831		mg/Kg		98	70 - 130
Toluene	0.100	0.1061		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.09887		mg/Kg		99	70 - 130
m,p-Xylenes	0.200	0.1767		mg/Kg		88	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

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

Lab Sample ID: LCS 880-40412/1-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.08535		mg/Kg		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-40412/2-A
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1104		mg/Kg		110	70 - 130	12	35
Toluene			0.100	0.1243		mg/Kg		124	70 - 130	16	35
Ethylbenzene			0.100	0.1190		mg/Kg		119	70 - 130	18	35
m,p-Xylenes			0.200	0.2122		mg/Kg		106	70 - 130	18	35
o-Xylene			0.100	0.1020		mg/Kg		102	70 - 130	18	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-21724-A-1-B MS
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40412

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.09140		mg/Kg		91	70 - 130		
Toluene	<0.00201	U	0.100	0.09742		mg/Kg		97	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.09031		mg/Kg		90	70 - 130		
m,p-Xylenes	<0.00402	U	0.201	0.1585		mg/Kg		79	70 - 130		
o-Xylene	<0.00201	U F1	0.100	0.07634		mg/Kg		76	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-21724-A-1-C MSD
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40412

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.08592		mg/Kg		86	70 - 130	6	35
Toluene	<0.00201	U	0.0996	0.08873		mg/Kg		89	70 - 130	9	35
Ethylbenzene	<0.00201	U	0.0996	0.07959		mg/Kg		80	70 - 130	13	35
m,p-Xylenes	<0.00402	U	0.199	0.1406		mg/Kg		71	70 - 130	12	35
o-Xylene	<0.00201	U F1	0.0996	0.06861	F1	mg/Kg		68	70 - 130	11	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

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

Lab Sample ID: 880-21724-A-1-C MSD
Matrix: Solid
Analysis Batch: 40361

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40412

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

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

Lab Sample ID: MB 880-40185/1-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40185

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		11/22/22 08:09	11/22/22 08:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/22/22 08:09	11/22/22 08:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/22/22 08:09	11/22/22 08:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	108		70 - 130	11/22/22 08:09	11/22/22 08:21	1
o-Terphenyl (Surr)	126		70 - 130	11/22/22 08:09	11/22/22 08:21	1

Lab Sample ID: LCS 880-40185/2-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40185

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	816.2		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	1000	988.2		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	163	S1+	70 - 130
o-Terphenyl (Surr)	190	S1+	70 - 130

Lab Sample ID: LCSD 880-40185/3-A
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40185

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	827.6		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	925.3		mg/Kg		93	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	157	S1+	70 - 130
o-Terphenyl (Surr)	180	S1+	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

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

Lab Sample ID: 890-3499-A-1-C MS
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40185

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	999	865.2		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1010		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*96*		*70 - 130*
o-Terphenyl (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-3499-A-1-D MSD
Matrix: Solid
Analysis Batch: 40170

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40185

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	999	1028		mg/Kg		101	70 - 130	17	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1191		mg/Kg		117	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*113*		*70 - 130*
o-Terphenyl (Surr)	*118*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40015/1-A
Matrix: Solid
Analysis Batch: 40329

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			11/28/22 08:51	1

Lab Sample ID: LCS 880-40015/2-A
Matrix: Solid
Analysis Batch: 40329

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.0		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-40015/3-A
Matrix: Solid
Analysis Batch: 40329

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	253.0		mg/Kg		101	90 - 110	3	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-6565-1 MS
Matrix: Solid
Analysis Batch: 40329

Client Sample ID: WW-1 (2-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	28.2	F1	249	346.8	F1	mg/Kg		128	90 - 110		

Lab Sample ID: 820-6565-1 MSD
Matrix: Solid
Analysis Batch: 40329

Client Sample ID: WW-1 (2-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	28.2	F1	249	342.8	F1	mg/Kg		126	90 - 110	1	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

GC VOA

Analysis Batch: 40361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	8021B	40412
MB 880-40412/5-A	Method Blank	Total/NA	Solid	8021B	40412
LCS 880-40412/1-A	Lab Control Sample	Total/NA	Solid	8021B	40412
LCSD 880-40412/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40412
880-21724-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	40412
880-21724-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40412

Analysis Batch: 40362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-2	WW-2 (2-4)	Total/NA	Solid	8021B	40407
820-6565-3	NW-1 (2-4)	Total/NA	Solid	8021B	40407
820-6565-4	NW-2 (2-4)	Total/NA	Solid	8021B	40407
820-6565-5	EW-3 (2-4)	Total/NA	Solid	8021B	40407
820-6565-6	SW-1 (2-4)	Total/NA	Solid	8021B	40407
820-6565-7	SW-2 (2-4)	Total/NA	Solid	8021B	40407
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	8021B	40407
MB 880-40407/5-A	Method Blank	Total/NA	Solid	8021B	40407
LCS 880-40407/1-A	Lab Control Sample	Total/NA	Solid	8021B	40407
LCSD 880-40407/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40407
890-3503-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	40407
890-3503-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40407

Prep Batch: 40407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-2	WW-2 (2-4)	Total/NA	Solid	5035	
820-6565-3	NW-1 (2-4)	Total/NA	Solid	5035	
820-6565-4	NW-2 (2-4)	Total/NA	Solid	5035	
820-6565-5	EW-3 (2-4)	Total/NA	Solid	5035	
820-6565-6	SW-1 (2-4)	Total/NA	Solid	5035	
820-6565-7	SW-2 (2-4)	Total/NA	Solid	5035	
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	5035	
MB 880-40407/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40407/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40407/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3503-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3503-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 40412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	5035	
MB 880-40412/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40412/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40412/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21724-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-21724-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-2	WW-2 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-3	NW-1 (2-4)	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

GC VOA (Continued)

Analysis Batch: 40519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-4	NW-2 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-5	EW-3 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-6	SW-1 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-7	SW-2 (2-4)	Total/NA	Solid	Total BTEX	
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-2	WW-2 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-3	NW-1 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-4	NW-2 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-5	EW-3 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-6	SW-1 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-7	SW-2 (2-4)	Total/NA	Solid	8015B NM	40185
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	8015B NM	40185
MB 880-40185/1-A	Method Blank	Total/NA	Solid	8015B NM	40185
LCS 880-40185/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40185
LCSD 880-40185/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40185
890-3499-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	40185
890-3499-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40185

Prep Batch: 40185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-2	WW-2 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-3	NW-1 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-4	NW-2 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-5	EW-3 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-6	SW-1 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-7	SW-2 (2-4)	Total/NA	Solid	8015NM Prep	
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	8015NM Prep	
MB 880-40185/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40185/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40185/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3499-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3499-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Total/NA	Solid	8015 NM	
820-6565-2	WW-2 (2-4)	Total/NA	Solid	8015 NM	
820-6565-3	NW-1 (2-4)	Total/NA	Solid	8015 NM	
820-6565-4	NW-2 (2-4)	Total/NA	Solid	8015 NM	
820-6565-5	EW-3 (2-4)	Total/NA	Solid	8015 NM	
820-6565-6	SW-1 (2-4)	Total/NA	Solid	8015 NM	
820-6565-7	SW-2 (2-4)	Total/NA	Solid	8015 NM	
820-6565-8	Seep-Floor (4-4.5)	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

HPLC/IC

Leach Batch: 40015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Soluble	Solid	DI Leach	
820-6565-2	WW-2 (2-4)	Soluble	Solid	DI Leach	
820-6565-3	NW-1 (2-4)	Soluble	Solid	DI Leach	
820-6565-4	NW-2 (2-4)	Soluble	Solid	DI Leach	
820-6565-5	EW-3 (2-4)	Soluble	Solid	DI Leach	
820-6565-6	SW-1 (2-4)	Soluble	Solid	DI Leach	
820-6565-7	SW-2 (2-4)	Soluble	Solid	DI Leach	
820-6565-8	Seep-Floor (4-4.5)	Soluble	Solid	DI Leach	
MB 880-40015/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40015/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40015/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-6565-1 MS	WW-1 (2-4)	Soluble	Solid	DI Leach	
820-6565-1 MSD	WW-1 (2-4)	Soluble	Solid	DI Leach	

Analysis Batch: 40329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6565-1	WW-1 (2-4)	Soluble	Solid	300.0	40015
820-6565-2	WW-2 (2-4)	Soluble	Solid	300.0	40015
820-6565-3	NW-1 (2-4)	Soluble	Solid	300.0	40015
820-6565-4	NW-2 (2-4)	Soluble	Solid	300.0	40015
820-6565-5	EW-3 (2-4)	Soluble	Solid	300.0	40015
820-6565-6	SW-1 (2-4)	Soluble	Solid	300.0	40015
820-6565-7	SW-2 (2-4)	Soluble	Solid	300.0	40015
820-6565-8	Seep-Floor (4-4.5)	Soluble	Solid	300.0	40015
MB 880-40015/1-A	Method Blank	Soluble	Solid	300.0	40015
LCS 880-40015/2-A	Lab Control Sample	Soluble	Solid	300.0	40015
LCSD 880-40015/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40015
820-6565-1 MS	WW-1 (2-4)	Soluble	Solid	300.0	40015
820-6565-1 MSD	WW-1 (2-4)	Soluble	Solid	300.0	40015

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: WW-1 (2-4)

Date Collected: 11/16/22 15:00
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-1
Matrix: Solid

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	40412	11/28/22 10:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/28/22 13:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/28/22 16:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 13:54	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 11:09	CH	EET MID

Client Sample ID: WW-2 (2-4)

Date Collected: 11/16/22 15:10
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-2
Matrix: Solid

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 15:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/28/22 16:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 14:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 11:33	CH	EET MID

Client Sample ID: NW-1 (2-4)

Date Collected: 11/16/22 15:20
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-3
Matrix: Solid

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 17:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 14:38	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 11:41	CH	EET MID

Client Sample ID: NW-2 (2-4)

Date Collected: 11/16/22 15:30
Date Received: 11/18/22 15:48

Lab Sample ID: 820-6565-4
Matrix: Solid

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 17:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: NW-2 (2-4)

Lab Sample ID: 820-6565-4
Matrix: Solid
Date Collected: 11/16/22 15:30
Date Received: 11/18/22 15:48

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			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 15:00	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 12:06	CH	EET MID

Client Sample ID: EW-3 (2-4)

Lab Sample ID: 820-6565-5
Matrix: Solid
Date Collected: 11/16/22 15:40
Date Received: 11/18/22 15:48

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 17:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 15:45	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 12:14	CH	EET MID

Client Sample ID: SW-1 (2-4)

Lab Sample ID: 820-6565-6
Matrix: Solid
Date Collected: 11/16/22 15:50
Date Received: 11/18/22 15:48

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 18:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 16:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 12:22	CH	EET MID

Client Sample ID: SW-2 (2-4)

Lab Sample ID: 820-6565-7
Matrix: Solid
Date Collected: 11/16/22 16:00
Date Received: 11/18/22 15:48

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 18:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 16:29	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Client Sample ID: SW-2 (2-4)

Lab Sample ID: 820-6565-7
Matrix: Solid
Date Collected: 11/16/22 16:00
Date Received: 11/18/22 15:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40329	11/28/22 12:30	CH	EET MID

Client Sample ID: Seep-Floor (4-4.5)

Lab Sample ID: 820-6565-8
Matrix: Solid
Date Collected: 11/16/22 16:15
Date Received: 11/18/22 15:48

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	40407	11/28/22 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/28/22 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40519	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40306	11/23/22 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	40185	11/22/22 09:47	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40170	11/22/22 16:51	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	40015	11/20/22 12:27	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40329	11/28/22 13:08	CH	EET MID

Laboratory References:

EET MID = Eurofins 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: 820-6565-1
SDG: AR217001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6565-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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:

EET MID = Eurofins 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: 820-6565-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-6565-1	WW-1 (2-4)	Solid	11/16/22 15:00	11/18/22 15:48
820-6565-2	WW-2 (2-4)	Solid	11/16/22 15:10	11/18/22 15:48
820-6565-3	NW-1 (2-4)	Solid	11/16/22 15:20	11/18/22 15:48
820-6565-4	NW-2 (2-4)	Solid	11/16/22 15:30	11/18/22 15:48
820-6565-5	EW-3 (2-4)	Solid	11/16/22 15:40	11/18/22 15:48
820-6565-6	SW-1 (2-4)	Solid	11/16/22 15:50	11/18/22 15:48
820-6565-7	SW-2 (2-4)	Solid	11/16/22 16:00	11/18/22 15:48
820-6565-8	Seep-Floor (4-4.5)	Solid	11/16/22 16:15	11/18/22 15:48

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
6565

6565

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location _____
Phone:
Contact: _____
Project Manager J. Guesnier
SRS #:
Sampler's Name J. Guesnier
Sampler's Signature

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C) 5.5/5.4 °C

Project Number: AR217001
Project Name: State I #16

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass				TPH Extended 8015	BTEX (EPA Method 8021B)	Chloride (EPA Method 300)					Lab Sample ID
S	11/16/2022	15:00	X		WW-1 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	15:10	X		WW-2 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	15:20	X		NW-1 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	15:30	X		NW-2 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	15:40	X		EW-3 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	15:50	X		SW-1 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	16:00	X		SW-2 (2-4)	2'	4'	X				X	X	X					
S	11/16/2022	16:15	X		Seep-Floor (4-4.5)	4'	4.5'	X				X	X	X					

820-6565 Chain of Custody

TURNAROUND TIME ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date: 11-18-22	Time: 15:48	Received by (Signature) A. Rieppler	Date: 11/18/22 Time: 15:48
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date: Time:

Bill To:

e-mail results to:
joseph.guesnier@terraconc.com
austin.worley@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other _____

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-6565-1
SDG Number: AR217001

Login Number: 6565
List Number: 1
Creator: Ruggles, Ashley

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.	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: 820-6565-1
SDG Number: AR217001

Login Number: 6565
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 11/21/22 08:46 AM

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joseph Guesnier
Terracon Consulting Eng & Scientists
5847 50th St
Lubbock, Texas 79424

Generated 12/19/2022 3:28:43 PM

JOB DESCRIPTION

State I #16
SDG NUMBER AR217001

JOB NUMBER

820-6683-1

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock TX 79424

See page two for job notes and contact information.

Released to Imaging: 5/12/2023 1:28:29 PM

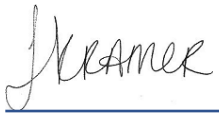
my EOL

Eurofins Lubbock

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Eurofins Lubbock

Compliance Statement

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 Eurofins Philadelphia 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. Eurofins Philadelphia is not responsible for sample integrity unless sampling has been performed by a member of our staff.

· Eurofins Philadelphia 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 Eurofins Philadelphia : Nicki Smith (Environmental Chemistry) and Jacqueline Gartner (Water Microbiology).

Kramer

Released to Imaging: 9/12/2023 1:28:29 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Laboratory Job ID: 820-6683-1
SDG: AR217001

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low 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
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

Job ID: 820-6683-1
SDG: AR217001

Job ID: 820-6683-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-6683-1

Receipt
The samples were received on 12/6/2022 8:58 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-41943 and analytical batch 880-41993 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-41922 and analytical batch 880-41994 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-41898 and analytical batch 880-41994 was outside the control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-41922 and analytical batch 880-41994 was outside the control limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-41383 and analytical batch 880-41511 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: FS-18.1 (820-6683-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-41295 and 880-41295 and analytical batch 880-41539 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: EW-1.1

Date Collected: 12/05/22 12:25
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/16/22 23:37	1
Toluene	<0.00201	U F1	0.00201		mg/Kg		12/15/22 13:52	12/16/22 23:37	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		12/15/22 13:52	12/16/22 23:37	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		12/15/22 13:52	12/16/22 23:37	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/16/22 23:37	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/15/22 13:52	12/16/22 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/15/22 13:52*	*12/16/22 23:37*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/15/22 13:52*	*12/16/22 23:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 11:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 11:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 11:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*12/08/22 14:20*	*12/10/22 11:54*	*1*
o-Terphenyl (Surr)	*116*		*70 - 130*	*12/08/22 14:20*	*12/10/22 11:54*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**141**	**F1**	5.00		mg/Kg			12/14/22 13:40	1

Client Sample ID: EW-2.1

Date Collected: 12/05/22 12:27
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/16/22 23:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/16/22 23:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/16/22 23:58	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/16/22 23:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/16/22 23:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/16/22 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/15/22 13:52*	*12/16/22 23:58*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*12/15/22 13:52*	*12/16/22 23:58*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: EW-2.1

Date Collected: 12/05/22 12:27
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 12:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 12:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*12/08/22 14:20*	*12/10/22 12:58*	*1*
o-Terphenyl (Surr)	*107*		*70 - 130*	*12/08/22 14:20*	*12/10/22 12:58*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**188**		4.99		mg/Kg			12/14/22 14:01	1

Client Sample ID: SEW-1.1

Date Collected: 12/05/22 12:31
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:18	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 00:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:18*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 13:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 13:20	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: SEW-1.1

Lab Sample ID: 820-6683-3
Matrix: Solid
Date Collected: 12/05/22 12:31
Date Received: 12/06/22 08:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*116*		*70 - 130*	*12/08/22 14:20*	*12/10/22 13:20*	*1*
o-Terphenyl (Surr)	*121*		*70 - 130*	*12/08/22 14:20*	*12/10/22 13:20*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.5**		4.98		mg/Kg			12/14/22 14:08	1

Client Sample ID: SW-3

Lab Sample ID: 820-6683-4
Matrix: Solid
Date Collected: 12/05/22 12:33
Date Received: 12/06/22 08:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 00:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 00:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 00:39	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		12/15/22 13:52	12/17/22 00:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 00:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/15/22 13:52	12/17/22 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:39*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 13:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 13:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*102*		*70 - 130*	*12/08/22 14:20*	*12/10/22 13:41*	*1*
o-Terphenyl (Surr)	*111*		*70 - 130*	*12/08/22 14:20*	*12/10/22 13:41*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.9**		5.00		mg/Kg			12/14/22 14:16	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-12.1

Date Collected: 12/05/22 12:35
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:59	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 00:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 00:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:59*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/15/22 13:52*	*12/17/22 00:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 14:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 14:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:02*	*1*
o-Terphenyl (Surr)	*110*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:02*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3230**		24.9		mg/Kg			12/14/22 14:23	5

Client Sample ID: FS-13.1

Date Collected: 12/05/22 12:37
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 01:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 01:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 01:20	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 01:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 01:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/15/22 13:52*	*12/17/22 01:20*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/15/22 13:52*	*12/17/22 01:20*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-13.1

Date Collected: 12/05/22 12:37
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 14:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 14:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:23*	*1*
o-Terphenyl (Surr)	*108*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:23*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1120**		24.8		mg/Kg			12/14/22 14:45	5

Client Sample ID: FS-14.1

Date Collected: 12/05/22 12:39
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 01:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 01:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 01:40	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		12/15/22 13:52	12/17/22 01:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 01:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/15/22 13:52	12/17/22 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/15/22 13:52*	*12/17/22 01:40*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/15/22 13:52*	*12/17/22 01:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 14:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/08/22 14:20	12/10/22 14:44	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-14.1

Date Collected: 12/05/22 12:39
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/08/22 14:20	12/10/22 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*104*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:44*	*1*
o-Terphenyl (Surr)	*116*		*70 - 130*	*12/08/22 14:20*	*12/10/22 14:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4220**		49.6		mg/Kg			12/14/22 14:52	10

Client Sample ID: FS-15.1

Date Collected: 12/05/22 12:41
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 02:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 02:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 02:01	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 02:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 02:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:01*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 15:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 15:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*116*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:05*	*1*
o-Terphenyl (Surr)	*124*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3070**		24.8		mg/Kg			12/14/22 14:59	5

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-16.1

Date Collected: 12/05/22 12:43
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 02:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 02:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 02:21	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		12/15/22 13:52	12/17/22 02:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 02:21	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/15/22 13:52	12/17/22 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:21*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 15:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 15:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*118*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:26*	*1*
o-Terphenyl (Surr)	*127*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:26*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7540**		100		mg/Kg			12/14/22 15:06	20

Client Sample ID: FS-17.1

Date Collected: 12/05/22 12:45
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/15/22 13:52	12/17/22 02:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/15/22 13:52	12/17/22 02:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/15/22 13:52	12/17/22 02:42	1
m,p-Xylenes	<0.00403	U	0.00403		mg/Kg		12/15/22 13:52	12/17/22 02:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/15/22 13:52	12/17/22 02:42	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/15/22 13:52	12/17/22 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:42*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*12/15/22 13:52*	*12/17/22 02:42*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-17.1

Date Collected: 12/05/22 12:45
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 15:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 15:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*120*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:48*	*1*
o-Terphenyl (Surr)	*129*		*70 - 130*	*12/08/22 14:20*	*12/10/22 15:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1490**		25.0		mg/Kg			12/14/22 15:13	5

Client Sample ID: FS-18.1

Date Collected: 12/05/22 12:47
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:32	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 04:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/15/22 13:52*	*12/17/22 04:32*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/15/22 13:52*	*12/17/22 04:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 16:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 16:30	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-18.1

Date Collected: 12/05/22 12:47
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*121*		*70 - 130*	*12/08/22 14:20*	*12/10/22 16:30*	*1*
o-Terphenyl (Surr)	*131*	*S1+*	*70 - 130*	*12/08/22 14:20*	*12/10/22 16:30*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1110**		24.9		mg/Kg			12/14/22 15:21	5

Client Sample ID: FS-19.1

Date Collected: 12/05/22 12:49
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:53	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 04:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 04:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/15/22 13:52*	*12/17/22 04:53*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*12/15/22 13:52*	*12/17/22 04:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 16:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 16:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*117*		*70 - 130*	*12/08/22 14:20*	*12/10/22 16:51*	*1*
o-Terphenyl (Surr)	*128*		*70 - 130*	*12/08/22 14:20*	*12/10/22 16:51*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1460**		24.8		mg/Kg			12/14/22 15:42	5

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-20.1

Date Collected: 12/05/22 12:51
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 05:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 05:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 05:13	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		12/15/22 13:52	12/17/22 05:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/17/22 05:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/15/22 13:52	12/17/22 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:13*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 17:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 17:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:13*	*1*
o-Terphenyl (Surr)	*112*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:13*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2860**		25.3		mg/Kg			12/14/22 15:49	5

Client Sample ID: FS-21.1

Date Collected: 12/05/22 12:53
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/17/22 05:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/17/22 05:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/17/22 05:33	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		12/15/22 13:52	12/17/22 05:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/15/22 13:52	12/17/22 05:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/15/22 13:52	12/17/22 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:33*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:33*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-21.1

Date Collected: 12/05/22 12:53
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 17:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 17:33	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*118*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:33*	*1*
o-Terphenyl (Surr)	*130*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:33*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**320**		4.97		mg/Kg			12/14/22 16:11	1

Client Sample ID: FS-22.1

Date Collected: 12/05/22 12:55
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 05:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 05:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 05:54	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 05:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/15/22 13:52	12/17/22 05:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/15/22 13:52	12/17/22 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:54*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*12/15/22 13:52*	*12/17/22 05:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/19/22 16:02	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 17:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 17:54	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-22.1

Lab Sample ID: 820-6683-15
Matrix: Solid
Date Collected: 12/05/22 12:55
Date Received: 12/06/22 08:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/08/22 14:20	12/10/22 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*118*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:54*	*1*
o-Terphenyl (Surr)	*129*		*70 - 130*	*12/08/22 14:20*	*12/10/22 17:54*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5070**		50.2		mg/Kg			12/14/22 16:18	10

Client Sample ID: FS-23.1

Lab Sample ID: 820-6683-16
Matrix: Solid
Date Collected: 12/05/22 12:57
Date Received: 12/06/22 08:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 17:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 17:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 17:08	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		12/15/22 15:22	12/17/22 17:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 17:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/15/22 15:22	12/17/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/15/22 15:22*	*12/17/22 17:08*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/15/22 15:22*	*12/17/22 17:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/19/22 16:21	1

Method: SW846 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			12/12/22 10:03	1

Method: SW846 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		12/08/22 14:20	12/10/22 18:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 18:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*107*		*70 - 130*	*12/08/22 14:20*	*12/10/22 18:14*	*1*
o-Terphenyl (Surr)	*120*		*70 - 130*	*12/08/22 14:20*	*12/10/22 18:14*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**864**		5.00		mg/Kg			12/14/22 16:26	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
820-6683-1	EW-1.1	102	107
820-6683-1 MS	EW-1.1	103	104
820-6683-1 MSD	EW-1.1	91	105
820-6683-2	EW-2.1	115	114
820-6683-3	SEW-1.1	107	109
820-6683-4	SW-3	102	116
820-6683-5	FS-12.1	106	103
820-6683-6	FS-13.1	117	102
820-6683-7	FS-14.1	113	107
820-6683-8	FS-15.1	117	100
820-6683-9	FS-16.1	95	115
820-6683-10	FS-17.1	78	117
820-6683-11	FS-18.1	109	103
820-6683-12	FS-19.1	103	112
820-6683-13	FS-20.1	121	109
820-6683-14	FS-21.1	108	110
820-6683-15	FS-22.1	126	110
820-6683-16	FS-23.1	109	95
890-3601-A-1-C MS	Matrix Spike	85	92
890-3601-A-1-D MSD	Matrix Spike Duplicate	86	89
LCS 880-41922/1-A	Lab Control Sample	97	102
LCS 880-41943/1-A	Lab Control Sample	97	95
LCSD 880-41922/2-A	Lab Control Sample Dup	99	102
LCSD 880-41943/2-A	Lab Control Sample Dup	94	94
MB 880-41898/5-A	Method Blank	62 S1-	106
MB 880-41922/5-A	Method Blank	62 S1-	106
MB 880-41938/5-A	Method Blank	92	93
MB 880-41943/5-A	Method Blank	97	90

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)
820-6683-1	EW-1.1	110	116
820-6683-1 MS	EW-1.1	110	102
820-6683-1 MSD	EW-1.1	106	99
820-6683-2	EW-2.1	100	107
820-6683-3	SEW-1.1	116	121
820-6683-4	SW-3	102	111
820-6683-5	FS-12.1	100	110
820-6683-6	FS-13.1	101	108
820-6683-7	FS-14.1	104	116
820-6683-8	FS-15.1	116	124
820-6683-9	FS-16.1	118	127

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
820-6683-10	FS-17.1	120	129										
820-6683-11	FS-18.1	121	131 S1+										
820-6683-12	FS-19.1	117	128										
820-6683-13	FS-20.1	101	112										
820-6683-14	FS-21.1	118	130										
820-6683-15	FS-22.1	118	129										
820-6683-16	FS-23.1	107	120										
LCS 880-41383/2-A	Lab Control Sample	111	116										
LCSD 880-41383/3-A	Lab Control Sample Dup	110	114										
MB 880-41383/1-A	Method Blank	127	185 S1+										

Surrogate Legend

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

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-41898/5-A
Matrix: Solid
Analysis Batch: 41994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41898

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 10:12	12/16/22 11:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 10:12	12/16/22 11:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 10:12	12/16/22 11:19	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		12/15/22 10:12	12/16/22 11:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 10:12	12/16/22 11:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/15/22 10:12	12/16/22 11:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*	*12/15/22 10:12*	*12/16/22 11:19*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/15/22 10:12*	*12/16/22 11:19*	*1*

Lab Sample ID: MB 880-41922/5-A
Matrix: Solid
Analysis Batch: 41994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/16/22 23:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/16/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/16/22 23:09	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		12/15/22 13:52	12/16/22 23:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 13:52	12/16/22 23:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/15/22 13:52	12/16/22 23:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*	*12/15/22 13:52*	*12/16/22 23:09*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/15/22 13:52*	*12/16/22 23:09*	*1*

Lab Sample ID: LCS 880-41922/1-A
Matrix: Solid
Analysis Batch: 41994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09248		mg/Kg		92	70 - 130		
Toluene			0.100	0.08679		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08628		mg/Kg		86	70 - 130		
m,p-Xylenes			0.200	0.1858		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09236		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-41922/2-A
Matrix: Solid
Analysis Batch: 41994

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41922

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09357		mg/Kg		94	70 - 130	1	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Lab Sample ID: LCSD 880-41922/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41994 — **Prep Batch: 41922**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08635		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.08714		mg/Kg		87	70 - 130	1	35
m,p-Xylenes			0.200	0.1872		mg/Kg		94	70 - 130	1	35
o-Xylene			0.100	0.09368		mg/Kg		94	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 820-6683-1 MS — **Client Sample ID: EW-1.1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41994 — **Prep Batch: 41922**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.07809		mg/Kg		78	70 - 130
Toluene	<0.00201	U F1	0.0998	0.07325		mg/Kg		73	70 - 130
Ethylbenzene	<0.00201	U F1	0.0998	0.07387		mg/Kg		73	70 - 130
m,p-Xylenes	<0.00402	U	0.200	0.1600		mg/Kg		80	70 - 130
o-Xylene	<0.00201	U	0.0998	0.08128		mg/Kg		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 820-6683-1 MSD — **Client Sample ID: EW-1.1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41994 — **Prep Batch: 41922**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07359		mg/Kg		74	70 - 130	6	35
Toluene	<0.00201	U F1	0.0990	0.06569	F1	mg/Kg		66	70 - 130	11	35
Ethylbenzene	<0.00201	U F1	0.0990	0.06549	F1	mg/Kg		65	70 - 130	12	35
m,p-Xylenes	<0.00402	U	0.198	0.1382		mg/Kg		70	70 - 130	15	35
o-Xylene	<0.00201	U	0.0990	0.07010		mg/Kg		70	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 880-41938/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41993 — **Prep Batch: 41938**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 14:55	12/16/22 22:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 14:55	12/16/22 22:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 14:55	12/16/22 22:04	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		12/15/22 14:55	12/16/22 22:04	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Lab Sample ID: MB 880-41938/5-A
Matrix: Solid
Analysis Batch: 41993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 14:55	12/16/22 22:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/15/22 14:55	12/16/22 22:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*12/15/22 14:55*	*12/16/22 22:04*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/15/22 14:55*	*12/16/22 22:04*	*1*

Lab Sample ID: MB 880-41943/5-A
Matrix: Solid
Analysis Batch: 41993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 08:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 08:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 08:47	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		12/15/22 15:22	12/17/22 08:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/15/22 15:22	12/17/22 08:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/15/22 15:22	12/17/22 08:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/15/22 15:22*	*12/17/22 08:47*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/15/22 15:22*	*12/17/22 08:47*	*1*

Lab Sample ID: LCS 880-41943/1-A
Matrix: Solid
Analysis Batch: 41993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41943

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09030		mg/Kg		90	70 - 130
Toluene	0.100	0.08409		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.07938		mg/Kg		79	70 - 130
m,p-Xylenes	0.200	0.1705		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08759		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-41943/2-A
Matrix: Solid
Analysis Batch: 41993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41943

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09270		mg/Kg		93	70 - 130	3	35
Toluene	0.100	0.08517		mg/Kg		85	70 - 130	1	35
Ethylbenzene	0.100	0.07903		mg/Kg		79	70 - 130	0	35
m,p-Xylenes	0.200	0.1679		mg/Kg		84	70 - 130	2	35
o-Xylene	0.100	0.08660		mg/Kg		87	70 - 130	1	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-3601-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41993 — **Prep Batch: 41943**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F2 F1	0.100	<0.00200	U F1	mg/Kg		1	70 - 130
Toluene	<0.00200	U F1	0.100	<0.00200	U F1	mg/Kg		0.6	70 - 130
Ethylbenzene	<0.00200	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130
m,p-Xylenes	<0.00401	U F1	0.200	<0.00401	U F1	mg/Kg		0.6	70 - 130
o-Xylene	<0.00200	U F1	0.100	<0.00200	U F1	mg/Kg		0.5	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-3601-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41993 — **Prep Batch: 41943**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0996	<0.00199	U F2 F1	mg/Kg		0.4	70 - 130	113	35
Toluene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m,p-Xylenes	<0.00401	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-41383/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 41511 — **Prep Batch: 41383**

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		12/08/22 14:20	12/10/22 09:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 09:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/08/22 14:20	12/10/22 09:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	127		70 - 130	12/08/22 14:20	12/10/22 09:21	1
o-Terphenyl (Surr)	185	S1+	70 - 130	12/08/22 14:20	12/10/22 09:21	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Lab Sample ID: LCS 880-41383/2-A
Matrix: Solid
Analysis Batch: 41511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41383

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	972.8		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1081		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*111*		*70 - 130*
o-Terphenyl (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-41383/3-A
Matrix: Solid
Analysis Batch: 41511

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41383

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	993.9		mg/Kg		99	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1099		mg/Kg		110	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*110*		*70 - 130*
o-Terphenyl (Surr)	*114*		*70 - 130*

Lab Sample ID: 820-6683-1 MS
Matrix: Solid
Analysis Batch: 41511

Client Sample ID: EW-1.1
Prep Type: Total/NA
Prep Batch: 41383

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1070		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	956.3		mg/Kg		96	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*110*		*70 - 130*
o-Terphenyl (Surr)	*102*		*70 - 130*

Lab Sample ID: 820-6683-1 MSD
Matrix: Solid
Analysis Batch: 41511

Client Sample ID: EW-1.1
Prep Type: Total/NA
Prep Batch: 41383

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	<50.0	U	997	990.1		mg/Kg		99	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	916.3		mg/Kg		92	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*106*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

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

Lab Sample ID: 820-6683-1 MSD
Matrix: Solid
Analysis Batch: 41511

Client Sample ID: EW-1.1
Prep Type: Total/NA
Prep Batch: 41383

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	99		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41295/1-A
Matrix: Solid
Analysis Batch: 41539

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			12/14/22 13:18	1

Lab Sample ID: LCS 880-41295/2-A
Matrix: Solid
Analysis Batch: 41539

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.6		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-41295/3-A
Matrix: Solid
Analysis Batch: 41539

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	228.6		mg/Kg		91	90 - 110	0	20

Lab Sample ID: 820-6683-1 MS
Matrix: Solid
Analysis Batch: 41539

Client Sample ID: EW-1.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	141	F1	250	344.6	F1	mg/Kg		81	90 - 110		

Lab Sample ID: 820-6683-1 MSD
Matrix: Solid
Analysis Batch: 41539

Client Sample ID: EW-1.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	141	F1	250	360.2	F1	mg/Kg		88	90 - 110	4	20

Lab Sample ID: 820-6683-11 MS
Matrix: Solid
Analysis Batch: 41539

Client Sample ID: FS-18.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1110		1250	2389		mg/Kg		103	90 - 110		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-6683-11 MSD
Matrix: Solid
Analysis Batch: 41539

Client Sample ID: FS-18.1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1110		1250	2343		mg/Kg		99	90 - 110	2	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

GC VOA

Prep Batch: 41898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-41898/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 41922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	5035	
820-6683-2	EW-2.1	Total/NA	Solid	5035	
820-6683-3	SEW-1.1	Total/NA	Solid	5035	
820-6683-4	SW-3	Total/NA	Solid	5035	
820-6683-5	FS-12.1	Total/NA	Solid	5035	
820-6683-6	FS-13.1	Total/NA	Solid	5035	
820-6683-7	FS-14.1	Total/NA	Solid	5035	
820-6683-8	FS-15.1	Total/NA	Solid	5035	
820-6683-9	FS-16.1	Total/NA	Solid	5035	
820-6683-10	FS-17.1	Total/NA	Solid	5035	
820-6683-11	FS-18.1	Total/NA	Solid	5035	
820-6683-12	FS-19.1	Total/NA	Solid	5035	
820-6683-13	FS-20.1	Total/NA	Solid	5035	
820-6683-14	FS-21.1	Total/NA	Solid	5035	
820-6683-15	FS-22.1	Total/NA	Solid	5035	
MB 880-41922/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-41922/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-41922/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-6683-1 MS	EW-1.1	Total/NA	Solid	5035	
820-6683-1 MSD	EW-1.1	Total/NA	Solid	5035	

Prep Batch: 41938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-41938/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 41943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-16	FS-23.1	Total/NA	Solid	5035	
MB 880-41943/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-41943/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-41943/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3601-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3601-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 41993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-16	FS-23.1	Total/NA	Solid	8021B	41943
MB 880-41938/5-A	Method Blank	Total/NA	Solid	8021B	41938
MB 880-41943/5-A	Method Blank	Total/NA	Solid	8021B	41943
LCS 880-41943/1-A	Lab Control Sample	Total/NA	Solid	8021B	41943
LCSD 880-41943/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	41943
890-3601-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	41943
890-3601-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	41943

Analysis Batch: 41994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	8021B	41922

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

GC VOA (Continued)

Analysis Batch: 41994 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-2	EW-2.1	Total/NA	Solid	8021B	41922
820-6683-3	SEW-1.1	Total/NA	Solid	8021B	41922
820-6683-4	SW-3	Total/NA	Solid	8021B	41922
820-6683-5	FS-12.1	Total/NA	Solid	8021B	41922
820-6683-6	FS-13.1	Total/NA	Solid	8021B	41922
820-6683-7	FS-14.1	Total/NA	Solid	8021B	41922
820-6683-8	FS-15.1	Total/NA	Solid	8021B	41922
820-6683-9	FS-16.1	Total/NA	Solid	8021B	41922
820-6683-10	FS-17.1	Total/NA	Solid	8021B	41922
820-6683-11	FS-18.1	Total/NA	Solid	8021B	41922
820-6683-12	FS-19.1	Total/NA	Solid	8021B	41922
820-6683-13	FS-20.1	Total/NA	Solid	8021B	41922
820-6683-14	FS-21.1	Total/NA	Solid	8021B	41922
820-6683-15	FS-22.1	Total/NA	Solid	8021B	41922
MB 880-41898/5-A	Method Blank	Total/NA	Solid	8021B	41898
MB 880-41922/5-A	Method Blank	Total/NA	Solid	8021B	41922
LCS 880-41922/1-A	Lab Control Sample	Total/NA	Solid	8021B	41922
LCSD 880-41922/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	41922
820-6683-1 MS	EW-1.1	Total/NA	Solid	8021B	41922
820-6683-1 MSD	EW-1.1	Total/NA	Solid	8021B	41922

Analysis Batch: 42232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	Total BTEX	
820-6683-2	EW-2.1	Total/NA	Solid	Total BTEX	
820-6683-3	SEW-1.1	Total/NA	Solid	Total BTEX	
820-6683-4	SW-3	Total/NA	Solid	Total BTEX	
820-6683-5	FS-12.1	Total/NA	Solid	Total BTEX	
820-6683-6	FS-13.1	Total/NA	Solid	Total BTEX	
820-6683-7	FS-14.1	Total/NA	Solid	Total BTEX	
820-6683-8	FS-15.1	Total/NA	Solid	Total BTEX	
820-6683-9	FS-16.1	Total/NA	Solid	Total BTEX	
820-6683-10	FS-17.1	Total/NA	Solid	Total BTEX	
820-6683-11	FS-18.1	Total/NA	Solid	Total BTEX	
820-6683-12	FS-19.1	Total/NA	Solid	Total BTEX	
820-6683-13	FS-20.1	Total/NA	Solid	Total BTEX	
820-6683-14	FS-21.1	Total/NA	Solid	Total BTEX	
820-6683-15	FS-22.1	Total/NA	Solid	Total BTEX	
820-6683-16	FS-23.1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	8015NM Prep	
820-6683-2	EW-2.1	Total/NA	Solid	8015NM Prep	
820-6683-3	SEW-1.1	Total/NA	Solid	8015NM Prep	
820-6683-4	SW-3	Total/NA	Solid	8015NM Prep	
820-6683-5	FS-12.1	Total/NA	Solid	8015NM Prep	
820-6683-6	FS-13.1	Total/NA	Solid	8015NM Prep	
820-6683-7	FS-14.1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

GC Semi VOA (Continued)

Prep Batch: 41383 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-8	FS-15.1	Total/NA	Solid	8015NM Prep	
820-6683-9	FS-16.1	Total/NA	Solid	8015NM Prep	
820-6683-10	FS-17.1	Total/NA	Solid	8015NM Prep	
820-6683-11	FS-18.1	Total/NA	Solid	8015NM Prep	
820-6683-12	FS-19.1	Total/NA	Solid	8015NM Prep	
820-6683-13	FS-20.1	Total/NA	Solid	8015NM Prep	
820-6683-14	FS-21.1	Total/NA	Solid	8015NM Prep	
820-6683-15	FS-22.1	Total/NA	Solid	8015NM Prep	
820-6683-16	FS-23.1	Total/NA	Solid	8015NM Prep	
MB 880-41383/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41383/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41383/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-6683-1 MS	EW-1.1	Total/NA	Solid	8015NM Prep	
820-6683-1 MSD	EW-1.1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	8015B NM	41383
820-6683-2	EW-2.1	Total/NA	Solid	8015B NM	41383
820-6683-3	SEW-1.1	Total/NA	Solid	8015B NM	41383
820-6683-4	SW-3	Total/NA	Solid	8015B NM	41383
820-6683-5	FS-12.1	Total/NA	Solid	8015B NM	41383
820-6683-6	FS-13.1	Total/NA	Solid	8015B NM	41383
820-6683-7	FS-14.1	Total/NA	Solid	8015B NM	41383
820-6683-8	FS-15.1	Total/NA	Solid	8015B NM	41383
820-6683-9	FS-16.1	Total/NA	Solid	8015B NM	41383
820-6683-10	FS-17.1	Total/NA	Solid	8015B NM	41383
820-6683-11	FS-18.1	Total/NA	Solid	8015B NM	41383
820-6683-12	FS-19.1	Total/NA	Solid	8015B NM	41383
820-6683-13	FS-20.1	Total/NA	Solid	8015B NM	41383
820-6683-14	FS-21.1	Total/NA	Solid	8015B NM	41383
820-6683-15	FS-22.1	Total/NA	Solid	8015B NM	41383
820-6683-16	FS-23.1	Total/NA	Solid	8015B NM	41383
MB 880-41383/1-A	Method Blank	Total/NA	Solid	8015B NM	41383
LCS 880-41383/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41383
LCSD 880-41383/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41383
820-6683-1 MS	EW-1.1	Total/NA	Solid	8015B NM	41383
820-6683-1 MSD	EW-1.1	Total/NA	Solid	8015B NM	41383

Analysis Batch: 41600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Total/NA	Solid	8015 NM	
820-6683-2	EW-2.1	Total/NA	Solid	8015 NM	
820-6683-3	SEW-1.1	Total/NA	Solid	8015 NM	
820-6683-4	SW-3	Total/NA	Solid	8015 NM	
820-6683-5	FS-12.1	Total/NA	Solid	8015 NM	
820-6683-6	FS-13.1	Total/NA	Solid	8015 NM	
820-6683-7	FS-14.1	Total/NA	Solid	8015 NM	
820-6683-8	FS-15.1	Total/NA	Solid	8015 NM	
820-6683-9	FS-16.1	Total/NA	Solid	8015 NM	
820-6683-10	FS-17.1	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

GC Semi VOA (Continued)

Analysis Batch: 41600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-11	FS-18.1	Total/NA	Solid	8015 NM	
820-6683-12	FS-19.1	Total/NA	Solid	8015 NM	
820-6683-13	FS-20.1	Total/NA	Solid	8015 NM	
820-6683-14	FS-21.1	Total/NA	Solid	8015 NM	
820-6683-15	FS-22.1	Total/NA	Solid	8015 NM	
820-6683-16	FS-23.1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 41295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Soluble	Solid	DI Leach	
820-6683-2	EW-2.1	Soluble	Solid	DI Leach	
820-6683-3	SEW-1.1	Soluble	Solid	DI Leach	
820-6683-4	SW-3	Soluble	Solid	DI Leach	
820-6683-5	FS-12.1	Soluble	Solid	DI Leach	
820-6683-6	FS-13.1	Soluble	Solid	DI Leach	
820-6683-7	FS-14.1	Soluble	Solid	DI Leach	
820-6683-8	FS-15.1	Soluble	Solid	DI Leach	
820-6683-9	FS-16.1	Soluble	Solid	DI Leach	
820-6683-10	FS-17.1	Soluble	Solid	DI Leach	
820-6683-11	FS-18.1	Soluble	Solid	DI Leach	
820-6683-12	FS-19.1	Soluble	Solid	DI Leach	
820-6683-13	FS-20.1	Soluble	Solid	DI Leach	
820-6683-14	FS-21.1	Soluble	Solid	DI Leach	
820-6683-15	FS-22.1	Soluble	Solid	DI Leach	
820-6683-16	FS-23.1	Soluble	Solid	DI Leach	
MB 880-41295/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41295/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41295/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-6683-1 MS	EW-1.1	Soluble	Solid	DI Leach	
820-6683-1 MSD	EW-1.1	Soluble	Solid	DI Leach	
820-6683-11 MS	FS-18.1	Soluble	Solid	DI Leach	
820-6683-11 MSD	FS-18.1	Soluble	Solid	DI Leach	

Analysis Batch: 41539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-1	EW-1.1	Soluble	Solid	300.0	41295
820-6683-2	EW-2.1	Soluble	Solid	300.0	41295
820-6683-3	SEW-1.1	Soluble	Solid	300.0	41295
820-6683-4	SW-3	Soluble	Solid	300.0	41295
820-6683-5	FS-12.1	Soluble	Solid	300.0	41295
820-6683-6	FS-13.1	Soluble	Solid	300.0	41295
820-6683-7	FS-14.1	Soluble	Solid	300.0	41295
820-6683-8	FS-15.1	Soluble	Solid	300.0	41295
820-6683-9	FS-16.1	Soluble	Solid	300.0	41295
820-6683-10	FS-17.1	Soluble	Solid	300.0	41295
820-6683-11	FS-18.1	Soluble	Solid	300.0	41295
820-6683-12	FS-19.1	Soluble	Solid	300.0	41295
820-6683-13	FS-20.1	Soluble	Solid	300.0	41295
820-6683-14	FS-21.1	Soluble	Solid	300.0	41295

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

HPLC/IC (Continued)

Analysis Batch: 41539 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-6683-15	FS-22.1	Soluble	Solid	300.0	41295
820-6683-16	FS-23.1	Soluble	Solid	300.0	41295
MB 880-41295/1-A	Method Blank	Soluble	Solid	300.0	41295
LCS 880-41295/2-A	Lab Control Sample	Soluble	Solid	300.0	41295
LCSD 880-41295/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41295
820-6683-1 MS	EW-1.1	Soluble	Solid	300.0	41295
820-6683-1 MSD	EW-1.1	Soluble	Solid	300.0	41295
820-6683-11 MS	FS-18.1	Soluble	Solid	300.0	41295
820-6683-11 MSD	FS-18.1	Soluble	Solid	300.0	41295

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: EW-1.1

Lab Sample ID: 820-6683-1

Date Collected: 12/05/22 12:25
Matrix: Solid
Date Received: 12/06/22 08:58

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/16/22 23:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 11:54	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 13:40	CH	EET MID

Client Sample ID: EW-2.1

Lab Sample ID: 820-6683-2

Date Collected: 12/05/22 12:27
Matrix: Solid
Date Received: 12/06/22 08:58

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/16/22 23:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 12:58	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 14:01	CH	EET MID

Client Sample ID: SEW-1.1

Lab Sample ID: 820-6683-3

Date Collected: 12/05/22 12:31
Matrix: Solid
Date Received: 12/06/22 08:58

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 00:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 13:20	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 14:08	CH	EET MID

Client Sample ID: SW-3

Lab Sample ID: 820-6683-4

Date Collected: 12/05/22 12:33
Matrix: Solid
Date Received: 12/06/22 08:58

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 00:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: SW-3
Date Collected: 12/05/22 12:33
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-4
Matrix: Solid

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			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 13:41	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 14:16	CH	EET MID

Client Sample ID: FS-12.1
Date Collected: 12/05/22 12:35
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-5
Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 00:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 14:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 14:23	CH	EET MID

Client Sample ID: FS-13.1
Date Collected: 12/05/22 12:37
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-6
Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 01:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 14:23	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 14:45	CH	EET MID

Client Sample ID: FS-14.1
Date Collected: 12/05/22 12:39
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-7
Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 01:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 14:44	SM	EET MID

Eurofins Lubbock

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-14.1

Date Collected: 12/05/22 12:39
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-7

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			5.04 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		10			41539	12/14/22 14:52	CH	EET MID

Client Sample ID: FS-15.1

Date Collected: 12/05/22 12:41
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-8

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 02:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 15:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 14:59	CH	EET MID

Client Sample ID: FS-16.1

Date Collected: 12/05/22 12:43
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-9

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 02:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 15:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		20			41539	12/14/22 15:06	CH	EET MID

Client Sample ID: FS-17.1

Date Collected: 12/05/22 12:45
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-10

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 02:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 15:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 15:13	CH	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-18.1

Date Collected: 12/05/22 12:47
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-11

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 04:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 16:30	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 15:21	CH	EET MID

Client Sample ID: FS-19.1

Date Collected: 12/05/22 12:49
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-12

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 04:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 16:51	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 15:42	CH	EET MID

Client Sample ID: FS-20.1

Date Collected: 12/05/22 12:51
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-13

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 17:13	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		5			41539	12/14/22 15:49	CH	EET MID

Client Sample ID: FS-21.1

Date Collected: 12/05/22 12:53
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-14

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 05:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Client Sample ID: FS-21.1

Date Collected: 12/05/22 12:53
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-14

Matrix: Solid

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			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 17:33	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 16:11	CH	EET MID

Client Sample ID: FS-22.1

Date Collected: 12/05/22 12:55
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-15

Matrix: Solid

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	41922	12/15/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41994	12/17/22 05:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 17:54	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		10			41539	12/14/22 16:18	CH	EET MID

Client Sample ID: FS-23.1

Date Collected: 12/05/22 12:57
Date Received: 12/06/22 08:58

Lab Sample ID: 820-6683-16

Matrix: Solid

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	41943	12/15/22 15:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	41993	12/17/22 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42232	12/19/22 16:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			41600	12/12/22 10:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41383	12/08/22 14:20	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41511	12/10/22 18:14	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41295	12/07/22 15:12	KS	EET MID
Soluble	Analysis	300.0		1			41539	12/14/22 16:26	CH	EET MID

Laboratory References:

EET MID = Eurofins 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: 820-6683-1
SDG: AR217001

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-6683-1
SDG: AR217001

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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:

EET MID = Eurofins 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: 820-6683-1
SDG: AR217001

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-6683-1	EW-1.1	Solid	12/05/22 12:25	12/06/22 08:58
820-6683-2	EW-2.1	Solid	12/05/22 12:27	12/06/22 08:58
820-6683-3	SEW-1.1	Solid	12/05/22 12:31	12/06/22 08:58
820-6683-4	SW-3	Solid	12/05/22 12:33	12/06/22 08:58
820-6683-5	FS-12.1	Solid	12/05/22 12:35	12/06/22 08:58
820-6683-6	FS-13.1	Solid	12/05/22 12:37	12/06/22 08:58
820-6683-7	FS-14.1	Solid	12/05/22 12:39	12/06/22 08:58
820-6683-8	FS-15.1	Solid	12/05/22 12:41	12/06/22 08:58
820-6683-9	FS-16.1	Solid	12/05/22 12:43	12/06/22 08:58
820-6683-10	FS-17.1	Solid	12/05/22 12:45	12/06/22 08:58
820-6683-11	FS-18.1	Solid	12/05/22 12:47	12/06/22 08:58
820-6683-12	FS-19.1	Solid	12/05/22 12:49	12/06/22 08:58
820-6683-13	FS-20.1	Solid	12/05/22 12:51	12/06/22 08:58
820-6683-14	FS-21.1	Solid	12/05/22 12:53	12/06/22 08:58
820-6683-15	FS-22.1	Solid	12/05/22 12:55	12/06/22 08:58
820-6683-16	FS-23.1	Solid	12/05/22 12:57	12/06/22 08:58

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
6683

CHAIN OF CUSTODY RECORD

Terracon

Laboratory:
Address:

Office Location: Lubbock
Phone:
Contact:
Project Manager: Joseph Guesnier
Sampler's Name: Austin Worley
Sampler's Signature: Austin Worley

Project Number: AR217001
Project Name: State I #16

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C): -10 / -10.1

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers: 4 oz Glass	BTEX (EPA Method 8021B)	TPH 8015 extended	Chloride (EPA Method 300)	Lab Sample ID
S	12/5/2022	12:25	X		EW- 1.1	2'	4'	X	X	X	X	
S	12/5/2022	12:27	X		EW - 2.1	2'	4'	X	X	X	X	
~~S~~	~~12/5/2022~~		~~X~~		~~EW - 3.1~~	~~2'~~	~~4'~~	~~X~~	~~X~~	~~X~~	~~X~~	aw
S	12/5/2022	12:31	X		SEW - 1.1	2'	4'	X	X	X	X	
S	12/5/2022	12:33	X		SW - 3	2'	4'	X	X	X	X	
S	12/5/2022	12:35	X		FS - 12.1	4'	5'	X	X	X	X	
S	12/5/2022	12:37	X		FS - 13.1	4'	5'	X	X	X	X	
S	12/5/2022	12:39	X		FS - 14.1	4'	5'	X	X	X	X	
S	12/5/2022	12:41	X		FS - 15.1	4'	5'	X	X	X	X	
S	12/5/2022	12:43	X		FS - 16.1	4'	5'	X	X	X	X	
S	12/5/2022	12:45	X		FS - 17.1	4'	5'	X	X	X	X	

820-6683 Chain of Custody

TURNAROUND TIME: ☒ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Austin Worley	12/6/22	8:58	Kimberly Ruggles	12/6/22	8:58

Bill To: Terracon

e-mail results to:
austin.worley@terracon.com
joseph.guesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other Wipe

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory:
Address:

Office Location: Lubbock
Phone:
Contact:
Project Manager: Joseph Guesnier
Sampler's Name: Austin Worley
Sampler's Signature: Austin Worley

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:

TEMP OF COOLER WHEN RECEIVED (°C): -10/-10.1

Project Number: AR217001
Project Name: State I #16

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers: 4 oz Glass				BTEX (EPA Method 8021B)	TPH 8015 extended	Chloride (EPA Method 300)					Lab Sample ID
S	12/5/2022	12:47	X		FS - 18.1	4'	5'	X				X	X	X					
S	12/5/2022	12:49	X		FS - 19.1	4'	5'	X				X	X	X					
S	12/5/2022	12:51	X		FS - 20.1	4'	5'	X				X	X	X					
S	12/5/2022	12:53	X		FS - 21.1	4'	5'	X				X	X	X					
S	12/5/2022	12:55	X		FS - 22.1	4'	5'	X				X	X	X					
S	12/5/2022	12:57	X		FS - 23.1	4'	5'	X				X	X	X					

NFE

TURNAROUND TIME: [X] Normal [ ] 48-Hour Rush [ ] 24-Hour Rush

TRRP Laboratory Review Checklist: [ ] Yes [ ] No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Austin Worley	12/6/22	8:58	Ashley M. Ruggles	12/6/22	8:58

Bill To: Terracon

e-mail results to:
austin.worley@terracon.com
joseph.guesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other Wipe

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-6683-1
SDG Number: AR217001

Login Number: 6683
List Number: 1
Creator: Ruggles, Ashley

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.	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: 820-6683-1
SDG Number: AR217001

Login Number: 6683
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/07/22 11:05 AM

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

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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

JKramer

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

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

LINKS

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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.

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).

JKramer

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 Job ID: 820-299-1
Project/Site: Spur Brine Release - AR217001

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.
¤	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: 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: <&commaMe 4-Bromofluorobenzene (Surr) rge&>. 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

Date Collected: 04/01/21 12:00
Date Received: 04/01/21 15:43
Sample Depth: 0' - 0.5'

Lab Sample ID: 820-299-1
Matrix: Solid

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

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: 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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA5-2

Lab Sample ID: 820-299-2
Matrix: Solid
Date Collected: 04/01/21 12:05
Date Received: 04/01/21 15:43
Sample Depth: 0.5' - 1.0'

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

Lab Sample ID: 820-299-3
Matrix: Solid
Date Collected: 04/01/21 12:10
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	<0.00199	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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA4-1

Date Collected: 04/01/21 12:15
Date Received: 04/01/21 15:43
Sample Depth: 0' - 0.5'

Lab Sample ID: 820-299-4
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 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

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: 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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA4-2

Lab Sample ID: 820-299-5
Matrix: Solid
Date Collected: 04/01/21 12:20
Date Received: 04/01/21 15:43
Sample Depth: 0.5' - 1.0'

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

Lab Sample ID: 820-299-6
Matrix: Solid
Date Collected: 04/01/21 12:25
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	<0.00202	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

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
Matrix: Solid

Date Collected: 04/01/21 12:30
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
Matrix: Solid

Date Collected: 04/01/21 12:35
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

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Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA3-2

Lab Sample ID: 820-299-8
Matrix: Solid
Date Collected: 04/01/21 12:35
Date Received: 04/01/21 15:43
Sample Depth: 0.5' - 1.0'

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

Lab Sample ID: 820-299-9
Matrix: Solid
Date Collected: 04/01/21 12:40
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 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

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
Matrix: Solid

Date Collected: 04/01/21 12:45
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
Matrix: Solid

Date Collected: 04/01/21 12:50
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

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Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA2-1

Lab Sample ID: 820-299-11
Matrix: Solid
Date Collected: 04/01/21 12:50
Date Received: 04/01/21 15:43
Sample Depth: 0' - 0.5'

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

Lab Sample ID: 820-299-12
Matrix: Solid
Date Collected: 04/01/21 12:55
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 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

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
Matrix: Solid
Date Collected: 04/01/21 13:00
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
Matrix: Solid
Date Collected: 04/01/21 13:15
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

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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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: HA1-3

Date Collected: 04/01/21 13:25
Date Received: 04/01/21 15:43
Sample Depth: 1.5' - 2.0'

Lab Sample ID: 820-299-18
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 06:13	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

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: 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

Lab Sample ID: 820-299-19
Matrix: Solid
Date Collected: 04/01/21 13:30
Date Received: 04/01/21 15:43
Sample Depth: 3.5' - 4.0'

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

Lab Sample ID: 820-299-20
Matrix: Solid
Date Collected: 04/01/21 13:35
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	<0.00200	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

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
Matrix: Solid

Date Collected: 04/01/21 13:40
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
Matrix: Solid

Date Collected: 04/01/21 13:45
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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: BG1-2

Lab Sample ID: 820-299-22
Matrix: Solid
Date Collected: 04/01/21 13:45
Date Received: 04/01/21 15:43
Sample Depth: 0.5' - 1.0'

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

Lab Sample ID: 820-299-23
Matrix: Solid
Date Collected: 04/01/21 13:50
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	<0.00202	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

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
Matrix: Solid
Date Collected: 04/01/21 13:55
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
Matrix: Solid
Date Collected: 04/01/21 14:00
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

Client Sample Results

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

Job ID: 820-299-1

Client Sample ID: BG2-2

Lab Sample ID: 820-299-25
Matrix: Solid
Date Collected: 04/01/21 14:00
Date Received: 04/01/21 15:43
Sample Depth: 0.5' - 1.0'

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

Lab Sample ID: 820-299-26
Matrix: Solid
Date Collected: 04/01/21 14:05
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 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

Client Sample Results

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
Sample Depth: 4.5' - 5.0'

Lab Sample ID: 820-299-27

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 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

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 (70-130)	DFBZ1 (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)

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-299-1
Project/Site: Spur Brine Release - AR217001

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)

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*

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

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 Result	MB 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 01:05	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 %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	*LCS %Recovery*	*LCS 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

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
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

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*

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		

Surrogate	*LCS %Recovery*	*LCS 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

Surrogate	*LCSD %Recovery*	*LCSD 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		

Surrogate	*MS %Recovery*	*MS 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

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*111*		*70 - 130*
o-Terphenyl (Surr)	*123*		*70 - 130*

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*

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 — **Client Sample ID: BG1-2**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 1372 — **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 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1515

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 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1515

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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1515

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 — **Client Sample ID: HA5-1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1515

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 — **Client Sample ID: HA5-1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1515

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 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1628

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

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	

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

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_Prep	

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_Prep	
820-299-2	HA5-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-3	HA5-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-4	HA4-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-5	HA4-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-6	HA4-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-7	HA3-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-8	HA3-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-9	HA3-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-10	HA3-4	Total/NA	Solid	TX_1005_S_Prep	
820-299-11	HA2-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-12	HA2-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-13	HA2-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-16	HA1-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-17	HA1-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-18	HA1-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-19	HA1-4	Total/NA	Solid	TX_1005_S_Prep	
820-299-20	HA1-5	Total/NA	Solid	TX_1005_S_Prep	
MB 880-1343/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	
LCS 880-1343/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
LCSD 880-1343/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Prep	
820-299-1 MS	HA5-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-1 MSD	HA5-1	Total/NA	Solid	TX_1005_S_Prep	

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

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_Prep	
820-299-23	BG1-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-24	BG2-1	Total/NA	Solid	TX_1005_S_Prep	
820-299-25	BG2-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-26	BG2-3	Total/NA	Solid	TX_1005_S_Prep	
820-299-27	HA3-5	Total/NA	Solid	TX_1005_S_Prep	
MB 880-1403/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	

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_Prep	
LCSD 880-1403/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Prep	
820-299-22 MS	BG1-2	Total/NA	Solid	TX_1005_S_Prep	
820-299-22 MSD	BG1-2	Total/NA	Solid	TX_1005_S_Prep	

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	

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

Lab Chronicle

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

Job ID: 820-299-1

Client Sample ID: HA5-1
Date Collected: 04/01/21 12:00
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-1
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 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
Date Collected: 04/01/21 12:05
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-2
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 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
Date Collected: 04/01/21 12:10
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-3
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 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
Date Collected: 04/01/21 12:15
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-4
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 01:07	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

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

Lab Chronicle

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

Job ID: 820-299-1

Client Sample ID: HA3-3
Date Collected: 04/01/21 12:40
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-9
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 02:49	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
Date Collected: 04/01/21 12:45
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-10
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 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
Date Collected: 04/01/21 12:50
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-11
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 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
Date Collected: 04/01/21 12:55
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-12
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 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

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

Lab Chronicle

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

Lab Sample ID: 820-299-19
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 06:33	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
Date Collected: 04/01/21 13:35
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-20
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 06:53	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
Date Collected: 04/01/21 13:40
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-21
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 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
Date Collected: 04/01/21 13:45
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-22
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 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

Lab Chronicle

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

Job ID: 820-299-1

Client Sample ID: BG1-3
Date Collected: 04/01/21 13:50
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-23
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 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
Date Collected: 04/01/21 13:55
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-24
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 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
Date Collected: 04/01/21 14:00
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-25
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 02:08	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
Date Collected: 04/01/21 14:05
Date Received: 04/01/21 15:43

Lab Sample ID: 820-299-26
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 02:28	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

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
Job ID: 820-299-1
Project/Site: Spur Brine Release - 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
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

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'

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen, Lubbock, Texas 79424
Phone:
Contact: Joeph Guesnier (806) 544-9276
SRS #:

Office Location: Lubbock
Project Manager: Joseph Guesnier
Sampler's Name: Bryant McBrayer
Sampler's Signature:

Project Number: AR217001
Project Name: Spur Brine Release

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)

Page 1 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 2 oz Glass	4 oz Glass	5035 kit	40 ml VOA	Chloride (EPA Method 300)	TPH (TCEQ Method TX1005)	BTEX (EPA Method 8021B)	Lab Sample ID
S	4/1/2021	12:00		X	HA5-1	0'	.5'		X			X	X	X	820-299-1
S	4/1/2021	12:05		X	HA5-2	.5'	1'		X			X	X	X	2
S	4/1/2021	12:10		X	HA5-3	1.5'	2'		X			X	X	X	3
S	4/1/2021	12:15		X	HA4-1	0'	.5'		X			X	X	X	4
S	4/1/2021	12:20		X	HA4-2	.5'	1'		X			X	X	X	5
S	4/1/2021	12:25		X	HA4-3	1.5'	2'		X			X	X	X	6
S	4/1/2021	12:30		X	HA3-1	0'	.5'		X			X	X	X	7
S	4/1/2021	12:35		X	HA3-2	.5'	1'		X			X	X	X	8
S	4/1/2021	12:40		X	HA3-3	1.5'	2'		X			X	X	X	9
S	4/1/2021	12:45		X	HA3-4	3.5'	4'		X			X	X	X	10
S	4/1/2021	12:50		X	HA2-1	0'	.5'		X			X	X	X	11
S	4/1/2021	12:55		X	HA2-2	.5'	1'		X			X	X	X	12
S	4/1/2021	13:00		X	HA2-3	1.5'	2'		X			X	X	X	13
S	4/1/2021	13:05		X	~~HA2-4~~	3.5'	4'		X			X	X	X	14
S	4/1/2021	13:10		X	~~HA2-5~~	4.5'	5'		X			X	X	X	15
S	4/1/2021	13:15		X	HA1-1	0'	.5'		X			X	X	X	16
S	4/1/2021	13:20		X	HA1-2	.5'	1'		X			X	X	X	17
S	4/1/2021	13:25		X	HA1-3	1.5'	2'		X			X	X	X	18
S	4/1/2021	13:30		X	HA1-4	3.5'	4'		X			X	X	X	19
S	4/1/2021	13:35		X	HA1-5	4.5'	5'		X			X	X	X	20
S	4/1/2021	13:40		X	BG1-1	0'	.5'		X			X	X	X	21
S	4/1/2021	13:45		X	BG1-2	.5'	1'		X			X	X	X	22
S	4/1/2021	13:50		X	BG1-3	1.5'	2'		X			X	X	X	23
S	4/1/2021	13:55		X	BG2-1	0'	.5'		X			X	X	X	24

~~Cancelled~~

TURNAROUND TIME: ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	4/1/21			4/1/21	15:43

NOTES: Client: Spur
0.5/0.48

e-mail results to:
bryant.mcbrayer@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml = Glass wide mouth; P/O - Plastic or other _____

820-299-01 Chain of Custody

Loc: 820
299

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen, Lubbock, Texas 79424
Phone:
Contact: Joeph Guesnier (806) 544-9276
SRS #:

Office Location: Lubbock
Project Manager: Joseph Guesnier
Sampler's Name: Bryant McBrayer
Sampler's Signature:

Project Number: AR217001
Project Name: Spur Brine Release

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)
Page 2 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 2 oz Glass	4 oz Glass	5035 kit	40 ml VOA	Chloride (EPA Method 300)	TPH (TCEQ Method TX1005)	BTEX (EPA Method 8021B)	Lab Sample ID
S	4/1/2021	14:00		X	BG2-2	.5"	1'		X			X	X	X	820-299-25
S	4/1/2021	14:05		X	BG2-3	1.5'	2'		X			X	X	X	1 26
S	~~4/1/2021~~	~~14:10~~		X	~~BG3-1~~	0'	.5'		X			X	X	X	—
S	~~4/1/2021~~	~~14:15~~		X	~~BG2-2~~	.5'	1'		X			X	X	X	—
S	~~4/1/2021~~	~~14:20~~		X	~~BG2-3~~	1.5'	2'		X			X	X	X	—
S	4/1/2021	12:47		X	HA3-5	4.5'	5'		X			X	X	X	820-299- 27

TURNAROUND TIME: ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	4/1/21			4/1/21	15:43

NOTES: Client: Spur
e-mail results to: 0.5/0.48
bryant.mcbrayer@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml - Glass wide mouth P/O - Plastic or other _____

Loc: 820
299

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Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 820-329 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-299-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 4/7/2021			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Spur Brine Release - AR217001	Project #: 82000340			
Site	SSOW#:			

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 AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W - pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, 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:
			Preservation Code:								
HA5-1 (820-299-1)	4/1/21	12 00 Mountain		Solid			X	X	X	1	
HA5-2 (820-299-2)	4/1/21	12 05 Mountain		Solid			X	X	X	1	
HA5-3 (820-299-3)	4/1/21	12 10 Mountain		Solid			X	X	X	1	
HA4-1 (820-299-4)	4/1/21	12 15 Mountain		Solid			X	X	X	1	
HA4-2 (820-299-5)	4/1/21	12 20 Mountain		Solid			X	X	X	1	
HA4-3 (820-299-6)	4/1/21	12 25 Mountain		Solid			X	X	X	1	
HA3-1 (820-299-7)	4/1/21	12 30 Mountain		Solid			X	X	X	1	
HA3-2 (820-299-8)	4/1/21	12 35 Mountain		Solid			X	X	X	1	
HA3-3 (820-299-9)	4/1/21	12 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 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/tests/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 complicance to Eurofins Xenco LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II, III, IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/2/21 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: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-329 3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 3 of 3
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-299-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 4/7/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Spur Brine Release - AR217001	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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 - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, 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:
			Preservation Code:								
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 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/tests/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 complicance 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) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time.	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/2/21 11:35			4-5-21 11:00 am	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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	

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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

JKramer

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? Ask The Expert

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.

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).

JKramer

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

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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
Matrix: Solid
Date Collected: 05/03/21 13:00
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
Matrix: Solid
Date Collected: 05/03/21 13:05
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

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
Matrix: Solid
Date Collected: 05/03/21 13:05
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 13:10
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 13:15
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
Matrix: Solid
Date Collected: 05/03/21 13:20
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

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
Matrix: Solid
Date Collected: 05/03/21 13:20
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 13:30
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 13:35
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
Matrix: Solid
Date Collected: 05/03/21 13:40
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

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
Matrix: Solid
Date Collected: 05/03/21 13:40
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 13:45
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 13:50
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
Matrix: Solid
Date Collected: 05/03/21 13:55
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

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')

Date Collected: 05/03/21 13:55
Date Received: 05/04/21 09:32

Lab Sample ID: 820-596-11

Matrix: Solid

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
OII 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')

Date Collected: 05/03/21 14:00
Date Received: 05/04/21 09:32

Lab Sample ID: 820-596-12

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		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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 14:10
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
Matrix: Solid
Date Collected: 05/03/21 14:15
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

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
Matrix: Solid
Date Collected: 05/03/21 14:15
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 14:20
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 14:25
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
Matrix: Solid
Date Collected: 05/03/21 14:30
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

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
Matrix: Solid
Date Collected: 05/03/21 14:30
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 14:35
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 14:40
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
Matrix: Solid
Date Collected: 05/03/21 14:45
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

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
Matrix: Solid
Date Collected: 05/03/21 14:45
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 14:50
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 14:55
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
Matrix: Solid
Date Collected: 05/03/21 15:00
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

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
Matrix: Solid
Date Collected: 05/03/21 15:00
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 15:05
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 15:10
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
Matrix: Solid
Date Collected: 05/03/21 15:15
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

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
Matrix: Solid
Date Collected: 05/03/21 15:15
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 15:20
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 15:25
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
Matrix: Solid
Date Collected: 05/03/21 15:30
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

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
Matrix: Solid
Date Collected: 05/03/21 15:30
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 15:35
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 15:40
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
Matrix: Solid
Date Collected: 05/03/21 15:45
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

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
Matrix: Solid
Date Collected: 05/03/21 15:45
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 15:50
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
OII 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

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')

Date Collected: 05/03/21 15:55
Date Received: 05/04/21 09:32

Lab Sample ID: 820-596-34

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		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')

Date Collected: 05/03/21 16:00
Date Received: 05/04/21 09:32

Lab Sample ID: 820-596-35

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		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

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
Matrix: Solid
Date Collected: 05/03/21 16:00
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 16:10
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
OII 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

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
Matrix: Solid
Date Collected: 05/03/21 16:15
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
Matrix: Solid
Date Collected: 05/03/21 16:20
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

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
Matrix: Solid
Date Collected: 05/03/21 16:20
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
OII 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
Matrix: Solid
Date Collected: 05/03/21 16:25
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
OII 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

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')
Date Collected: 05/03/21 16:40
Date Received: 05/04/21 09:32

Lab Sample ID: 820-596-40
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		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**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	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										

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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 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**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 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

Surrogate Summary

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)

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

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					

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		

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	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	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

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)

Surrogate	MSD %Recovery	MSD 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

Analyte	MB Result	MB 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

Surrogate	MB %Recovery	MB 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

Analyte			Spike Added	LCS Result	LCS 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		

Surrogate	LCS %Recovery	LCS 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

Analyte			Spike Added	LCSD Result	LCSD 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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

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

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

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
OII 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

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

Surrogate	LCSD %Recovery	LCSD 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

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 11:37	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
OII 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

Surrogate	MB %Recovery	MB 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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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		

Surrogate	LCS %Recovery	LCS 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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	97		70 - 130

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
OII 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

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

Surrogate	LCS %Recovery	LCS 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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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

Surrogate	LCSD %Recovery	LCSD 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

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	989.0		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	947.9		mg/Kg		95	70 - 130		

Surrogate	MS %Recovery	MS 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

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	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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	100		70 - 130

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

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

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

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

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	

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

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	

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	

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

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
Matrix: Solid
Date Collected: 05/03/21 13:00
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
Matrix: Solid
Date Collected: 05/03/21 13:05
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
Matrix: Solid
Date Collected: 05/03/21 13:10
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
Matrix: Solid
Date Collected: 05/03/21 13:15
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

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
Matrix: Solid
Date Collected: 05/03/21 13:20
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
Matrix: Solid
Date Collected: 05/03/21 13:30
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
Matrix: Solid
Date Collected: 05/03/21 13:35
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
Matrix: Solid
Date Collected: 05/03/21 13:40
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

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
Matrix: Solid
Date Collected: 05/03/21 13:45
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
Matrix: Solid
Date Collected: 05/03/21 13:50
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
Matrix: Solid
Date Collected: 05/03/21 13:55
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
Matrix: Solid
Date Collected: 05/03/21 14:00
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

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
Matrix: Solid
Date Collected: 05/03/21 14:10
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
Matrix: Solid
Date Collected: 05/03/21 14:15
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
Matrix: Solid
Date Collected: 05/03/21 14:20
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
Matrix: Solid
Date Collected: 05/03/21 14:25
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

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
Matrix: Solid
Date Collected: 05/03/21 14:30
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
Matrix: Solid
Date Collected: 05/03/21 14:35
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
Matrix: Solid
Date Collected: 05/03/21 14:40
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
Matrix: Solid
Date Collected: 05/03/21 14:45
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

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
Matrix: Solid
Date Collected: 05/03/21 14:50
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
Matrix: Solid
Date Collected: 05/03/21 14:55
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
Matrix: Solid
Date Collected: 05/03/21 15:00
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
Matrix: Solid
Date Collected: 05/03/21 15:05
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

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
Matrix: Solid
Date Collected: 05/03/21 15:10
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
Matrix: Solid
Date Collected: 05/03/21 15:15
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
Matrix: Solid
Date Collected: 05/03/21 15:20
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
Matrix: Solid
Date Collected: 05/03/21 15:25
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

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
Matrix: Solid
Date Collected: 05/03/21 15:30
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
Matrix: Solid
Date Collected: 05/03/21 15:35
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
Matrix: Solid
Date Collected: 05/03/21 15:40
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
Matrix: Solid
Date Collected: 05/03/21 15:45
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

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
Matrix: Solid
Date Collected: 05/03/21 15:50
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
Matrix: Solid
Date Collected: 05/03/21 15:55
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
Matrix: Solid
Date Collected: 05/03/21 16:00
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
Matrix: Solid
Date Collected: 05/03/21 16:10
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

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
Matrix: Solid
Date Collected: 05/03/21 16:15
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
Matrix: Solid
Date Collected: 05/03/21 16:20
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
Matrix: Solid
Date Collected: 05/03/21 16:25
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
Matrix: Solid
Date Collected: 05/03/21 16:40
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

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	

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

820-596-01 Chain of Custody

Loc: 820
596

CHAIN OF CUSTODY RECORD

Terracon

enco
701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact: J. Guesnier 806-544-9276
Project Manager: J. Guesnier
SRS #:
Sampler's Name: J. Guesnier
Sampler's Signature

Project Number: AR217001
Project Name: State I 16 (Brine Seep)

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 0.1/0.08

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8021B)	TPH Extended 8015	Lab Sample ID
S	5/3/2021	13:00		X	T-1 (6')	5'	6'	X				X	X	X	820-596-1
S	5/3/2021	13:05		X	T-1 (8')	7'	8'	X				X	X	X	2
S	5/3/2021	13:10		X	T-1 (10')	9'	10'	X				X	X	X	3
S	5/3/2021	13:15		X	T-1 (12')	11'	12'	X				X	X	X	4
S	5/3/2021	13:20		X	T-1 (14')	13'	14'	X				X	X	X	5
S	5/3/2021	13:30		X	T-3 (6')	5'	6'	X				X	X	X	6
S	5/3/2021	13:35		X	T-3 (8')	7'	8'	X				X	X	X	7
S	5/3/2021	13:40		X	T-3 (10')	9'	10'	X				X	X	X	8
S	5/3/2021	13:45		X	T-2 (6')	5'	6'	X				X	X	X	9
S	5/3/2021	13:50		X	T-2 (8')	7'	8'	X				X	X	X	10
S	5/3/2021	13:55		X	T-2 (10')	9'	10'	X				X	X	X	11
S	5/3/2021	14:00		X	T-2 (14')	13'	14'	X				X	X	X	12
S	5/3/2021	14:10		X	T-4 (6')	5'	6'	X				X	X	X	13
S	5/3/2021	14:15		X	T-4 (8')	7'	8'	X				X	X	X	14
S	5/3/2021	14:20		X	T-4 (10')	9'	10'	X				X	X	X	15
S	5/3/2021	14:25		X	T-4 (12')	11'	12'	X				X	X	X	16
S	5/3/2021	14:30		X	T-4 (14')	13'	14'	X				X	X	X	17
S	5/3/2021	14:35		X	T-5 (6')	5'	6'	X				X	X	X	18
S	5/3/2021	14:40		X	T-5 (8')	7'	8'	X				X	X	X	19
S	5/3/2021	14:45		X	T-5 (10')	9'	10'	X				X	X	X	20
S	5/3/2021	14:50		X	T-5 (12')	11'	12'	X				X	X	X	21

TURNAROUND TIME: ☐ Normal ☑ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
				5/4/21	9:32

NOTES: Client: Spur Energy Partners

e-mail results to:
bryant.mcbrayer@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other _____

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

Loc: 820
596

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact: J. Guesnier 806-544-9276
Project Manager: J. Guesnier
SRS #:
Sampler's Name: J. Guesnier
Sampler's Signature

Project Number: AR217001
Project Name: State I 16 (Brine Seep)

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 0.1/0.05
Page 2 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8021B)	TPH Extended 8015	Lab Sample ID
S	5/3/2021	14:55		X	T-5 (14')	13'	14'	X				X	X	X	820-596-22
S	5/3/2021	15:00		X	T-6 (6')	5'	6'	X				X	X	X	23
S	5/3/2021	15:05		X	T-6 (8')	7'	8'	X				X	X	X	24
S	5/3/2021	15:10		X	T-6 (10')	9'	10'	X				X	X	X	25
S	5/3/2021	15:15		X	T-7 (6')	5'	6'	X				X	X	X	26
S	5/3/2021	15:20		X	T-7 (8')	7'	8'	X				X	X	X	27
S	5/3/2021	15:25		X	T-7 (10')	9'	10'	X				X	X	X	28
S	5/3/2021	15:30		X	T-7 (12')	11'	12'	X				X	X	X	29
S	5/3/2021	15:35		X	T-7 (14')	13'	14'	X				X	X	X	30
S	5/3/2021	15:40		X	T-8 (6')	5'	6'	X				X	X	X	31
S	5/3/2021	15:45		X	T-8 (8')	7'	8'	X				X	X	X	32
S	5/3/2021	15:50		X	T-8 (10')	9'	10'	X				X	X	X	33
S	5/3/2021	15:55		X	T-8 (12')	11'	12'	X				X	X	X	34
S	5/3/2021	16:00		X	T-8 (14')	13'	14'	X				X	X	X	35
S	5/3/2021	16:10		X	T-9 (6')	5'	6'	X				X	X	X	36
S	5/3/2021	16:15		X	T-9 (8')	7'	8'	X				X	X	X	37
S	5/3/2021	16:20		X	T-9 (12')	11'	12'	X				X	X	X	38
S	5/3/2021	16:25		X	T-10 (6')	5'	6'	X				X	X	X	39
S	5/3/2021	16:30		X	T-10 (8')	7'	8'	X				X	X	X	40
S	5/3/2021	16:40		X	~~T-10 (10')~~	9'	10'	X				X	X	X	

TURNAROUND TIME: ☐ Normal ☑ 48-Hour Rush ☐ 24-Hour Rush
TRRP Laboratory Review Checklist: ☐ Yes ☐ No

Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
				5/4/21	9:32
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:
Relinquished by (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:

NOTES: Client: Spur Energy Partners

e-mail results to:
bryant.mcbrayer@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other

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Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-792.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 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			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: State I 16 (Brine Seep)	Project #: 82000268			
Site:	SSOW#:			

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 - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S H2SO4, T - TSP Dodecahydrate, U Acetone, V - MCAA, W pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=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:
			Preservation Code:								
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/tests/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 complicance 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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/4/21 11:11			5-5-21 1000 pm	
2	Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-792.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.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			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: State I 16 (Brine Seep)	Project #: 82000268			
Site:	SSOW#:			

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 - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=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:
			Preservation Code:								
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 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/tests/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 complicance 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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 5/4/21 11:11	Company	Received by:	Date/Time: 5-5-21 1:44pm	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 11/01/2020

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-792.5
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 5 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			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: State I 16 (Brine Seep)	Project #: 82000268			
Site:	SSOW#:			

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 - AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U Acetone, V - MCAA, W - pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=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:
			Preservation Code:								
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 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/tests/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 complicance 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) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/4/21 11:11	Company	Received by:	Date/Time: 5-5-21 1100 pm	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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	

eurofins | 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

JKramer

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? Ask The Expert

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.

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).

JKramer

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 Job ID: 820-781-1
Project/Site: State I 16

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.

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
Matrix: Solid
Date Collected: 05/21/21 14:15
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
Matrix: Solid
Date Collected: 05/21/21 14:17
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)

Lab Sample ID: 820-781-1

Date Collected: 05/21/21 14:15
Matrix: Solid
Date Received: 05/24/21 16:25

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)

Lab Sample ID: 820-781-2

Date Collected: 05/21/21 14:17
Matrix: Solid
Date Received: 05/24/21 16:25

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
Job ID: 820-781-1
Project/Site: State I 16

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

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Project Manager: J. Guesnier
Contact: J. Guesnier 806-544-9276
Sampler's Name: J. Guesnier
SRS #:
Sampler's Signature

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): -9.1 / -9.14

Page 1 of 1

820-781 Chain of Custody

Loc: 820
781

Project Number: AR217001
Project Name: State I 16

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8021B)	TPH Extended 8015	Lab Sample ID
S	5/21/2021	14:15		X	GP-1 (14-15)	14'	15'	X				X			
S	5/21/2021	14:17		X	GP-1 (15-16)	15'	16'	X				X			

TURNAROUND TIME: ☐ Normal ☐ 48-Hour Rush ☑ 24-Hour Rush
TRRP Laboratory Review Checklist: ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	5-24-21	4:24		5/24/21	16:25

NOTES: Client: Spur Energy Partners

e-mail results to:
bryant.mcbrayer@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater; W - Water; S - Soil; L - Liquid; A - Air Bag; C - Charcoal tube; SL - Sludge
Container: VOA - 40 ml vial; A/G - Amber Glass 1L; 250 ml - Glass wide mouth; P/O - Plastic or other _____

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Eurofins Xenco, Lubbock
6701 Aberdeen Ave. Suite 8
Lubbock, TX 79424
Phone 806-794-1296

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No. 820-1097 1
Client Contact: Shipping/Receiving	Phone:	E-Mail jessica kramer@eurofinset.com	State of Origin: Texas	Page Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-781-1
Address: 1211 W Florida Ave,	Due Date Requested: 5/25/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: AR217001 State 16	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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 Na2S2O3
G Amchlor — S - H2SO4
H Ascorbic Acid — T TSP Dodecahydrate
I - Ice — U Acetone
J DI Water — V MCAA
K EDTA — W pH 4-5
L EDA — Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GP-1(14-15) (820-781-1)	5/21/21	14 15 Central		Solid			X	1	
GP-1(15-16) (820-781-2)	5/21/21	14 17 Central		Solid			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/tests/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 complicance 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) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 5/24/21 17:00	Company	Received by:	Date/Time: 5-25-21 11:30AM	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

5/25/2021
Page 14 of 16
Received by OCD: 4/14/2023 1:19:50 PM
Released to Imaging: 9/12/2023 1:28:29 PM

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	
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	

eurofins | 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

JKramer

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? Ask The Expert

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.

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).

JKramer

Jessica Kramer
Project Manager
10/15/2021 5:53:30 PM

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Released to Imaging: 9/12/2023 1:28:29 PM

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.
¤	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
Matrix: Solid
Date Collected: 10/05/21 09:00
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 09:05
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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A4

Date Collected: 10/05/21 09:05
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-2

Matrix: Solid

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
OII 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

Date Collected: 10/05/21 09:10
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-3

Matrix: Solid

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: A5

Date Collected: 10/05/21 09:10
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-3
Matrix: Solid

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
OII 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

Date Collected: 10/05/21 09:15
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-4
Matrix: Solid

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

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
Matrix: Solid
Date Collected: 10/05/21 09:15
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 09:20
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
OII 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*

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
Matrix: Solid
Date Collected: 10/05/21 09:20
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
Matrix: Solid
Date Collected: 10/05/21 09:25
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
OII 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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B4

Date Collected: 10/05/21 09:30
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-7
Matrix: Solid

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
OII 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

Date Collected: 10/05/21 09:35
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-8
Matrix: Solid

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: B5

Date Collected: 10/05/21 09:35
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-8
Matrix: Solid

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
OII 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

Date Collected: 10/05/21 09:40
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-9
Matrix: Solid

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

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
Matrix: Solid
Date Collected: 10/05/21 09:40
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 09:45
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

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
Matrix: Solid
Date Collected: 10/05/21 09:45
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 09:50
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
OII 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*

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
Matrix: Solid

Date Collected: 10/05/21 09:50
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
Matrix: Solid

Date Collected: 10/05/21 09:55
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
OII 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

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
Matrix: Solid
Date Collected: 10/05/21 10:00
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 10:05
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

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
Matrix: Solid

Date Collected: 10/05/21 10:05
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
OII 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
Matrix: Solid

Date Collected: 10/05/21 10:10
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

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
Matrix: Solid
Date Collected: 10/05/21 10:10
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 10:15
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

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
Matrix: Solid
Date Collected: 10/05/21 10:15
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 10:20
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
OII 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*

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
Matrix: Solid
Date Collected: 10/05/21 10:20
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
Matrix: Solid
Date Collected: 10/05/21 10:25
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
OII 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

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
Matrix: Solid
Date Collected: 10/05/21 10:30
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 10:35
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

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
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Matrix: Solid

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
OII 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
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Matrix: Solid

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: E3

Date Collected: 10/05/21 10:40
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-21

Matrix: Solid

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
OII 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

Date Collected: 10/05/21 10:45
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-22

Matrix: Solid

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

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
Matrix: Solid
Date Collected: 10/05/21 10:45
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 10:50
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
OII 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*

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
Matrix: Solid
Date Collected: 10/05/21 10:50
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
Matrix: Solid
Date Collected: 10/05/21 10:55
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
OII 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

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
OII 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

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
Matrix: Solid

Date Collected: 10/05/21 11:05
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
Matrix: Solid

Date Collected: 10/05/21 11:10
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

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
Matrix: Solid
Date Collected: 10/05/21 11:10
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 11:15
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

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
Matrix: Solid
Date Collected: 10/05/21 11:15
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 11:20
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
OII 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*

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
Matrix: Solid
Date Collected: 10/05/21 11:20
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
Matrix: Solid
Date Collected: 10/05/21 11:25
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
OII 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

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
Matrix: Solid
Date Collected: 10/05/21 11:30
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
OII 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
Matrix: Solid
Date Collected: 10/05/21 11:35
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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: I5

Date Collected: 10/05/21 11:35
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-32

Matrix: Solid

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

Date Collected: 10/05/21 11:40
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-33

Matrix: Solid

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: I6

Date Collected: 10/05/21 11:40
Date Received: 10/08/21 09:36
Sample Depth: 0.5' - 1'

Lab Sample ID: 820-2183-33

Matrix: Solid

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
OII 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**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(56-150)	(68-152)	(53-142)	(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

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 (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(56-150)	(68-152)	(53-142)	(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**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(65-130)	(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

Surrogate Summary

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)

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*

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*

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*

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	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*

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*

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*

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*

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*

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*

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*

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*

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*

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
OII 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		

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

Surrogate	MS %Recovery	MS 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

Surrogate	MSD %Recovery	MSD 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
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		10/12/21 15:00	10/12/21 18:29	1

Surrogate	MB %Recovery	MB 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		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	121		65 - 130
o-Terphenyl	101		65 - 130

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
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

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	RPD	RPD Limit
Chloride	3940		102	3981	4	mg/Kg		41	80 - 120	1	20

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

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
Matrix: Solid
Analysis Batch: 26383

Client Sample ID: H6
Prep Type: Total/NA
Prep Batch: 26307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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	

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	
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	
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	26154

Prep Batch: 26154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2183-22	E4	Total/NA	Solid	5035	
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	
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	26154

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	
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	26154

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

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	

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

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	

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

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

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

Date Collected: 10/05/21 09:00
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-1
Matrix: Solid

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

Date Collected: 10/05/21 09:05
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-2
Matrix: Solid

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

Date Collected: 10/05/21 09:10
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-3
Matrix: Solid

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

Date Collected: 10/05/21 09:15
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-4
Matrix: Solid

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

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
Matrix: Solid
Date Collected: 10/05/21 09:15
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
Matrix: Solid
Date Collected: 10/05/21 09:20
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
Matrix: Solid
Date Collected: 10/05/21 09:25
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
Matrix: Solid
Date Collected: 10/05/21 09:30
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

Date Collected: 10/05/21 09:30
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-7
Matrix: Solid

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

Date Collected: 10/05/21 09:35
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-8
Matrix: Solid

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

Date Collected: 10/05/21 09:40
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-9
Matrix: Solid

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

Date Collected: 10/05/21 09:45
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-10
Matrix: Solid

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

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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
Matrix: Solid
Date Collected: 10/05/21 09:50
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
Matrix: Solid
Date Collected: 10/05/21 09:55
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
Matrix: Solid
Date Collected: 10/05/21 10:00
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
Matrix: Solid
Date Collected: 10/05/21 10:05
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
Matrix: Solid
Date Collected: 10/05/21 10:05
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
Matrix: Solid
Date Collected: 10/05/21 10:10
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
Matrix: Solid
Date Collected: 10/05/21 10:15
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
Matrix: Solid
Date Collected: 10/05/21 10:20
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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Date Received: 10/08/21 09:36

Matrix: Solid

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
Matrix: Solid
Date Collected: 10/05/21 10:55
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
Matrix: Solid
Date Collected: 10/05/21 11:00
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
Matrix: Solid
Date Collected: 10/05/21 11:05
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
Matrix: Solid
Date Collected: 10/05/21 11:10
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

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: State I #16

Job ID: 820-2183-1
SDG: AR217001

Client Sample ID: G4

Date Collected: 10/05/21 11:10
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-27
Matrix: Solid

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

Date Collected: 10/05/21 11:15
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-28
Matrix: Solid

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

Date Collected: 10/05/21 11:20
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-29
Matrix: Solid

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

Date Collected: 10/05/21 11:25
Date Received: 10/08/21 09:36

Lab Sample ID: 820-2183-30
Matrix: Solid

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

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

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'

Released to Imaging: 9/12/2023 1:28:29 PM

Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact: J. Guesnier 806-544-9276
Project Manager: J. Guesnier
SRS #:
Sampler's Name: Aaron Adams
Sampler's Signature

Project Number: AR217001
Project Name: State I #16

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	TPH Extended 8015	BTEX (EPA Method 8260B)	Lab Sample ID
S	10/5/2021	9:00		X	A3	0.5'	1'	X				X	X	X	
S	10/5/2021	9:05		X	A4	0.5'	1'	X				X	X	X	
S	10/5/2021	9:10		X	A5	0.5'	1'	X				X	X	X	
S	10/5/2021	9:15		X	A6	0.5'	1'	X				X	X	X	
S	10/5/2021	9:20		X	B2	0.5'	1'	X				X	X	X	
S	10/5/2021	9:25		X	B3	0.5'	1'	X				X	X	X	
S	10/5/2021	9:30		X	B4	0.5'	1'	X				X	X	X	
S	10/5/2021	9:35		X	B5	0.5'	1'	X				X	X	X	
S	10/5/2021	9:40		X	B6	0.5'	1'	X				X	X	X	
S	10/5/2021	9:45		X	C2	0.5'	1'	X				X	X	X	
S	10/5/2021	9:50		X	C3	0.5'	1'	X				X	X	X	
S	10/5/2021	9:55		X	C4	0.5'	1'	X				X	X	X	
S	10/5/2021	10:00		X	C5	0.5'	1'	X				X	X	X	
S	10/5/2021	10:05		X	C6	0.5'	1'	X				X	X	X	
S	10/5/2021	10:10		X	D2	0.5'	1'	X				X	X	X	
S	10/5/2021	10:15		X	D3	0.5'	1'	X				X	X	X	
S	10/5/2021	10:20		X	D4	0.5'	1'	X				X	X	X	
S	10/5/2021	10:25		X	D5	0.5'	1'	X				X	X	X	
S	10/5/2021	10:30		X	D6	0.5'	1'	X				X	X	X	
S	10/5/2021	10:35		X	E2	0.5'	1'	X				X	X	X	
S	10/5/2021	10:40		X	E3	0.5'	1'	X				X	X	X	
S	10/5/2021	10:45		X	E4	0.5'	1'	X				X	X	X	
S	10/5/2021	10:50		X	E5	0.5'	1'	X				X	X	X	

820-2183 Chain of Custody

TURNAROUND TIME ☐ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	10-8-21	5:36	Ashley Ruggles	10/8/21	9:36
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time

NOTES: Client: IR-4
-0.04 -14.04
-14/-13.96 C
ATK 10/8/21

e-mail results to:
brett.dennis@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml = Glass wide mouth P/O - Plastic or other

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact: J. Guesnier 806-544-9276
Project Manager: J. Guesnier
SRS #:
Sampler's Name: Aaron Adams
Sampler's Signature

Project Number: AR217001
Project Name: State I #16

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)

Page 2 of 2

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	TPH Extended 8015	BTEX (EPA Method 8260B)	Lab Sample ID
S	10/5/2021	10:55		X	F3	0.5'	1'	X				X	X	X	
S	10/5/2021	11:00		X	F4	0.5'	1'	X				X	X	X	
S	10/5/2021	11:05		X	F5	0.5'	1'	X				X	X	X	
S	10/5/2021	11:10		X	G4	0.5'	1'	X				X	X	X	
S	10/5/2021	11:15		X	G5	0.5'	1'	X				X	X	X	
S	10/5/2021	11:20		X	G6	0.5'	1'	X				X	X	X	
S	10/5/2021	11:25		X	H5	0.5'	1'	X				X	X	X	
S	10/5/2021	11:30		X	H6	0.5'	1'	X				X	X	X	
S	10/5/2021	11:35		X	I5	0.5'	1'	X				X	X	X	
S	10/5/2021	11:40		X	I6	0.5'	1'	X				X	X	X	

TURNAROUND TIME: ☑ Normal ☐ 48-Hour Rush ☐ 24-Hour Rush

TRRP Laboratory Review Checklist ☐ Yes ☐ No

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
	10-8-21	9:36	Ashley Ruggles	10/8/21	9:36
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time

NOTES: Client: IR-4
-0.04 -14.04
-14/-13.96C
e-mail results to:
brett.dennis@terracon.com
erin.loyd@terracon.com
jrguesnier@terracon.com
ATR 10/8/21

Matrix: WW-Wastewater W - Water S - Soil L - Liquid A - Air Bag C - Charcoal tube SL - Sludge
Container: VOA - 40 ml vial A/G - Amber Glass 1L 250 ml - Glass wide mouth P/O - Plastic or other

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2257 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 4
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2183-1
Address: 4147 Greenbriar Dr	Due Date Requested: 10/14/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I #16	Project #: 82000340			
Site:	SSOW#:			

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 AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)
Other

| Sample Identification Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Perform MS/MSD | Total_Hg_Hg_Hg

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2257.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 2 of 4
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2183-1
Address: 4147 Greenbriar Dr	Due Date Requested: 10/14/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I #16	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Y/N)	Field Filtered Sample (Y/N)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	8260C/5035FP_Calc (MOD) BTEX	Total_BTEX	Special Instructions/Note:
			Preservation Code:									
C2 (820-2183-10)	10/5/21	09:45 Central		Solid			X	X	X	X	X	
C3 (820-2183-11)	10/5/21	09:50 Central		Solid			X	X	X	X	X	
C4 (820-2183-12)	10/5/21	09:55 Central		Solid			X	X	X	X	X	
C5 (820-2183-13)	10/5/21	10:00 Central		Solid			X	X	X	X	X	
C6 (820-2183-14)	10/5/21	10:05 Central		Solid			X	X	X	X	X	
D2 (820-2183-15)	10/5/21	10:10 Central		Solid			X	X	X	X	X	
D3 (820-2183-16)	10/5/21	10:15 Central		Solid			X	X	X	X	X	
D4 (820-2183-17)	10/5/21	10:20 Central		Solid			X	X	X	X	X	
D5 (820-2183-18)	10/5/21	10:25 Central		Solid			X	X	X	X	X	

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ashley T. Ruggles FEx	10/8/21 17:00		FEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
FEx			Pete Pin	10/9/21 1000	Ex
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:	IR ID: HOU-188
		Temp: 2.0 C/F: +0.9 Corrected Temp: 2.9	

Ver 06/08/2021

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2257.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 3 of 4
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2183-1
Address: 4147 Greenbriar Dr	Due Date Requested: 10/14/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I #16	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	8260C/5035FP_Calc (MOD) BTEX	Total_BTEX	Special Instructions/Note
D6 (820-2183-19)	10/5/21	10:30 Central		Solid	X	X	X	X	X	
E2 (820-2183-20)	10/5/21	10:35 Central		Solid	X	X	X	X	X	
E3 (820-2183-21)	10/5/21	10:40 Central		Solid	X	X	X	X	X	
E4 (820-2183-22)	10/5/21	10:45 Central		Solid	X	X	X	X	X	
E5 (820-2183-23)	10/5/21	10:50 Central		Solid	X	X	X	X	X	
F3 (820-2183-24)	10/5/21	10:55 Central		Solid	X	X	X	X	X	
F4 (820-2183-25)	10/5/21	11:00 Central		Solid	X	X	X	X	X	
F5 (820-2183-26)	10/5/21	11:05 Central		Solid	X	X	X	X	X	
G4 (820-2183-27)	10/5/21	11 10 Central		Solid	X	X	X	X	X	

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ashley Ruggles FEx	10/8/21 1700		FEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
FEx			Peha Pin	10/9/21 1000	Ex
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:	Temp: 2.0 IR ID HOU-188 C/F +0.9 Corrected Temp: 2.4

06/08/2021

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-2257.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 4 of 4
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2183-1
Address: 4147 Greenbriar Dr	Due Date Requested: 10/14/2021			Preservation Codes:
City: Stafford	TAT Requested (days):			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 Na2S2O3 G Amchlor S H2SO4 H Ascorbic Acid T TSP Dodecahydrate I Ice U Acetone J DI Water V MCAA K EDTA W pH 4-5 L EDA Z other (specify) Other
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: State I #16	Project #: 82000340			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	Total Number of Containers	8015MOD_NM/8016NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	8260C/5035FP_Calc (MOD) BTEX	Total_BTEX	Special Instructions/Note:
		Preservation Code:										
G5 (820-2183-28)	10/5/21	11 15 Central		Solid			X	X	X	X	X	
G6 (820-2183-29)	10/5/21	11:20 Central		Solid			X	X	X	X	X	
H5 (820-2183-30)	10/5/21	11:25 Central		Solid			X	X	X	X	X	
H6 (820-2183-31)	10/5/21	11:30 Central		Solid			X	X	X	X	X	
I5 (820-2183-32)	10/5/21	11.35 Central		Solid			X	X	X	X	X	
I6 (820-2183-33)	10/5/21	11:40 Central		Solid			X	X	X	X	X	

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ashley Ruggles FEx	10/8/21 1700		FEx		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Pilar Pla	10/9/21 1000	Ex
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
		Temp 2.0 IR ID HOU-188 C/F +0.9 Corrected Temp 2.9

ver 06/08/2021

Released to Imaging: 9/12/2023 1:28:29 PM
Received by OCD: 4/14/2023 1:19:50 PM

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 820-2258.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.builes@eurofinset.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-2186-1
Address: 4147 Greenbriar Dr	Due Date Requested: 10/15/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: 2021 Oct Waste Water Analysis	Project #: 82000170			
Site:	SSOW#:			

Analysis Requested

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	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Perform MS/MSD (Yes or No)	SM5210B_Calc/ BOD, 5-Day	1664B_NP/ (MOD) HEM Oil and Grease	335.4/Distill_CN Cyanide, Total	200.7/200.7_P_TR (MOD) Recoverable Metals per ICP by EPA	245.1/245.1_Prep Mercury	Total Number of containers	Special Instructions/Note:
Dynamic Foods (820-2186-1)	10/8/21	09:00 Central	C	Water		X						HDPE 1L
Dynamic Foods (820-2186-2)	10/7/21	16:00 Central	G	Water			X					Clear Glass 1L w HCL
Dynamic Foods (820-2186-3)	10/7/21	11:00 Central	G	Water			X					Clear Glass 1L w HCL
Dynamic Foods (820-2186-4)	10/7/21	13:00 Central	G	Water			X					Clear Glass 1L w HCL
Dynamic Foods (820-2186-5)	10/7/21	15:00 Central	G	Water			X					Clear Glass 1L w HCL
Dynamic Foods (820-2186-6)	10/7/21	13:00 Central	G	Water				X				HDPE 250ml w NaOH
Dynamic Foods (820-2186-7)	10/8/21	09:00 Central	G	Water					X	X		HDPE 250ml w HNO_3

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/tests/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 complicance 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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Teddy Rendell Lee	10/8/21 1700	Eurofins Lubbock	FEx		
Relinquished by: FEx	Date/Time:	Company	Received by: Pilar Pla	Date/Time: 10/9/21 1000	Company Ex
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
		Temp: 2.0 IR ID:HOU-188 C/F:+0.9 Corrected Temp: 2.9

Samples shipped on ice PRL 10/8/21

06/08/2021

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	

APPENDIX E – WASTE MANIFEST

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

Incident ID	
District RP	
Facility ID	
Application ID	

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 not 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: Joseph Guesnier Title: Staff Scientist

Signature: Date: 4/12/2021

email: jrguesnier@terracon.com Telephone: 806-544-9276

OCD Only

Received by: Date:

5847 50th street
Lubbock, TX 79424
P (806) 300-0140
D (806) 589-6525
Terracon.com

09-23-2022

Oil Conservation Division of New Mexico (NMOCD)
1301 W Grand Ave
Artesia, NM 88210

Attn: Mike Bratcher
E: Mike.Bratcher@stat.nm.us

Re: State I #16 Brine Seep – Remedial Action Plan
NMOCD Reference No. nAPP2110253617
Terracon Project No. AR217001

Dear Mr., Bratcher:

Following our initial meeting August 11, 2022 for the State I #16 Site located on Unit M Section 28, T17S R29E, Eddy County, New Mexico. Terracon has prepared the below correspondence to address the NMOCDs concerns regarding the sampling of the surrounding wells in the area in accordance with **New Mexico Administrative Code (NMAC) Rule 20.6.2**. The below table summarizes the attachments that are applicable to the request from the NMOCD.

(1) Well Sampling Results Map	Figure – 4
(2) Groundwater Sample Analytical Results	Table 4

Considering the results observed from the sampling event and at the direction of the NMOCD, Terracon will install three monitoring wells to the, north and northwest of the existing BG-1 well. The proposed borings would be installed and sampled to assess the background concentrations of groundwater in the area in and attempt to further evaluate the point of influence for the concentrations observed in BG-1. The below table summarizes the attachments that are applicable to the proposal set forth by Terracon and Spur Energy Partners (Spur).

(3) SWD Locations Map	Figure – 5
(4) Proposed Well Locations	Figure – 6

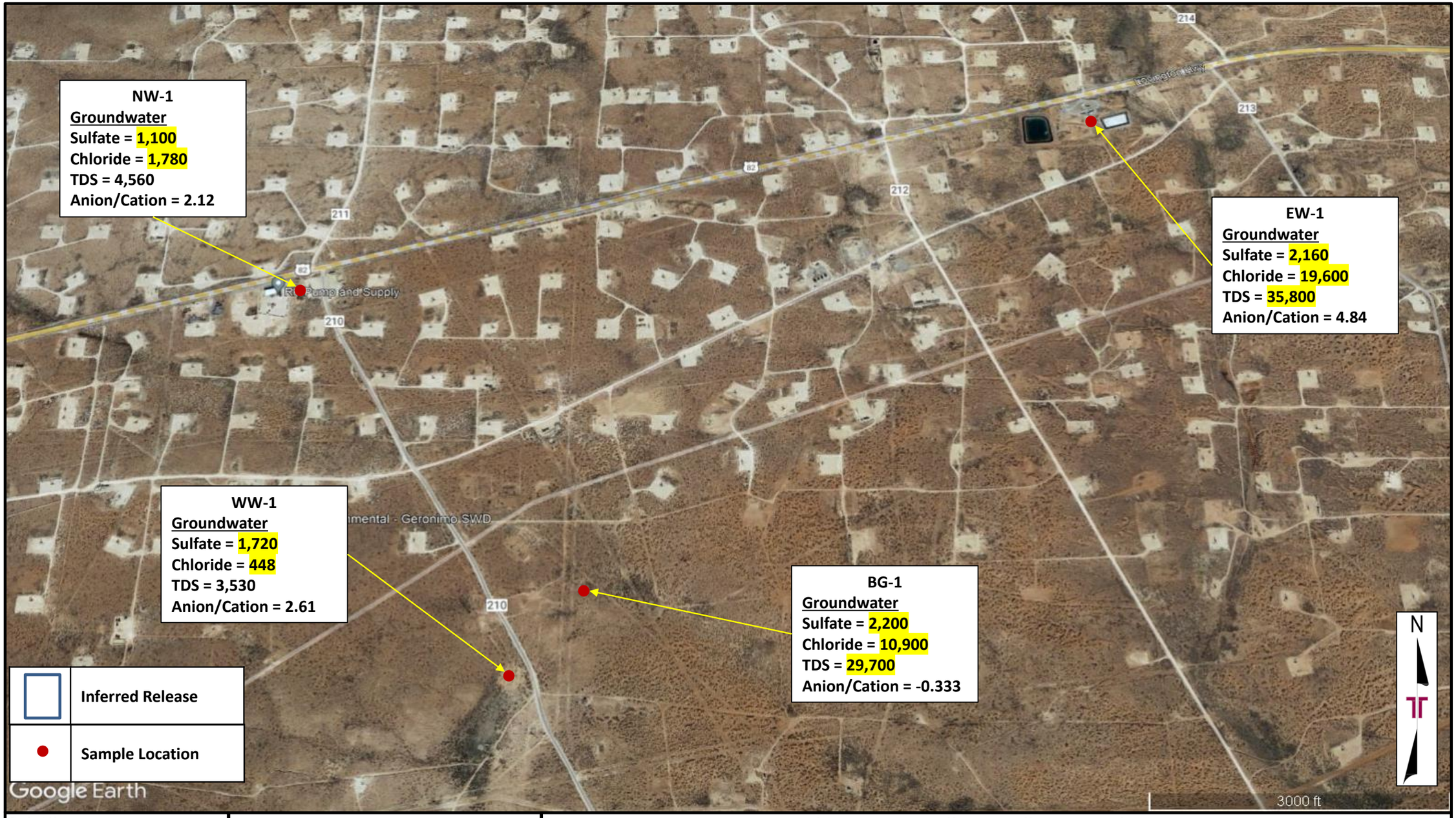
Terracon appreciates this opportunity to respond to the NMOCD email dated August 16, 2022. Terracon respectfully requests that the State I #16 Remedial Action Plan that was approved with conditions, on March 11, 2022 and considering that the conditions of that approval have been met, Terracon and Spur be allowed to complete the soil remediation for the constituents of concern and remediation actions be taken in accordance with **NMAC 19.15.29.12**. If you have any further questions, please feel free to contact either of the below Terracon representatives via phone at (806)-300-0140 or via email.

Released to Imaging: 9/12/2023 1:28:29 PM

Sincerely,
Terracon Consultants, Inc.

Joseph Guesnier
Senior Staff Scientist
Office Manager-Carlsbad

Erin Loyd, P.G. (TX)
Principal
Office Manager-Lubbock



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	11/02/2017

Terracon
Consulting Engineers & Scientists
5827 50th St. Suite 1 Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

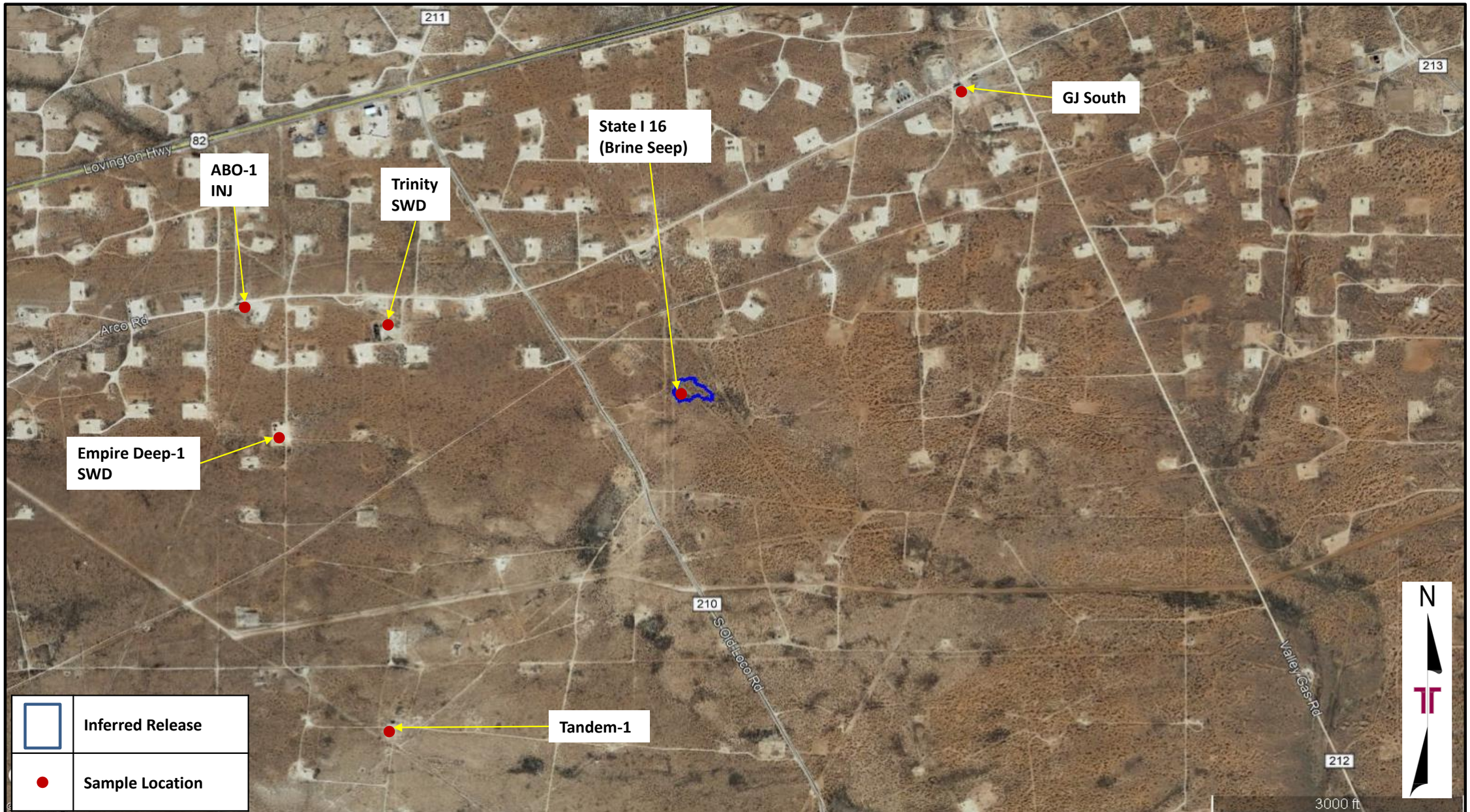
Figure 4 – Well Sampling Results Map

Spur – Brine Release
32.801606°, -104.088176°
Lea County, New Mexico

TABLE 4
GROUNDWATER SAMPLE ANALYTICAL RESULTS - Chlorides
State I #016 - Brine Seep
Terracon Project No. AR217001

Sample I.D.	Sample Date	Temperature (Celsius)	pH (SU)	Sulfate (mg/L)	Alkalinity (mg/L)	Specific Conductance	Cation/Anion Balance	Total Disolved Solids (TDS)	Chloride
B-1	06/20/22	18.4	7.2	**2,200**	94.3	30,800	-0.333	**29,700**	**10,900**
WW-1	08/17/22	20.3	7.03	**1,720**	172	3,990	2.61	3,530	**448**
EW-1	08/18/22	20.3	8.24	**2,160**	239	52,200	4.84	**35,800**	**19,600**
NW-1	08/18/22	20.3	7.1	**1,100**	28.1	7,120	2.12	4,560	**1,780**
New Mexico Environmental Department		N/A	6 - 9	600	N/A	N/A	N/A	10,000	250 mg/l

N/A = Non Applicable standard
(J) = Estimated value, value is above the laboratory SDL, but below the laboratory method quantitiation limit (MQL)
Bold denotes concentrations that exceed New Mexico Standards For Ground Water of 10,000 mg/l TDS or less

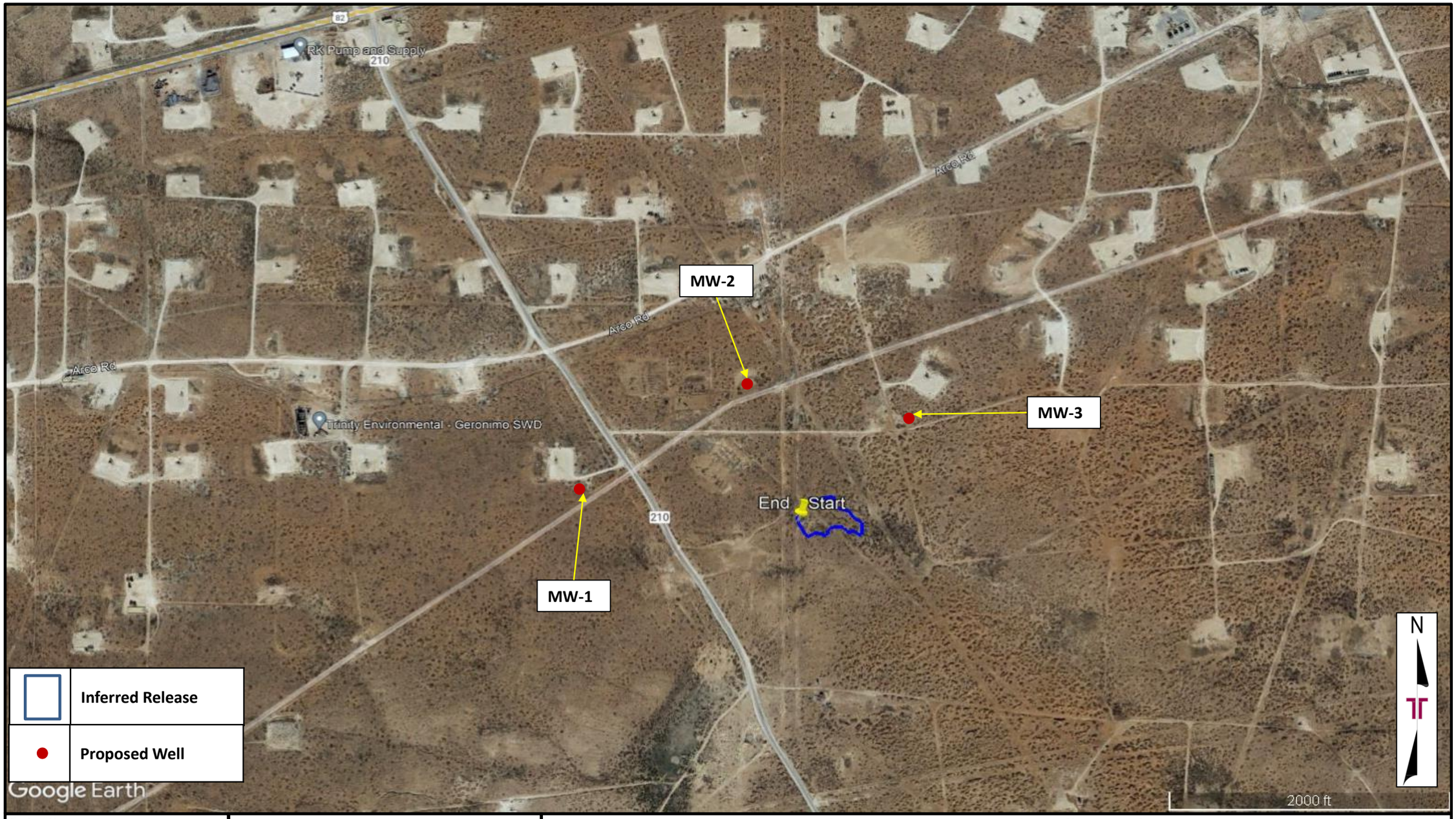


Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Date:	2018

Terracon
Consulting Engineers & Scientists
5847 50th St. Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

Figure – 5 SWD Locations Map

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



Project No.	AR217001
Scale:	As Shown
Source:	Google Earth
Image Date:	11/02/2017

Terracon
Consulting Engineers & Scientists
5827 50th St. Suite 1 Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

Figure – 6 Proposed Well Locations

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

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 25, 2022

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: STATE I

Enclosed are the results of analyses for samples received by the laboratory on 08/18/22 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NW - 1 - 1LITER / 250ML POLY	H223792-01	Water	18-Aug-22 14:20	18-Aug-22 15:05

08/25/22 - Client requested a CAB added to the report. This is the revised report and will replace the one sent earlier 08/25/22.

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

NW - 1 - 1LITER / 250ML POLY

H223792-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**28.1**		5.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Cation/Anion Balance	**2.12**			%	1	2082536	CK	25-Aug-22	CALC	
Chloride*	**1780**		4.00	mg/L	1	2081611	GM	18-Aug-22	4500-Cl-B	
Conductivity*	**7120**		1.00	umhos/cm @ 25°C	1	2081842	GM	18-Aug-22	120.1	
Nitrate as N	<2.50		2.50	mg/L	2.5	2081801	AC	18-Aug-22	353.3	
Nitrite as N	<0.12		0.12	mg/L	2.5	2081801	AC	18-Aug-22	354.1	
pH*	**7.10**		0.100	pH Units	1	2081823	GM	18-Aug-22	150.1	
Temperature °C	**20.3**			pH Units	1	2081823	GM	18-Aug-22	150.1	
Sulfate*	**1100**		250	mg/L	25	2081915	AC	19-Aug-22	375.4	
TDS*	**4560**		5.00	mg/L	1	2081633	AC	19-Aug-22	160.1	
Alkalinity, Total*	**23.0**		4.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Arsenic*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Barium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Cadmium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Calcium*	**385**		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Chromium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Lead*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Magnesium*	**137**		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Potassium*	**22.1**		5.00	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Selenium*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Silver*	<0.050		0.050	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Sodium*	**907**		5.00	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

NW - 1 - 1LITER / 250ML POLY

H223792-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Mercury by CVAFS										
Mercury	<100		100	ng/L	1	B222311	HTB	24-Aug-22	EPA245.7	

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081107 - General Prep - Wet Chem										
Blank (2081107-BLK1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (2081107-BS1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	292	12.5	mg/L				80-120			
Alkalinity, Total	240	10.0	mg/L	250		96.0	80-120			
LCS Dup (2081107-BSD1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	4.18	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	4.08	20	
Batch 2081611 - General Prep - Wet Chem										
Blank (2081611-BLK1)				Prepared & Analyzed: 17-Aug-22						
Chloride	ND	4.00	mg/L							
LCS (2081611-BS1)				Prepared & Analyzed: 17-Aug-22						
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (2081611-BSD1)				Prepared & Analyzed: 17-Aug-22						
Chloride	104	4.00	mg/L	100		104	80-120	3.92	20	
Batch 2081633 - Filtration										
Blank (2081633-BLK1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	ND	5.00	mg/L							

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081633 - Filtration										
LCS (2081633-BS1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	833		mg/L	1000		83.3	80-120			
Duplicate (2081633-DUP1)		**Source: H223697-01**		Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	3090	5.00	mg/L		3160			2.21	20	
Batch 2081801 - General Prep - Wet Chem										
Blank (2081801-BLK1)				Prepared & Analyzed: 18-Aug-22						
Nitrite as N	ND	0.05	mg/L							
Nitrate as N	ND	1.00	mg/L							
LCS (2081801-BS1)				Prepared & Analyzed: 18-Aug-22						
Nitrate as N	4.80	1.00	mg/L	5.00		96.0	80-120			
Nitrite as N	0.19	0.05	mg/L	0.200		96.5	80-120			
Duplicate (2081801-DUP1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	7.71	1.00	mg/L		7.96			3.19	20	
Nitrite as N	0.04	0.05	mg/L		0.04			0.00	20	
Matrix Spike (2081801-MS1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	16.2	2.50	mg/L	12.5	7.96	66.0	80-120			QM-07
Nitrite as N	0.47	0.12	mg/L	0.500	0.04	86.5	80-120			
Batch 2081823 - General Prep - Wet Chem										
LCS (2081823-BS1)				Prepared & Analyzed: 18-Aug-22						
pH	7.08		pH Units	7.00		101	90-110			

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081823 - General Prep - Wet Chem										
Duplicate (2081823-DUP1)		**Source: H223777-01**		Prepared & Analyzed: 18-Aug-22						
pH	7.25	0.100	pH Units		7.22			0.415	20	
Temperature °C	18.8		pH Units		18.8			0.00	200	
Batch 2081842 - General Prep - Wet Chem										
LCS (2081842-BS1)				Prepared & Analyzed: 18-Aug-22						
Conductivity	49800		uS/cm	50000		99.6	80-120			
Duplicate (2081842-DUP1)		**Source: H223790-01**		Prepared & Analyzed: 18-Aug-22						
Conductivity	4040	1.00	umhos/cm @ 25°C		3990			1.25	20	
Batch 2081915 - General Prep - Wet Chem										
Blank (2081915-BLK1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	ND	10.0	mg/L							
LCS (2081915-BS1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120			
LCS Dup (2081915-BSD1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120	0.0463	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
Blank (B222295-BLK1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Silver	ND	0.010	mg/L							
Magnesium	ND	0.100	mg/L							
Selenium	ND	0.100	mg/L							
Lead	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
Cadmium	ND	0.050	mg/L							
Chromium	ND	0.050	mg/L							
Potassium	ND	1.00	mg/L							
Calcium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							
Arsenic	ND	0.100	mg/L							
LCS (B222295-BS1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Arsenic	2.11	0.100	mg/L	2.00		105	85-115			
Silver	0.048	0.010	mg/L	0.0500		95.3	85-115			
Sodium	1.67	1.00	mg/L	1.62		103	85-115			
Barium	1.01	0.050	mg/L	1.00		101	85-115			
Selenium	4.05	0.100	mg/L	4.00		101	85-115			
Calcium	2.06	0.100	mg/L	2.00		103	85-115			
Magnesium	10.2	0.100	mg/L	10.0		102	85-115			
Lead	1.00	0.100	mg/L	1.00		100	85-115			
Cadmium	1.02	0.050	mg/L	1.00		102	85-115			
Chromium	1.02	0.050	mg/L	1.00		102	85-115			
Potassium	4.15	1.00	mg/L	4.00		104	85-115			
LCS Dup (B222295-BSD1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Sodium	1.65	1.00	mg/L	1.62		102	85-115	1.22	20	
Barium	1.01	0.050	mg/L	1.00		101	85-115	0.193	20	
Silver	0.047	0.010	mg/L	0.0500		94.2	85-115	1.20	20	
Calcium	2.11	0.100	mg/L	2.00		106	85-115	2.39	20	
Magnesium	10.2	0.100	mg/L	10.0		102	85-115	0.587	20	
Selenium	3.99	0.100	mg/L	4.00		99.7	85-115	1.54	20	
Arsenic	2.08	0.100	mg/L	2.00		104	85-115	1.39	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
LCS Dup (B222295-BSD1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Chromium	1.02	0.050	mg/L	1.00		102	85-115	0.166	20	
Potassium	4.15	1.00	mg/L	4.00		104	85-115	0.00892	20	
Lead	0.981	0.100	mg/L	1.00		98.1	85-115	2.34	20	
Cadmium	0.991	0.050	mg/L	1.00		99.1	85-115	3.17	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:55

Total Mercury by CVAFS - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222311 - EPA 245.7										
Blank (B222311-BLK1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	ND	100	ng/L							
LCS (B222311-BS1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1780	100	ng/L	2000		89.1	76-113			
LCS Dup (B222311-BSD1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1710	100	ng/L	2000		85.6	76-113	4.01	20	

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Page 521 of 548

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Terracon
Project Manager:	Joe Guesnier
Address:	5847 50th Street
City:	Lubbock State: TX Zip: 79424
Phone #:	(806)300-0140 Fax #:
Project #:	AR217001 Project Owner:
Project Name:	State I
Project Location:	Loco Hills, NM
Sampler Name:	Austin Worley

BILL TO

P.O. #:	
Company:	Spur
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cation & Anion	Nitrate & Nitrite	Conductance	TDS	AIK	RCRA 8 Metals 200.7
H223792	NW-1 1 Liter Poly		1	X							X		8/18/22	14:20	X	X	X	X	X	X
2	NW-1 250mL Poly		1	X							X		8/18/22	14:20	X	X	X	X	X	X

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Relinquished By: Austin Worley	Date: 8/18/22 Time: 3:05pm	Received By: S Rodriguez	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 1.1 Corrected Temp. °C 0.5	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) SR

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS:

Turnaround Time: Standard ☐ Rush ☒
Thermometer ID #113
Correction Factor ~~0.5°C~~ -0.6°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

SR 8/18/22

FORM-006 R 3.2 10/07/21

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

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August 25, 2022

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: STATE I

Enclosed are the results of analyses for samples received by the laboratory on 08/18/22 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EW - 1 - 1LITER / 250ML POLY	H223791-01	Water	18-Aug-22 13:25	18-Aug-22 15:05

08/25/22 - Client requested a CAB added to the report. This is the revised report and will replace the one sent earlier 08/25/22.

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

EW - 1 - 1LITER / 250ML POLY

H223791-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**239**		5.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Cation/Anion Balance	**4.84**			%	1	2082536	CK	25-Aug-22	CALC	
Chloride*	**19600**		4.00	mg/L	1	2081611	GM	18-Aug-22	4500-Cl-B	
Conductivity*	**52200**		1.00	umhos/cm @ 25°C	1	2081842	GM	18-Aug-22	120.1	
Nitrate as N	<5.00		5.00	mg/L	5	2081801	AC	18-Aug-22	353.3	
Nitrite as N	<0.12		0.12	mg/L	2.5	2081801	AC	18-Aug-22	354.1	
pH*	**8.24**		0.100	pH Units	1	2081823	GM	18-Aug-22	150.1	
Temperature °C	**20.3**			pH Units	1	2081823	GM	18-Aug-22	150.1	
Sulfate*	**2160**		500	mg/L	50	2081915	AC	19-Aug-22	375.4	
TDS*	**35800**		5.00	mg/L	1	2081633	AC	19-Aug-22	160.1	
Alkalinity, Total*	**196**		4.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Arsenic*	<5.00		5.00	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Barium*	<2.50		2.50	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Cadmium*	<2.50		2.50	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Calcium*	**458**		5.00	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Chromium*	<2.50		2.50	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Lead*	<5.00		5.00	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Magnesium*	**418**		5.00	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Potassium*	**70.5**		50.0	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Selenium*	<5.00		5.00	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Silver*	<0.500		0.500	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	
Sodium*	**11200**		50.0	mg/L	50	B222295	AES	24-Aug-22	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

EW - 1 - 1LITER / 250ML POLY

H223791-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Mercury by CVAFS										
Mercury	**5000**		200	ng/L	2	B222311	HTB	24-Aug-22	EPA245.7	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081107 - General Prep - Wet Chem										
Blank (2081107-BLK1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (2081107-BS1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	292	12.5	mg/L				80-120			
Alkalinity, Total	240	10.0	mg/L	250		96.0	80-120			
LCS Dup (2081107-BSD1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	4.18	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	4.08	20	
Batch 2081611 - General Prep - Wet Chem										
Blank (2081611-BLK1)				Prepared & Analyzed: 17-Aug-22						
Chloride	ND	4.00	mg/L							
LCS (2081611-BS1)				Prepared & Analyzed: 17-Aug-22						
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (2081611-BSD1)				Prepared & Analyzed: 17-Aug-22						
Chloride	104	4.00	mg/L	100		104	80-120	3.92	20	
Batch 2081633 - Filtration										
Blank (2081633-BLK1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	ND	5.00	mg/L							

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081633 - Filtration										
LCS (2081633-BS1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	833		mg/L	1000		83.3	80-120			
Duplicate (2081633-DUP1)		**Source: H223697-01**		Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	3090	5.00	mg/L		3160			2.21	20	
Batch 2081801 - General Prep - Wet Chem										
Blank (2081801-BLK1)				Prepared & Analyzed: 18-Aug-22						
Nitrite as N	ND	0.05	mg/L							
Nitrate as N	ND	1.00	mg/L							
LCS (2081801-BS1)				Prepared & Analyzed: 18-Aug-22						
Nitrate as N	4.80	1.00	mg/L	5.00		96.0	80-120			
Nitrite as N	0.19	0.05	mg/L	0.200		96.5	80-120			
Duplicate (2081801-DUP1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	7.71	1.00	mg/L		7.96			3.19	20	
Nitrite as N	0.04	0.05	mg/L		0.04			0.00	20	
Matrix Spike (2081801-MS1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	16.2	2.50	mg/L	12.5	7.96	66.0	80-120			QM-07
Nitrite as N	0.47	0.12	mg/L	0.500	0.04	86.5	80-120			
Batch 2081823 - General Prep - Wet Chem										
LCS (2081823-BS1)				Prepared & Analyzed: 18-Aug-22						
pH	7.08		pH Units	7.00		101	90-110			

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081823 - General Prep - Wet Chem										
Duplicate (2081823-DUP1)		**Source: H223777-01**		Prepared & Analyzed: 18-Aug-22						
pH	7.25	0.100	pH Units		7.22			0.415	20	
Temperature °C	18.8		pH Units		18.8			0.00	200	
Batch 2081842 - General Prep - Wet Chem										
LCS (2081842-BS1)				Prepared & Analyzed: 18-Aug-22						
Conductivity	49800		uS/cm	50000		99.6	80-120			
Duplicate (2081842-DUP1)		**Source: H223790-01**		Prepared & Analyzed: 18-Aug-22						
Conductivity	4040	1.00	umhos/cm @ 25°C		3990			1.25	20	
Batch 2081915 - General Prep - Wet Chem										
Blank (2081915-BLK1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	ND	10.0	mg/L							
LCS (2081915-BS1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120			
LCS Dup (2081915-BSD1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120	0.0463	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
Blank (B222295-BLK1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Silver	ND	0.010	mg/L							
Magnesium	ND	0.100	mg/L							
Selenium	ND	0.100	mg/L							
Lead	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
Cadmium	ND	0.050	mg/L							
Chromium	ND	0.050	mg/L							
Potassium	ND	1.00	mg/L							
Calcium	ND	0.100	mg/L							
Sodium	ND	1.00	mg/L							
Arsenic	ND	0.100	mg/L							
LCS (B222295-BS1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Arsenic	2.11	0.100	mg/L	2.00		105	85-115			
Silver	0.048	0.010	mg/L	0.0500		95.3	85-115			
Sodium	1.67	1.00	mg/L	1.62		103	85-115			
Barium	1.01	0.050	mg/L	1.00		101	85-115			
Selenium	4.05	0.100	mg/L	4.00		101	85-115			
Calcium	2.06	0.100	mg/L	2.00		103	85-115			
Magnesium	10.2	0.100	mg/L	10.0		102	85-115			
Lead	1.00	0.100	mg/L	1.00		100	85-115			
Cadmium	1.02	0.050	mg/L	1.00		102	85-115			
Chromium	1.02	0.050	mg/L	1.00		102	85-115			
Potassium	4.15	1.00	mg/L	4.00		104	85-115			
LCS Dup (B222295-BSD1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Sodium	1.65	1.00	mg/L	1.62		102	85-115	1.22	20	
Barium	1.01	0.050	mg/L	1.00		101	85-115	0.193	20	
Silver	0.047	0.010	mg/L	0.0500		94.2	85-115	1.20	20	
Calcium	2.11	0.100	mg/L	2.00		106	85-115	2.39	20	
Magnesium	10.2	0.100	mg/L	10.0		102	85-115	0.587	20	
Selenium	3.99	0.100	mg/L	4.00		99.7	85-115	1.54	20	
Arsenic	2.08	0.100	mg/L	2.00		104	85-115	1.39	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
LCS Dup (B222295-BSD1)	Prepared: 22-Aug-22 Analyzed: 24-Aug-22									
Chromium	1.02	0.050	mg/L	1.00		102	85-115	0.166	20	
Potassium	4.15	1.00	mg/L	4.00		104	85-115	0.00892	20	
Lead	0.981	0.100	mg/L	1.00		98.1	85-115	2.34	20	
Cadmium	0.991	0.050	mg/L	1.00		99.1	85-115	3.17	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:54

Total Mercury by CVAFS - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222311 - EPA 245.7										
Blank (B222311-BLK1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	ND	100	ng/L							
LCS (B222311-BS1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1780	100	ng/L	2000		89.1	76-113			
LCS Dup (B222311-BSD1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1710	100	ng/L	2000		85.6	76-113	4.01	20	

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Page 533 of 548

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Terracon
Project Manager:	Joe Guesnier
Address:	5847 50th Street
City:	Lubbock
State:	TX
Zip:	79424
Phone #:	(806)300-0140
Fax #:	
Project #:	AR217001
Project Owner:	
Project Name:	State I
Project Location:	Loco Hills NM
Sampler Name:	Austin Worley

BILL TO

P.O. #:	
Company:	Spur
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cation Anion	Nitrate & Nitrite	Conductance	TDS	AIK	RCRA 8 Metals 200.7
H223791	EW-1 1 liter poly		1	X							X		8/18/22	13:25	X	X	X	X	X	X
1	EW-1 250mL poly		1	X							X		8/18/22	13:25	X	X	X	X	X	X

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Relinquished By:	Austin Worley	Date: 8/18/22	Received By:
Relinquished By:		Time: 3:05pm	Received By: L Rodriguez
		Date:	
		Time:	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C	1.1°C	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) SR
Sampler - UPS - Bus - Other:	Corrected Temp. °C	0.5°C		

Turnaround Time: Standard ☐ Rush ☒
Thermometer ID #113
Correction Factor -0.5°C 0.6°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

SR 8/18/22

FORM-006 R 3.2 10/07/21

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 25, 2022

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: STATE I

Enclosed are the results of analyses for samples received by the laboratory on 08/18/22 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WW - 1 - 1LITER / 250ML POLY	H223790-01	Water	17-Aug-22 17:45	18-Aug-22 15:05

08/25/22 - Client requested a CAB added to the report. This is the revised report and will replace the one sent earlier 08/25/22.

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

WW - 1 - 1LITER / 250ML POLY

H223790-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**210**		5.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Cation/Anion Balance	**2.61**			%	1	2082536	CK	25-Aug-22	CALC	
Chloride*	**448**		4.00	mg/L	1	2081611	GM	18-Aug-22	4500-Cl-B	
Conductivity*	**3990**		1.00	umhos/cm @ 25°C	1	2081842	GM	18-Aug-22	120.1	
Nitrate as N	**2.28**		1.00	mg/L	1	2081801	AC	18-Aug-22	353.3	
Nitrite as N	<0.05		0.05	mg/L	1	2081801	AC	18-Aug-22	354.1	
pH*	**7.03**		0.100	pH Units	1	2081823	GM	18-Aug-22	150.1	
Temperature °C	**20.3**			pH Units	1	2081823	GM	18-Aug-22	150.1	
Sulfate*	**1720**		500	mg/L	50	2081915	AC	19-Aug-22	375.4	
TDS*	**3530**		5.00	mg/L	1	2081633	AC	19-Aug-22	160.1	
Alkalinity, Total*	**172**		4.00	mg/L	1	2081107	GM	18-Aug-22	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Arsenic*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Barium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Cadmium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Calcium*	**597**		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Chromium*	<0.250		0.250	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Lead*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Magnesium*	**116**		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Potassium*	**6.02**		5.00	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Selenium*	<0.500		0.500	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Silver*	<0.050		0.050	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	
Sodium*	**224**		5.00	mg/L	5	B222295	AES	24-Aug-22	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

WW - 1 - 1LITER / 250ML POLY

H223790-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Mercury by CVAFS										
Mercury	<100		100	ng/L	1	B222311	HTB	24-Aug-22	EPA245.7	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081107 - General Prep - Wet Chem										
Blank (2081107-BLK1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (2081107-BS1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	292	12.5	mg/L				80-120			
Alkalinity, Total	240	10.0	mg/L	250		96.0	80-120			
LCS Dup (2081107-BSD1)				Prepared & Analyzed: 11-Aug-22						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120	4.18	20	
Alkalinity, Total	250	10.0	mg/L	250		100	80-120	4.08	20	
Batch 2081611 - General Prep - Wet Chem										
Blank (2081611-BLK1)				Prepared & Analyzed: 17-Aug-22						
Chloride	ND	4.00	mg/L							
LCS (2081611-BS1)				Prepared & Analyzed: 17-Aug-22						
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (2081611-BSD1)				Prepared & Analyzed: 17-Aug-22						
Chloride	104	4.00	mg/L	100		104	80-120	3.92	20	
Batch 2081633 - Filtration										
Blank (2081633-BLK1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	ND	5.00	mg/L							

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081633 - Filtration										
LCS (2081633-BS1)				Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	833		mg/L	1000		83.3	80-120			
Duplicate (2081633-DUP1)		**Source: H223697-01**		Prepared: 17-Aug-22 Analyzed: 18-Aug-22						
TDS	3090	5.00	mg/L		3160			2.21	20	
Batch 2081801 - General Prep - Wet Chem										
Blank (2081801-BLK1)				Prepared & Analyzed: 18-Aug-22						
Nitrate as N	ND	1.00	mg/L							
Nitrite as N	ND	0.05	mg/L							
LCS (2081801-BS1)				Prepared & Analyzed: 18-Aug-22						
Nitrate as N	4.80	1.00	mg/L	5.00		96.0	80-120			
Nitrite as N	0.19	0.05	mg/L	0.200		96.5	80-120			
Duplicate (2081801-DUP1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	7.71	1.00	mg/L		7.96			3.19	20	
Nitrite as N	0.04	0.05	mg/L		0.04			0.00	20	
Matrix Spike (2081801-MS1)		**Source: H223765-02**		Prepared & Analyzed: 18-Aug-22						
Nitrate as N	16.2	2.50	mg/L	12.5	7.96	66.0	80-120			QM-07
Nitrite as N	0.47	0.12	mg/L	0.500	0.04	86.5	80-120			
Batch 2081823 - General Prep - Wet Chem										
LCS (2081823-BS1)				Prepared & Analyzed: 18-Aug-22						
pH	7.08		pH Units	7.00		101	90-110			

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2081823 - General Prep - Wet Chem										
Duplicate (2081823-DUP1)		**Source: H223777-01**		Prepared & Analyzed: 18-Aug-22						
pH	7.25	0.100	pH Units		7.22			0.415	20	
Temperature °C	18.8		pH Units		18.8			0.00	200	
Batch 2081842 - General Prep - Wet Chem										
LCS (2081842-BS1)				Prepared & Analyzed: 18-Aug-22						
Conductivity	49800		uS/cm	50000		99.6	80-120			
Duplicate (2081842-DUP1)		**Source: H223790-01**		Prepared & Analyzed: 18-Aug-22						
Conductivity	4040	1.00	umhos/cm @ 25°C		3990			1.25	20	
Batch 2081915 - General Prep - Wet Chem										
Blank (2081915-BLK1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	ND	10.0	mg/L							
LCS (2081915-BS1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120			
LCS Dup (2081915-BSD1)				Prepared & Analyzed: 19-Aug-22						
Sulfate	21.6	10.0	mg/L	20.0		108	80-120	0.0463	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
Blank (B222295-BLK1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Chromium	ND	0.050	mg/L							
Sodium	ND	1.00	mg/L							
Arsenic	ND	0.100	mg/L							
Magnesium	ND	0.100	mg/L							
Calcium	ND	0.100	mg/L							
Silver	ND	0.010	mg/L							
Potassium	ND	1.00	mg/L							
Cadmium	ND	0.050	mg/L							
Selenium	ND	0.100	mg/L							
Lead	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
LCS (B222295-BS1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Potassium	4.15	1.00	mg/L	4.00		104	85-115			
Arsenic	2.11	0.100	mg/L	2.00		105	85-115			
Silver	0.048	0.010	mg/L	0.0500		95.3	85-115			
Sodium	1.67	1.00	mg/L	1.62		103	85-115			
Selenium	4.05	0.100	mg/L	4.00		101	85-115			
Calcium	2.06	0.100	mg/L	2.00		103	85-115			
Magnesium	10.2	0.100	mg/L	10.0		102	85-115			
Lead	1.00	0.100	mg/L	1.00		100	85-115			
Chromium	1.02	0.050	mg/L	1.00		102	85-115			
Cadmium	1.02	0.050	mg/L	1.00		102	85-115			
Barium	1.01	0.050	mg/L	1.00		101	85-115			
LCS Dup (B222295-BSD1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Sodium	1.65	1.00	mg/L	1.62		102	85-115	1.22	20	
Barium	1.01	0.050	mg/L	1.00		101	85-115	0.193	20	
Silver	0.047	0.010	mg/L	0.0500		94.2	85-115	1.20	20	
Selenium	3.99	0.100	mg/L	4.00		99.7	85-115	1.54	20	
Magnesium	10.2	0.100	mg/L	10.0		102	85-115	0.587	20	
Calcium	2.11	0.100	mg/L	2.00		106	85-115	2.39	20	
Arsenic	2.08	0.100	mg/L	2.00		104	85-115	1.39	20	

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Analytical Results For:

TERRACON CONSULTANTS 5827 50TH ST. SUITE 1 LUBBOCK TX, 79424	Project: STATE I Project Number: AR217001 Project Manager: JOSEPH GUESNIER Fax To:	Reported: 25-Aug-22 16:52

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222295 - Total Recoverable by ICP										
LCS Dup (B222295-BSD1)				Prepared: 22-Aug-22 Analyzed: 24-Aug-22						
Chromium	1.02	0.050	mg/L	1.00		102	85-115	0.166	20	
Potassium	4.15	1.00	mg/L	4.00		104	85-115	0.00892	20	
Lead	0.981	0.100	mg/L	1.00		98.1	85-115	2.34	20	
Cadmium	0.991	0.050	mg/L	1.00		99.1	85-115	3.17	20	

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Total Mercury by CVAFS - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B222311 - EPA 245.7										
Blank (B222311-BLK1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	ND	100	ng/L							
LCS (B222311-BS1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1780	100	ng/L	2000		89.1	76-113			
LCS Dup (B222311-BSD1)				Prepared: 23-Aug-22 Analyzed: 24-Aug-22						
Mercury	1710	100	ng/L	2000		85.6	76-113	4.01	20	

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Terracon	**BILL TO** P.O. #:	
Project Manager:	Joe Guesnier	Company:	Spur
Address:	5847 50th Street	Attn:	
City:	Lubbock State: TX Zip: 79424	Address:	
Phone #:	(806)300-0140 Fax #:	City:	
Project #:	AR217001 Project Owner:	State: Zip:	
Project Name:	State I	Phone #:	
Project Location:	Loco Hills, NM	Fax #:	
Sampler Name:	Austin Worley		

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Cation Anion	Nitrate & Nitrite	Conductance	TDS	AlK	RCRA 8 Metal's 200.7
H223790	WW-1 1 Liter Poly		1	X							X		8/17/22	17:45	X	X	X	X	X	X
2	WW-1 250 mL Poly		1	X							X		8/17/22	17:45	X	X	X	X	X	X

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Relinquished By:	Date: 8/18/22	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Austin Lilly	Time: 3:05pm	SRodriguez	All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 1.1 c	Sample Condition Cool Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Rush ☒
Sampler - UPS - Bus - Other:	Corrected Temp. °C 0.5c	☐ Yes ☐ Yes ☐ No ☐ No	SR	Thermometer ID #113 Correction Factor -0.6°C 0.4c

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

SR 8/18/22

Received by OCD: 4/14/2023 1:19:50 PM

Released to Imaging: 9/12/2023 1:28:29 PM

APPENDIX F – 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.

Additional Scope Limitations

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 our 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 LLC (Spur), 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 and Terracon. Any unauthorized distribution or reuse is at Spur sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Spur 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 and all relying parties unless otherwise agreed in writing.

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District II
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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 207983

CONDITIONS

Operator: Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	OGRID: 328947
	Action Number: 207983
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Closure Report is Conditionally Approved. The soil clean-up portion of the release is complete and meets closure criteria standards. The incident will stay open until the pending groundwater investigation is completed. A formal groundwater study needs to be conducted to investigate if groundwater contamination has occurred at the site location. The initial phase of the groundwater investigation involving installation of three monitoring wells north and northwest of existing BG-1 well is approved. A site conceptual model will need to be developed using subsurface geologic and hydrologic data. Groundwater analytical data will need to be collected and included in that model. Please test chemistry including major cations and anions. Please let me know if you have any further questions.	9/12/2023