Form C-141
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State of New Mexico
Oil Conservation Division

Incident ID	NDHR 1917159396
District RP	1RP-5561
Facility ID	fDHR 1917159219
Application ID	pDHR 1917158937

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: Rob Kirk Title: VP & GM, HSE & Compliance

Signature: RP Kirk Date: 12/10/2021

email: rob.kirk@ariswater.com Telephone: 575-300-5155

OCD Only

Received by: Chad Hensley Date: 03/21/2022

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: Chad Hensley Date: 03/21/2022

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Closure Report

General Site Information:
Zeus SWD Flowback Line (NMOCD Reference #: 1RP-5561)

Site Contact:
Rob Kirk, Solaris Water Midstream
907 Tradewinds Blvd, Ste. B, Midland, Texas 79706
(432) 203-9020

Depth to Ground Water
Greater than 100 feet below grade surface

Distance to Nearest Surface Water
Laguna Gatuna (West-Central Lea County), approximately 9.71 miles to the Northwest

Driving Directions
From Hwy 62, South on HWY 176 6.5 mi, South on Delaware Basin Road 7.10 mi., West 0.05 mi. to Pipe location

Legal Description
Unit A Section 36, T21S, R32E, N.M.P.M., Lea County, New Mexico

November 18, 2021
Terracon Project No. AR197210

Prepared for:
Solaris Water Midstream LLC
Midland, Texas

Prepared by:
Terracon Consultants, Inc.
Lubbock, Texas

Offices Nationwide Established in 1965
Employee-Owned terracon.com
Terracon
Geotechnical Environmental Construction Materials Facilities

November 18, 2021

Solaris Water Midstream LLC / Aris Water
907 Tradewinds Blvd., Suite B
Midland, Texas 79706

Attn: Mr. Rob Kirk
P: 432-203-9020
E: rob.kirk@ariswater.com

RE: **Closure Report**
Zeus SWD Flowback Line Produced Water Release (1RP-5561)
Unit A Section 36, T21S, R32E, N.M.P.M., Lea County, New Mexico
Terracon Project No. AR197210

Dear Mr. Kirk,

Terracon Consultants, Inc. (Terracon) is pleased to submit our Closure Report for the site referenced above. The Release Investigation and RAP were developed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning clean-up actions required for releases of crude oil and produced water. Based on the findings of the release investigation assessment, Terracon recommended the following actions be taken to achieve protection of fresh water and the environment in accordance with NMOCD regulations. Terracon developed the Release Investigation, RAP and Closure in general accordance with our proposal (PAR197210) dated February 1, 2019.

- Based on the magnitude of chloride concentrations detected within the release margins to depths subject to NMOCD Reclamation requirements, approximately 6,280 cubic yards (cy) of chloride impacted material were excavated and disposed of at the R360 Disposal Facility located in Halfway, New Mexico, a permitted disposal facility, under manifest.
- Following excavation to recommended Reclamation depths, vertical and horizontal delineation samples were collected from the base and walls of the excavation to confirm the remaining levels of soil contaminants were below the desired NMOCD Remediation Action Levels (RALs).
- Based on the depth to groundwater being greater than 105 feet below grade surface (ft. bgs), and the confirmed vertical delineation, it is anticipated that a remedial response will not be warranted within the soils at depths greater than 4 ft. bgs.

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Terracon appreciates this opportunity to provide environmental services to Solaris Water Midstream LLC / Aris Water (Solaris). Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Terracon Consultants, Inc.

Joseph Guesnier
Staff Scientist
Lubbock

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

Terracon

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Closure Report
Zeus SWD Flowback Line Produced Water Release
Unit A Section 36, Township 21 South, Range 32 East, N.M.P.M.
Lea County, New Mexico
NMOCD Reference No. 1RP-5561
Terracon Project No. AR197210
November 18, 2021

1.0 SITE DESCRIPTION

The Site is comprised of an approximate 3-acre tract of land within the Unit A Section 36, Township 21 South, Range 32 East, N.M.P.M., Lea County, New Mexico (hereinafter, the site). The site consists primarily of undeveloped range land except for a pipeline utilized to transfer produced water to a saltwater disposal (SWD) facility operated by Solaris Water Midstream (Solaris) to the west. Figures 1 through 12, comprised of maps relevant to the release evaluation and remdiation, well logs and Table 1 Soil Sample Analytical Results are included in Appendix A.

2.0 SCOPE OF SERVICES

Terracon's scope of services is to investigate the magnitude and extent of the documented release and develop and execute a Remedial Action Plan (RAP) in accordance with the New Mexico Oil Conservation Division (NMOCD) requirements that detail site closure activities to be completed. This Closure Report addresses the June 7, 2019 release of approximately 500 barrels (bbls) of produced water which contained an estimated 2 bbls of crude oil originating from a malfunctioning joint on a poly pipeline of a Solaris flowback line.

3.0 INTRODUCTION AND NOTIFICATION

The following table provides detailed information regarding the June 7, 2019 produced water release at the Zeus SWD Flowback Line Site in Lea County, New Mexico:

Required Information	Site and Release information	
Responsible party Local contact	The facility is operated by Solaris Water Midstream	
	Contact: Mr. Rob Kirk	P: (469) 978-5620 E: rob.kirk@solarismidstream.com
NMOCD Notification	Notice of the release was provided to the NMOCD District 1 Hobbs Office by Rob Kirk (Solaris) on June 7, 2019.	
Facility description	The facility is comprised of a flowback line associated with the Zeus SWD and surrounding impacted soils which are located in Lea County, New Mexico. More specifically, the Site is an	

Required Information	Site and Release information	
	approximate 3-acre area comprised of undeveloped range land utilized as a pipeline rights-of-way located within the Unit A Section 36, Township 21 South, Range 32 East, N.M.P.M., approximately 27 miles west of Eunice, New Mexico.	
Time of incident	June 6, 2019, discovered at 7:00 a.m.	
Discharge event	Release of produced water containing crude oil originating from a malfunctioning pipe seam on a pipeline connection of a Solaris transfer flowback line. The release origin occurred east of the facility pad, under development at the time of the release. The release area, near the origin of the release, was limited to an approximately 1-acre area; however, a portion of the release traveled along the surface for approximately 600 ft. to the west and approximately 600 ft. the the south at a width ranging from approximately 115 ft. west of the release point down to 8 ft. The release margins are illustrated on Figure 2 of Appendix A.	
Type of discharge	The documented fluids release occurred at the surface and appears to be extensive to depth.	
Quantity of spilled material	Total Fluids: 500 bbls	Produced Water: 500 bbls containing approximately 2 bbls of crude oil
	Total Fluids Recovered: 11 bbls	Produced Water: 10 bbls Crude Oil: 1 bbls
Site characteristics	Relatively flat with drainage following the native ground surface; very gently sloping to the south and west.	
Immediate corrective actions	Pipeline was shut-in, and Terracon Remediation Construction Services (RCS) consolidated affected materials into a stockpile proximate to the release origin.	

4.0 INITIAL RESPONSE ACTIONS

4.1 Source Elimination

Initial source elimination was accomplished by the Solaris foreman shutting in the leaking line and replacing the failed pipe connection.

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4.2 Containment and Site Stabilization

Terracon RCS members consolidated and stockpiled affected soils proximate to the release origin to prevent further horizontal migration of the release. The immediate response actions measured approximately 500-square-feet (sf) resulting in a stockpile totaling an estimated 200-cubic yards (cy). Following consolidation of these materials, Terracon RCS members fenced off the stockpile to deter inadvertent contact with the materials.

5.0 GENERAL SITE CHARACTERISTICS

5.1 Depth to Groundwater

A water well record search of the New Mexico Office of the State Engineer (NMOSE) Potable Water Well (POD) Geographic Information System (GIS) data portal identified no registered wells within one mile of the site. One registered well (CP-01701-POD1) was identified within 3.5 miles of the site with a stated depth of 457 ft. below grade surface (bgs). NMOSE registered wells within 6.5 miles of the site have an average depth to groundwater of 435 feet bgs, with a maximum reported depth of 824 feet bgs. Based on the review of NMOSE available documentation, the depth to groundwater at the site is anticipated to be deeper than 100 feet bgs.

5.2 Depth to Groundwater Investigation

Following the prompting of the NMOCD to establish on-site depth to groundwater, Solaris enlisted Vision Resources, Inc. (Vision) to drill a borehole and confirm that groundwater is at a depth greater than 100 ft bgs. Vision utilized a air rotary drill rig on June 3, 2020 to drill a bore hole down to 105 ft bgs. The bore hole was observed for the presence of groundwater over the duration of the state mandated time period of 72-hours. The resulting observation did not indicate the presence of groundwater within the advanced 105 ft bgs boring, as summarized in Well Record & Log Appendix A. This finding confirms the documentation found on the NMOSE POD GIS data portal.

5.3 Distance to Nearest Potable Water Well

Based on review of the NMOSE database, registered potable water wells were not present within 0.5 miles of the site.

5.4 Distance to Nearest Surface Water

The Laguna Gatuna (playa) is located approximately 9.71 miles northwest of the site.

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5.5 Soil / Waste Characteristics

Soils at the site are mapped as Pyote and Maljamar fine sands, 0 to 3 percent slopes. This soil has a surface layer of fine sand 0 to 24 inches, sandy clay loam 24 to 50 inches and cemented material 50 to 60 inches. Resulting in the formation being categorized with a very low runoff, with a natural drainage class of well drained.

5.6 Groundwater Quality

Groundwater quality is unknown at the site. As stated previously, there are no wells registered with the NMOSE website within 0.5 miles of the site.

6.0 REGULATORY FRAMEWORK AND RESPONSE ACTION LEVELS

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

6.1 Reclamation Levels (Surface to 4 ft. bgs)

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

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

6.2 Remediation Levels (> 4 ft. bgs)

The *Closure Criteria for Soils Impacted by a Release* guidance document provides direction for initial response actions, site assessment, sampling procedures and provides closure criteria based on the depth to groundwater, distance to private and domestic water sources, and the distance to the nearest surface water body as follows:

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*

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

Constituent	Remediation Limit
Chloride	20,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

7.0 SOIL SAMPLING PROCEDURES

Soil sampling procedures are detailed as follows:

7.1 Soil Sampling Procedures for Laboratory Analysis

Soil Sampling Procedures

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

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

Analytical Methods

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

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

8.0 RELEASE INVESTIGATION DATA EVALUATION

During Terracon's June 12, 2019 release investigation activities, a total of 70 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. A total of 60 samples were collected from within the release margins, and 10 samples were collected outside of the impacted area to evaluate background concentrations.

8.1 Background Data Evaluation

A total of 10 discrete soil samples were collected from two background locations in up-gradient positions relative to the release extent. Four of the 10 samples were analyzed for the presence of BTEX and TPH. The four analyzed samples did not exhibit concentrations of BTEX or TPH constituents above applicable laboratory Sample Detection Levels (SDLs), as summarized in Table 1.

Each of the 10 background samples collected were analyzed for the presence of chloride. The detected chloride concentrations ranged from 10.5 mg/kg in soil sample HA-14 (3 ft bgs to 3.5 ft bgs) to 55.7 mg/kg in soil sample HA-13 (4.5 ft bgs to 5 ft bgs), as summarized in Table 1.

Based on the review of the analytical results of the background soil samples, the detected constituent concentrations did not exceed NMOCD Action Levels based on the criteria ranking parameters and applicability by depth. Based on this comparison, NMOCD Action Levels will continue to be utilized as the applicable RALs for the site.

8.2 Release Margins Data Evaluation

8.2.1 Reclamation Assessment Data Evaluation

Benzene was not detected above applicable laboratory SDLs in the 24 soil samples analyzed within Reclamation Assessment target depths, as summarized in Table 1.

Total BTEX was detected above applicable laboratory SDLs in one of the 24 soil samples analyzed within Reclamation Assessment target depths. The Total BTEX concentration was 0.0141 mg/kg in HA-11 (0 ft. bgs to 0.5 ft. bgs). The detected Total BTEX concentrations did not exceed the applicable NMOCD RAL for Total BTEX of 50 mg/kg, as summarized in Table 1.

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Total TPH was detected above applicable laboratory SDLs in one of the 24 soil samples analyzed within the Reclamation Assessment target depths. The Total TPH concentration was 11.2 mg/kg in HA-9 (0 ft bgs to 0.5 ft bgs) The samples collected within the release margins did not exhibit Total TPH concentrations above the NMOCD RAL of 2,500 mg/kg for Total TPH, as summarized in Table 1.

Chloride was detected above applicable laboratory SDLs in each of the 48 soil samples analyzed within the Reclamation Assessment target depths. The chloride concentrations ranged from 53.9 mg/kg in soil sample HA-2 (0.5 to 1 ft bgs) to 8,890 mg/kg in soil sample HA-1 (3 to 3.5 ft bgs). Of the 48 soil samples analyzed, 43 soil samples exhibited chloride concentrations above the applicable NMOCD Reclamation Assessment Limit of 600 mg/kg, as summarized in Table 1.

8.2.2 Remediation Assessment Data Evaluation

At each of the soil boring locations, a soil sample was collected and analyzed from the 4.5 to 5 ft. bgs interval for the presence of chlorides. The samples were not analyzed for the presence of BTEX or TPH due to the constituents' lack of presence in shallower intervals.

The detected chloride concentrations ranged in concentrations from 1,330 mg/kg in soil sample HA-3 (4.5 to 5 ft. bgs) to 12,800 mg/kg in soil sample HA-7 (4.5 to 5 ft. bgs). The detected chloride concentrations at depths greater than 4 ft. bgs did not exceed the applicable NMOCD Remediation Action Limit of 20,000 mg/kg, as summarized in Table 1.

It should be noted that soil borings were terminated due auger refusal upon encountered cemented caliche layer.

8.3 Release Investigation Data Summary

Based on the review of the above release investigation analytical results, the presence of petroleum hydrocarbon constituents (BTEX/TPH) were not detected at concentrations above applicable NMOCD Reclamation and/or Remediation Action Limits.

Of the 48 soil samples analyzed, 43 soil samples exhibited chloride concentrations above the applicable NMOCD Reclamation Action Limit of 600 mg/kg. None of the soil samples analyzed for chlorides exceeded the NMOCD Remediation Action Limit for samples collected deeper than 4 ft. bgs. While the bottom-of-hole samples did not exhibit chloride concentrations above an actionable limit, seven of the 12 soil boring locations exhibited increasing chloride concentration trends and did not achieve vertical delineation to below the Reclamation Action Limit of 600 mg/kg.

It is anticipated that released produced water associated chlorides consolidated upon the cemented layer of the Maljamar Formation at 50 to 60 inches bgs. Based on the proximity of the analyzed samples to this restrictive layer and the magnitude of the concentrations being elevated

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above 600 mg/kg but below 20,000 mg/kg, Terracon collected additional vertical delineation samples and analyzed for the presence of chlorides at this restrictive zone to ensure that concentrations were not elevated further at this restrictive interphase.

9.0 CLOSURE SAMPLING DATA EVALUATION

During Terracon's confirmation sampling activities from July 19, 2021 through October 05, 2021, a total of 198 soil samples were collected from the site and analyzed for BTEX, chloride, and/or TPH. A total of 166 soil samples were collected from within the excavation margins, and 32 soil samples were collected from the treated material.

9.1 Excavation Confirmation Data Evaluation

A total of 166 confirmation soil samples were collected from 170 locations as approved of by the NMOCD in the previously submitted RAP. All samples collected were analyzed for concentrations of BTEX, Total TPH, and chloride constituents above applicable laboratory SDLs, as summarized in Table 1.

Benzene was detected above applicable laboratory SDLs in three of the 166 soil samples analyzed within excavation target depths. The Benzene concentration ranged from 0.000544 mg/kg in soil sample A-B-9 (4 ft. bgs to 4.5 ft. bgs) to 0.00281 mg/kg in soil sample A-N-5 (4 ft. bgs to 4.5 ft. bgs). The detected Benzene concentrations did not exceed the applicable NMOCD RAL for Benzene of 10 mg/kg, as summarized in Table 1.

Total BTEX was detected above applicable laboratory SDLs in five of the 166 soil samples analyzed within excavation target depths. The Total BTEX concentration ranged from 0.00106 mg/kg in soil sample A-E-5 (4 ft. bgs to 4.5 ft. bgs) to 0.00414 mg/kg in soil sample A-D-6 (4 ft. bgs to 4.5 ft. bgs). The detected Total BTEX concentrations did not exceed the applicable NMOCD RAL for Total BTEX of 50 mg/kg, as summarized in Table 1.

Total TPH was not detected above applicable laboratory SDLs in the 166 soil samples analyzed within Reclamation Assessment target depths, as summarized in Table 1.

Chloride was detected above applicable laboratory SDLs in 154 of the 166 soil samples analyzed within the excavation target depths. The chloride concentrations ranged from 1.58 mg/kg in soil sample B-G-1 (1.5 ft. bgs to 2 ft. bgs) to 9,250 mg/kg in soil sample B-D-2 (4 ft. bgs to 4.5 ft. bgs). Of the 166 soil samples analyzed, soil sample C-C-2E was the sole exception above the NMOCD RAL, but was subsequently resampled and no longer exhibited chloride concentrations above the applicable NMOCD Reclamation Assessment Limit of 600 mg/kg, as summarized in Table 1.

Based on the review of the analytical results of the excavation soil samples, the detected constituent concentrations did not exceed NMOCD Action Levels based on the criteria ranking parameters and applicability by depth.

9.2 Treated Material Data Evaluation

9.2.1 Treated Material Data Evaluation

A total of 32 composite soil samples were collected from from the treated material. The 32 composite soil samples were collected from 16 separate locations. The analyzed samples did not exhibit concentrations of chloride, BTEX or TPH constituents above applicable laboratory SDLs, as summarized in Table 1.

Benzene, Total BTEX and Total TPH were not detected above applicable laboratory SDLs in the 32 soil samples analyzed within Reclamation Assessment target depths, as summarized in Table 1.

Chloride was detected above applicable laboratory SDLs in each of the 32 soil samples analyzed within the treated materials at target depths. The chloride concentrations ranged from 15.0 mg/kg in soil sample CS-7 (1.5 ft. bgs to 2 ft. bgs) to 140 mg/kg in soil sample CS-14 (1.5 ft. bgs to 2 ft. bgs). Of the 32 soil samples analyzed, no soil samples exhibited chloride concentrations above the applicable NMOCD Reclamation Assessment Limit of 600 mg/kg, as summarized in Table 1.

9.3 Confirmation Sampling Data Summary

Based on the review of the above confirmation data analytical results, the presence of petroleum hydrocarbon constituents (BTEX/TPH) and chloride were not detected at concentrations above applicable NMOCD Reclamation and/or Remediation Action Limits.

10.0 SOIL RECLAMATION AND REMEDIATION

Impacted soil were remediated, reclamated and managed according to the criteria described below which is intended to protect fresh waters, public health and the environment from exposure to the above constituents of concern.

10.1 Reclamation Response Objectives

Based on the magnitude of chloride concentrations detected within the release margins to depths subject to NMOCD Reclamation requirements, approximately 6,280 cy of chloride impacted material were required to be excavated and disposed of at a permitted disposal facility under

manifest. The remaining impacted material measuring approximately 10,000 cy were amended and treated as detailed below.

- The site was excavated to a depth of 4 ft bgs and material were stockpiled and analyzed to determine which stockpiles were over 2,000 mg/kg for chloride.
- Stockpiles exhibiting concentrations over 2,000 mg/kg for chloride were disposed of, and all stockpiles below 2,000 mg/kg for chloride were amended and utilized for backfill.
- The excavation was backfilled in 6 in. lifts utilizing the previously exhumed material.
- Each 6 in. lift consisted of an additional 1 in. of Nitrogen enriched Hay and an additional 1 in. of pulverized Gypsum.
- Each lift had approximately 1,000 barrels of water spread evenly across the treated soil to assist in nutrient and constituent stabilization, and enhance microbial activity.
- Following the completion of the soil treatments, Terracon concluded the reclamation response with five point-composite samples from two depths, from surface and 2 ft bgs., conducted over a 5,000 sq ft grid. Terracon collected 32 confirmation samples within the treated soils.

These selected methods removed the significantly impacted soils, and treatment the moderately impacted soils. The above approach was tested for effectiveness using impacted site material from within the release margins. The results of the trial resulted in the reduction of chloride concentrations to below NMOCD standards, while improving rooting conditions for native seed establishment. This approach was choosen as the best management practice for this site and is intended to not only achieve the reclamation objectives set by the NMOCD, but additionally improve the overall physical and microbial soil conditions while minimizing disposal and backfill quanitities.

10.2 Remediation Response Objectives

Following excavation to recommended Reclamation depths, vertical and horizontal delineation samples were collected from the base and walls of the excavation to confirm the remaining levels of soil contaminants are below the desired NMOCD RALs.

Based on the exploratory boring results depth to groundwater and the confirmed vertical delineation, it was evident that a remedial response was not warranted within the soils at depths greater than 4 ft. bgs.

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10.3 Soil Management

The selected methods of soil management were to initially remove and dispose of significantly impacted soils at a NMOCD-approved facility, and additionally to treat the moderately impacted soils with organic and direct chemical treatments. The amended soils were then utilized as backfill, and the heavily impacted soils were disposed of and transported by truck (20 cubic yard capacity) and disposed of at the R360 Disposal Facility located in Halfway, New Mexico.

11.0 TERMINATION OF REMEDIAL ACTIONS, FINAL CLOSURE AND REPORTING

11.1 Termination of Reclamation and Remedial Actions

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

11.2 Final Closure

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

11.3 Final Report

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

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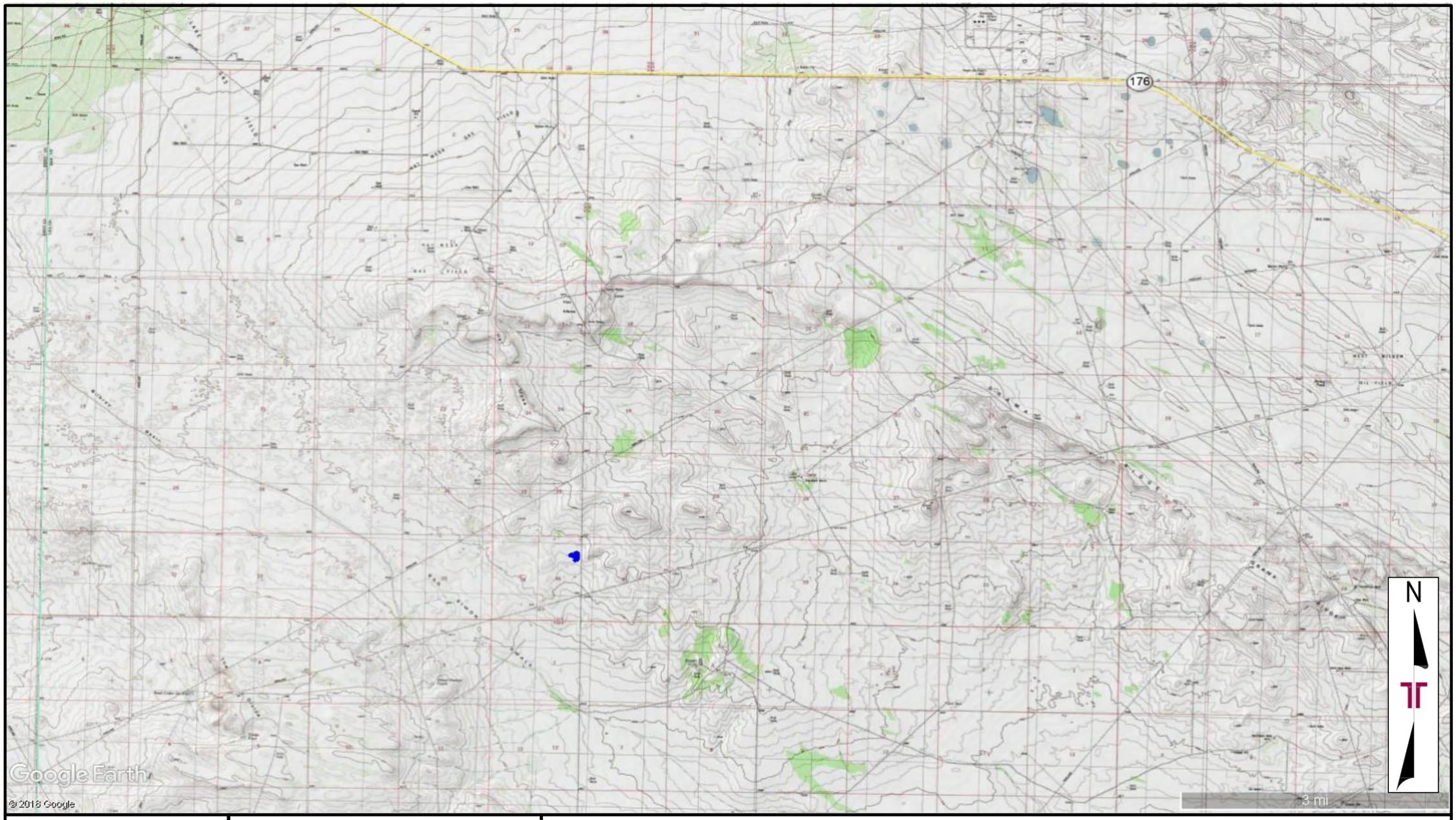
APPENDIX A – FIGURES AND TABLES

Figure 1 – Topographic Map
Figure 2 – Site Map
Figure 3 – Chloride Concentration Map
Figure 4 – Chloride Concentration Map (Soils >4 ft bgs.)
Figure 5 – Confirmation Map (Perimeter Zone 1)
Figure 6 – Confirmation Map (Perimeter Zone 2)
Figure 7 – Confirmation Map (Perimeter Zone 3)
Figure 8 – Confirmation Map (Floor Zone 1)
Figure 9 – Confirmation Map (Floor Zone 2)
Figure 10 – Confirmation Map (Floor Zone 3)
Figure 11 – Treated Soils Confirmation Map
Figure 12 – NMOSE POD Location Map
Boring Log – WELL RECORD & LOG (NMOSE)
Table 1 – Soil Sample Analytical Results



Project No.	AR197210
Scale:	As Shown
Source:	USGS
Date:	2014

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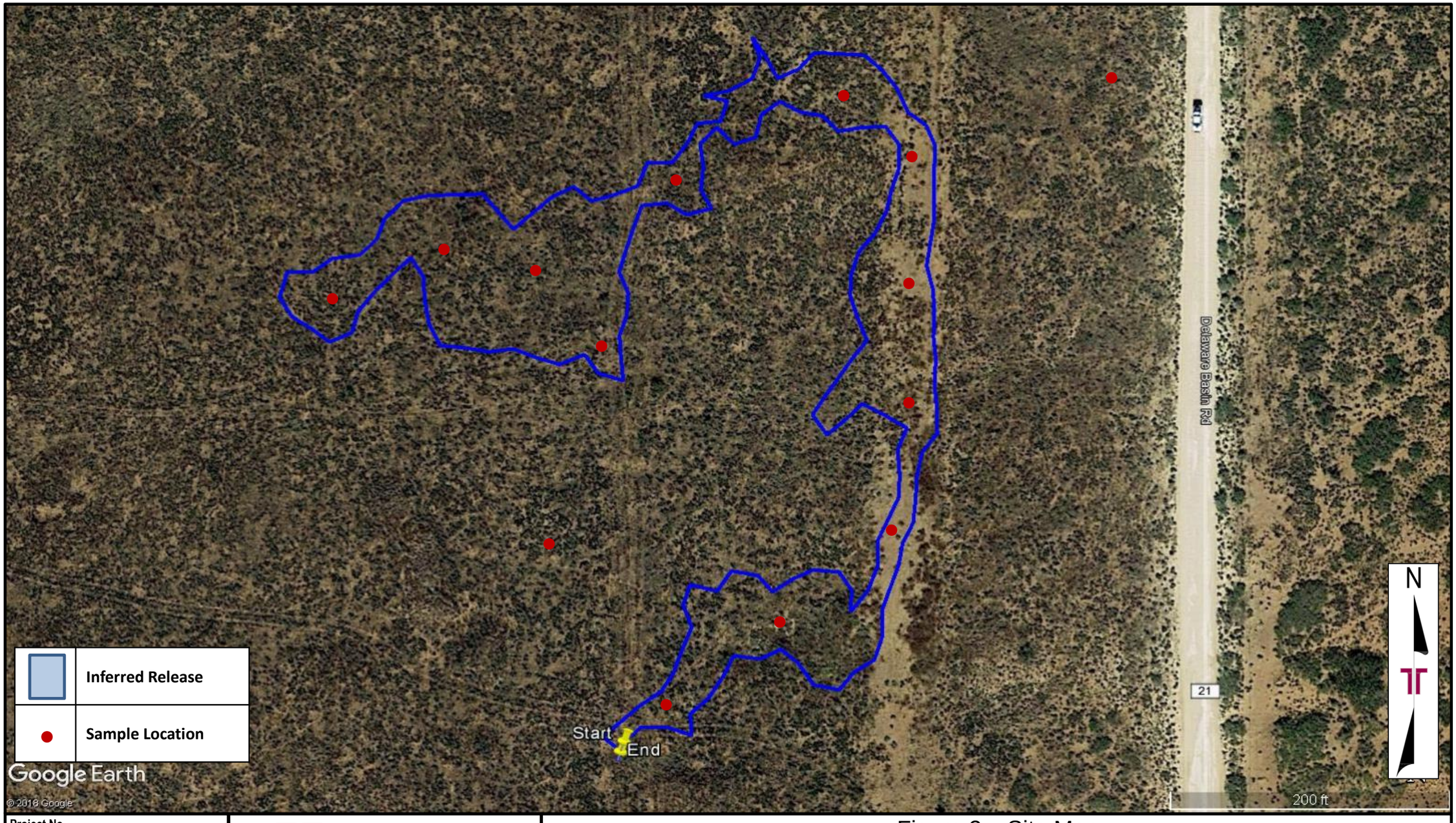
Consulting Engineers & Scientists
5827 50th St. Suite 1 Lubbock, Texas 79424
PH. (806) 300-0104 FAX. (806) 797 0947

Figure 1 – Topo Map

Solaris Zeus
32.439115°, -103.62100°
Lea County, New Mexico



Project No.	AR197210
Scale:	As Shown
Source:	Google Earth
Image Date:	4/1/2016

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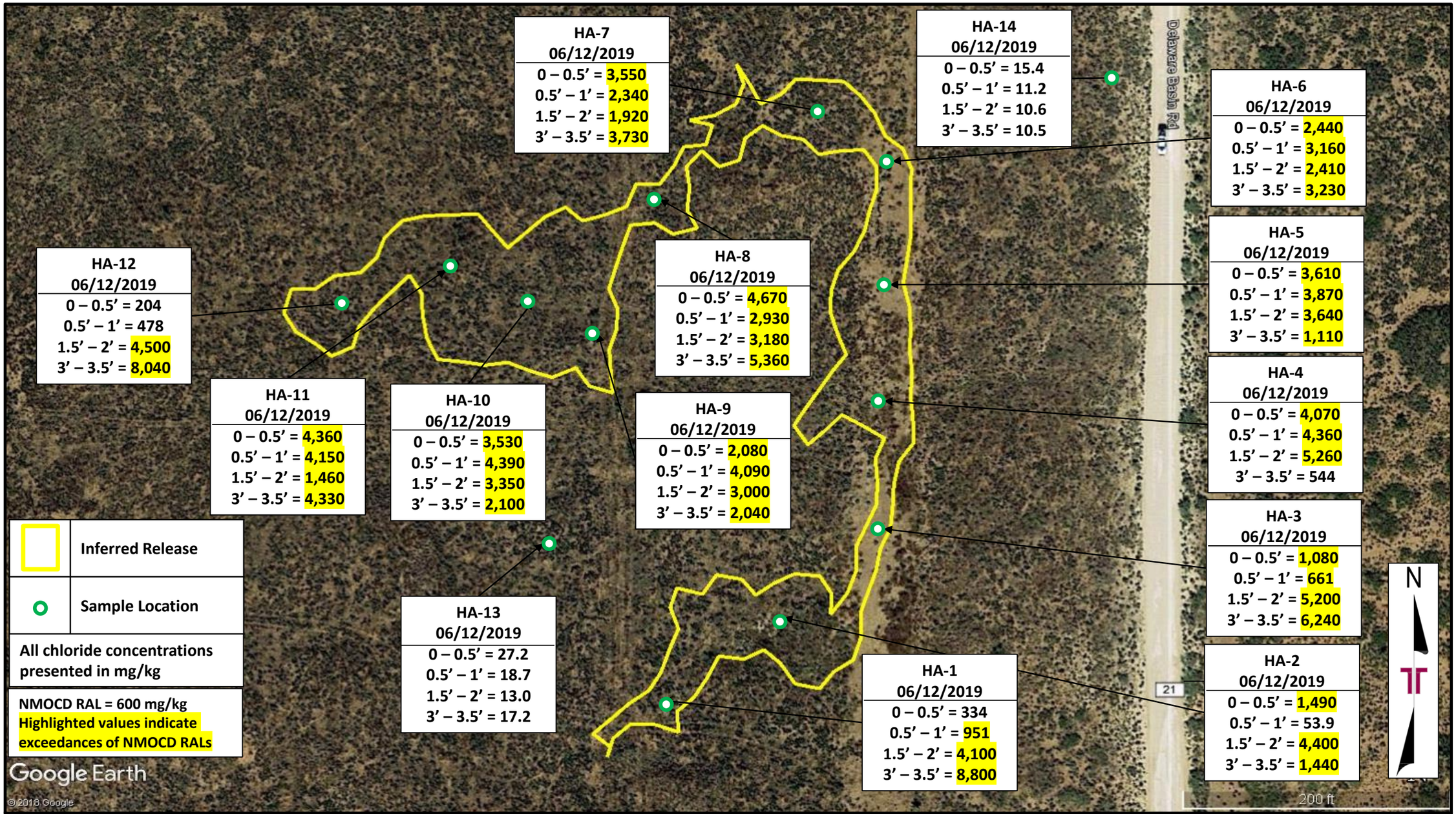
Figure 2 – Site Map

Solaris Zeus
32.439115°, -103.621000°
Lea County, New Mexico



Project No.	AR197210
Scale:	As Shown
Source:	Google Earth
Image Date:	4/1/2016

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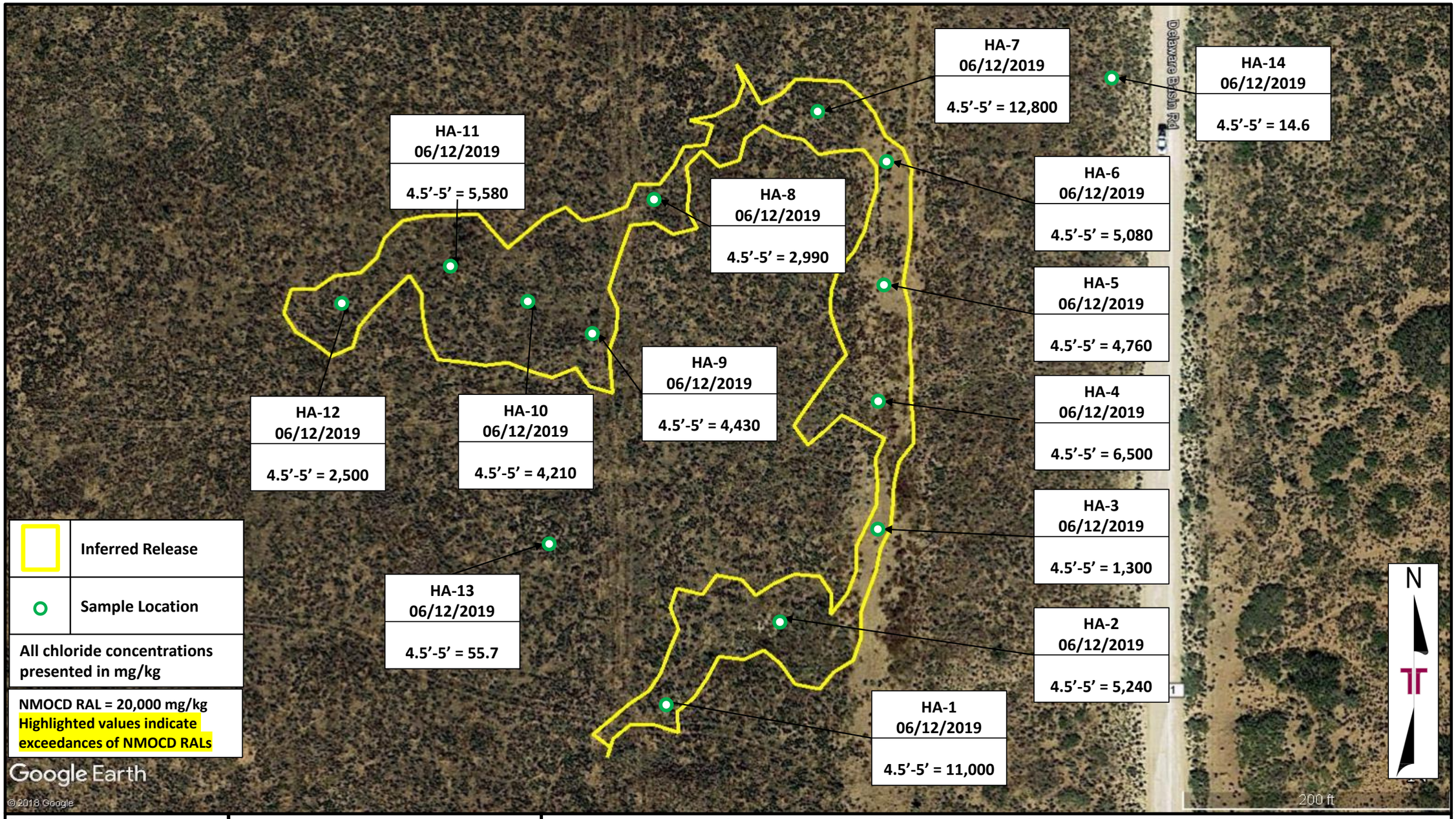
Figure 3 – Chloride Concentration Map (Soils within Reclamation Depths)

Solaris Zeus
32.439115°, -103.621000°
Lea County, New Mexico



Project No.	AR197210
Scale:	As Shown
Source:	Google Earth
Image Date:	4/1/2016

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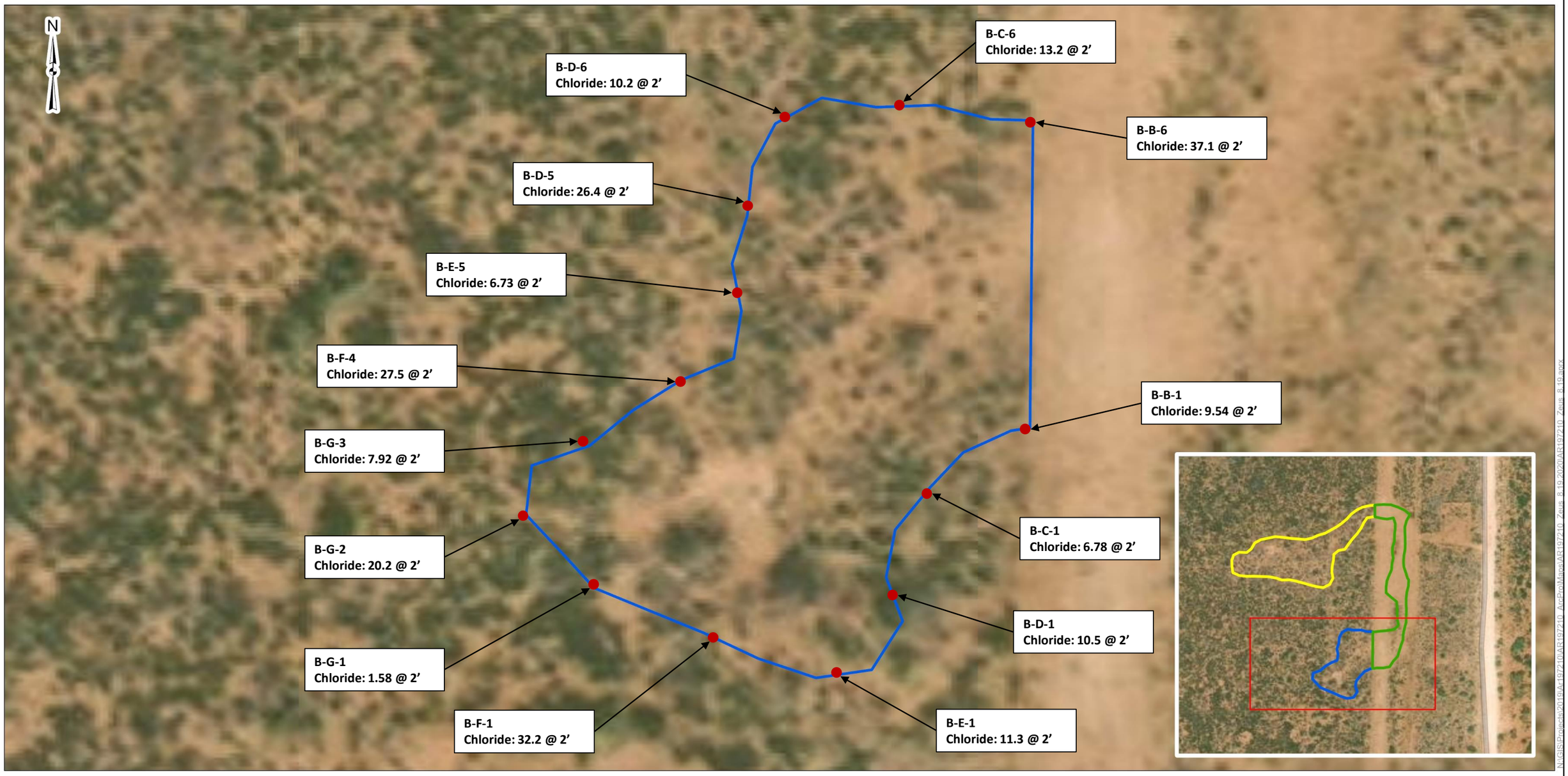
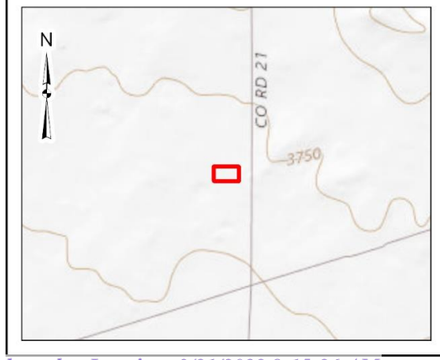
Figure 4 – Chloride Concentration Map (Soils >4 ft bgs.)

Solaris Zeus
32.439115°, -103.621000°
Lea County, New Mexico





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 27.5 55 110

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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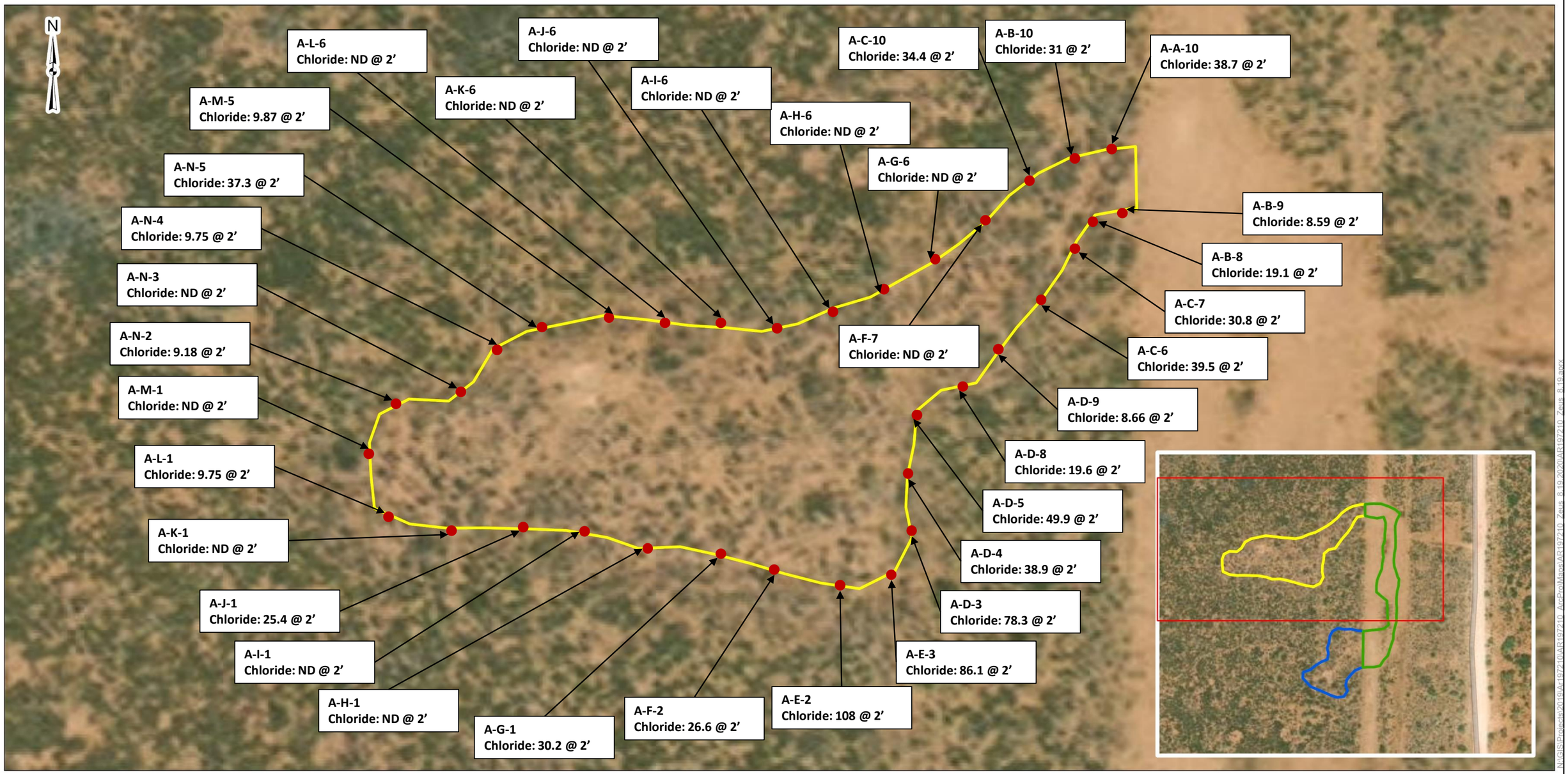
Confirmation Sample Map - Section 2

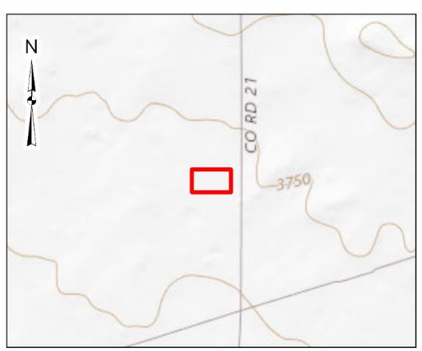
Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

5

N:\GIS\Projects\2021\AR197210\AR\ProMaps\AR197210 Zeus 8.19.2021.aprx





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 43 86 172

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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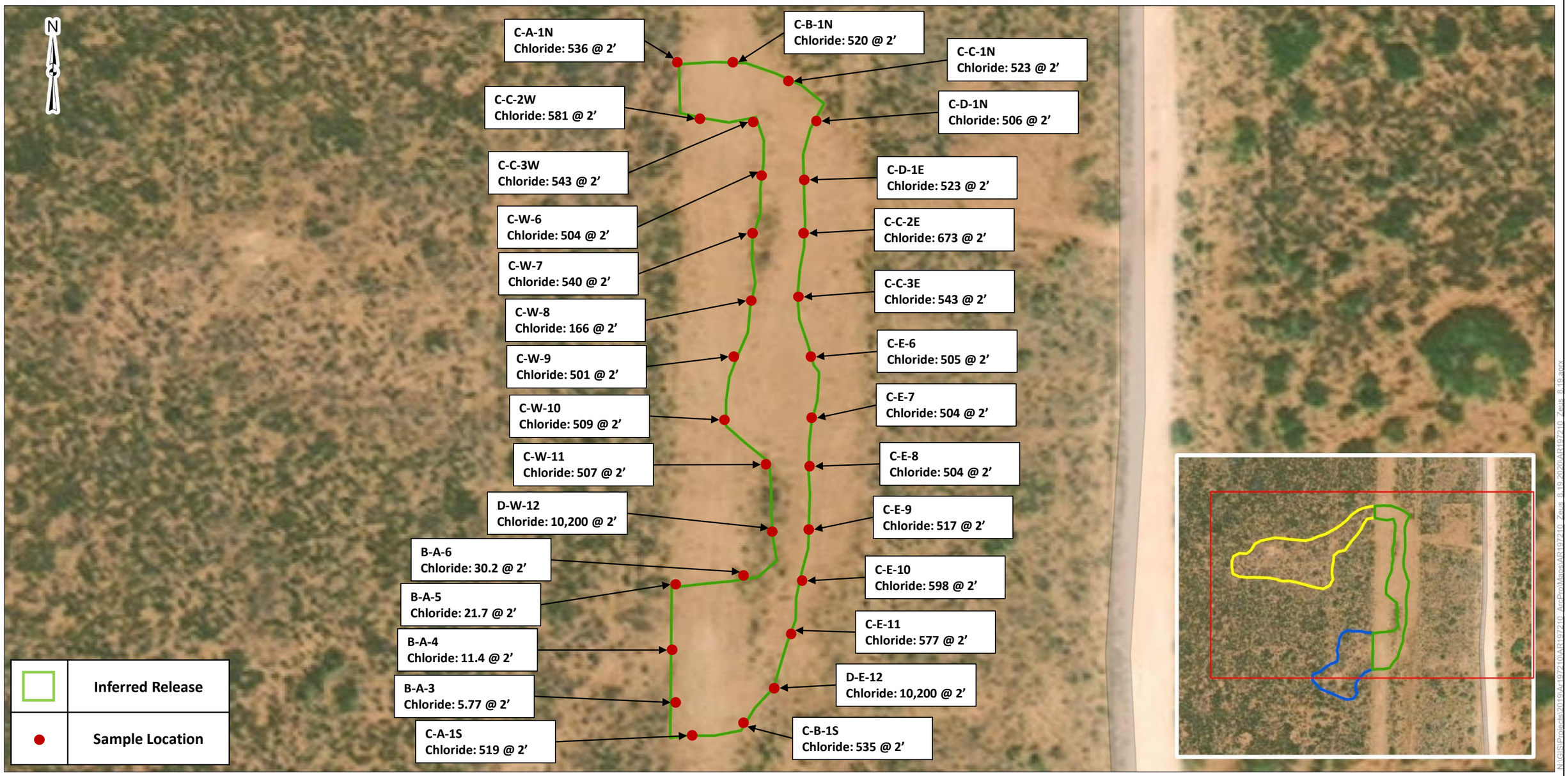
Confirmation Sample Map - Section 1

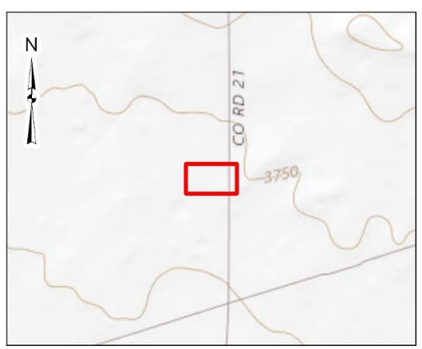
Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

6

N:\GIS Projects\2019\AR197210\ArcPro\Maps\AR197210 Zeus 8.19.2021.aprx





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 55 110 220

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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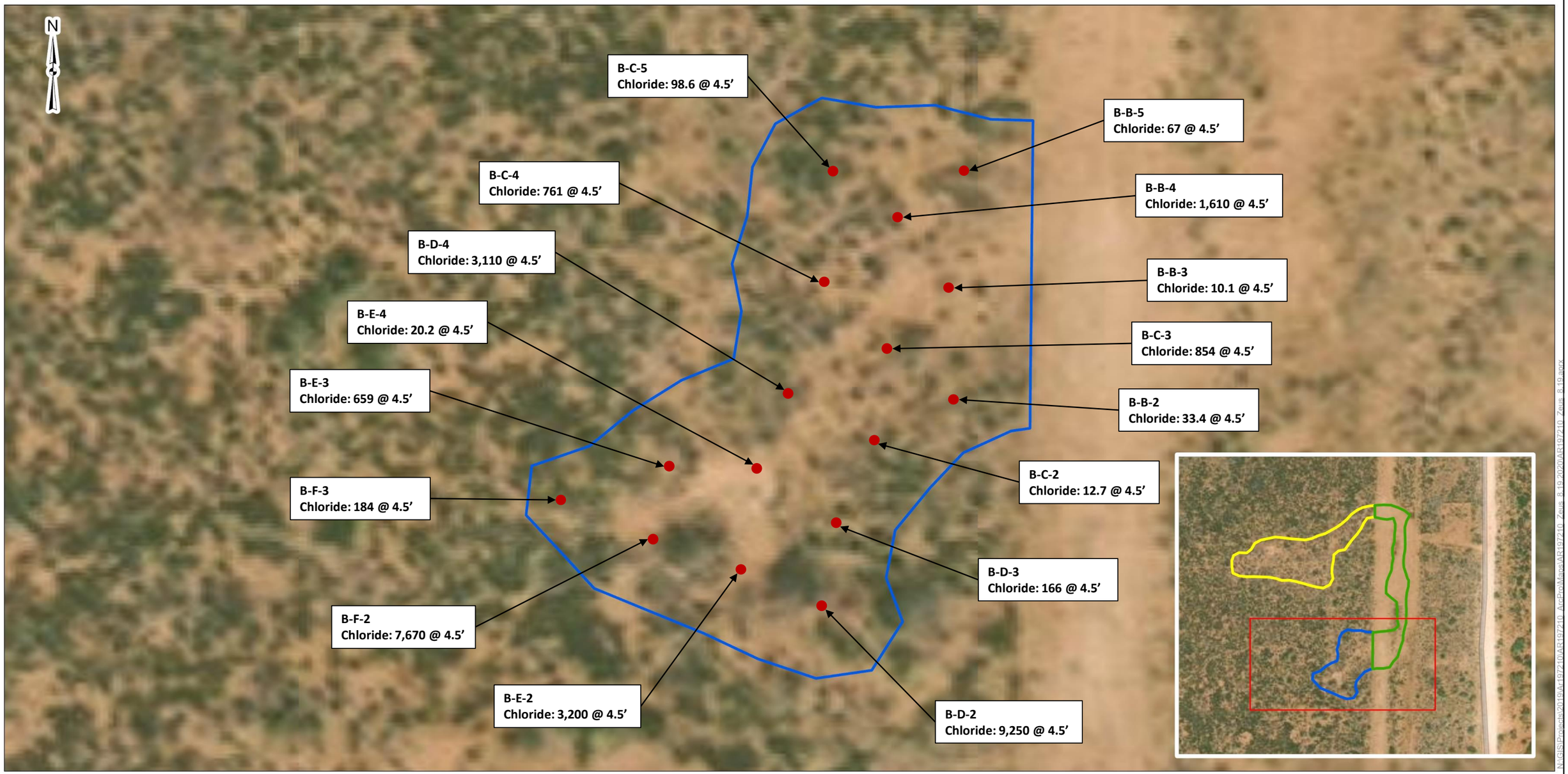
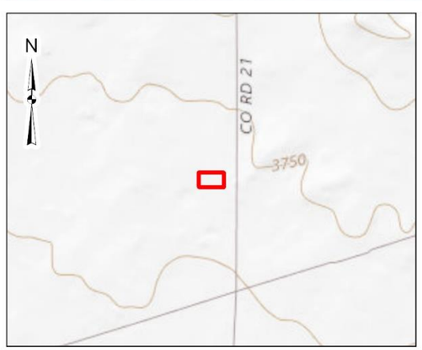
Confirmation Sample Map - Section 3

Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

7





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 27.5 55 110

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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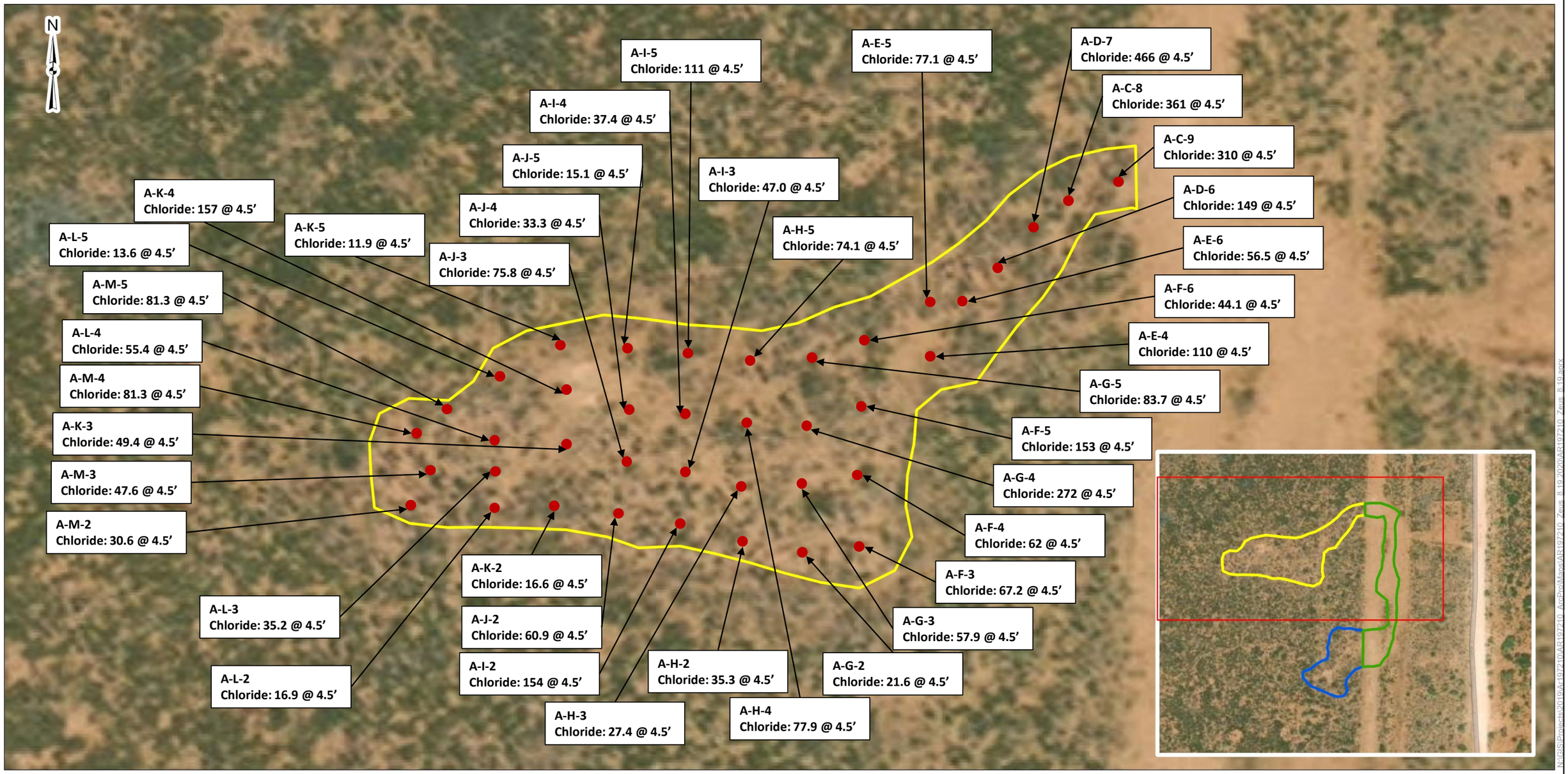
Confirmation Sample Map - Section 2

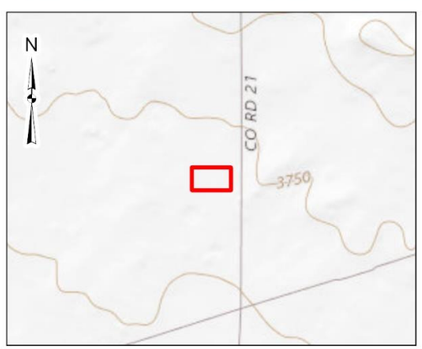
Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

8

N:\GIS Projects\2019\197210\AR197210 Zeus 8.19.2020\AR197210 Zeus 8.19.apr





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 43 86 172

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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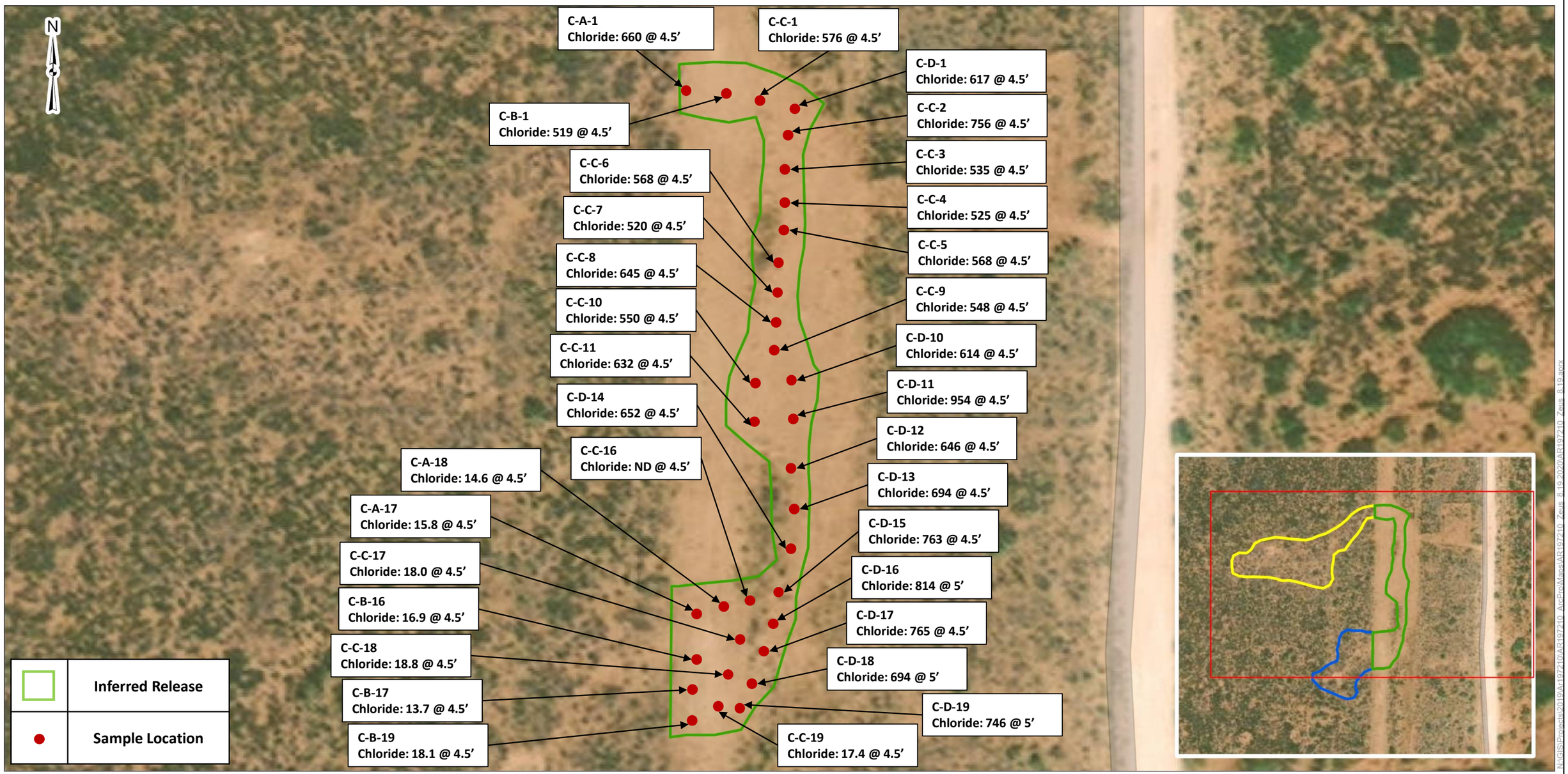
Confirmation Sample Map - Section 1

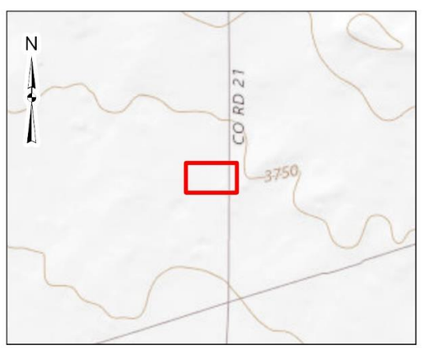
Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

9

N:\GIS Projects\2021\AR197210\AR197210 ArcPro\Maps\AR197210 Zeus 8.19.2021.aprx





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 55 110 220

Project No.:	AR197210
Date:	Oct 2021
Drawn By:	BAD
Reviewed By:	ELL

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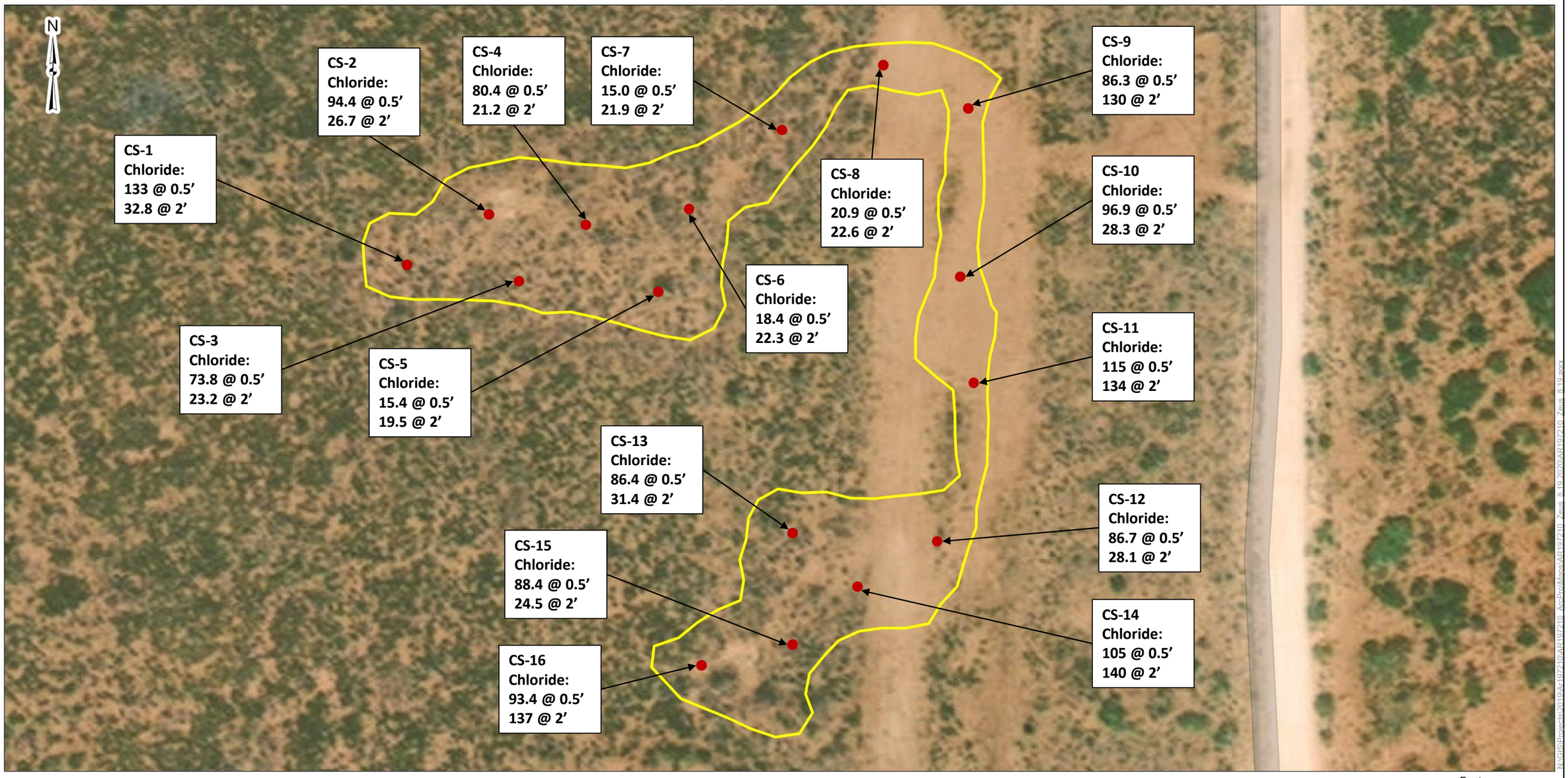
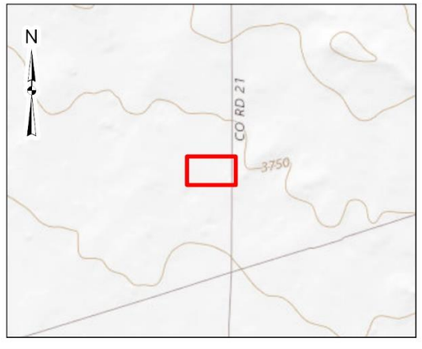
Confirmation Sample Map - Section 3

Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

10





DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Feet
0 62.5 125 250

Project No.:	AR197210
Date:	Nov 2021
Drawn By:	BAD
Reviewed By:	ELL

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Treated Soils Confirmation Map

Solaris Water LLC
Zeus Produced Water Release
NMOCD Reference No. 1RP-5561
32.439115, -103.621000

Figure

11

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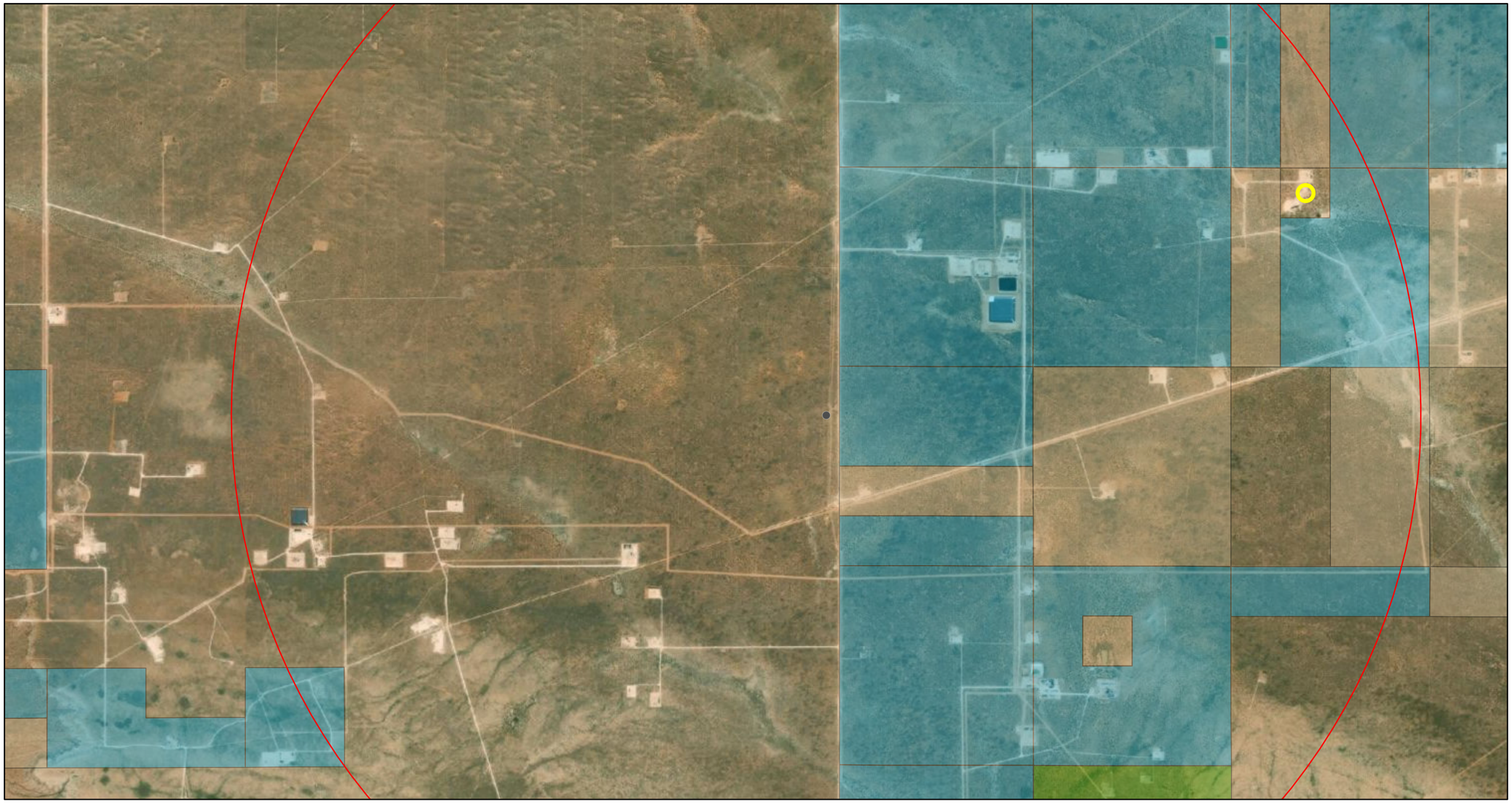
FIGURE 12 - NMOSE POD LOCATION MAP



1/15/2021 10:49:54 AM

OSE District Boundary

New Mexico State Trust Lands

Subsurface Estate

Surface Estate

Both Estates

SiteBoundaries

1:36,112

0 0.38 0.75 1.5 mi

0 0.5 1 2 km

Esri, HERE, Garmin, Esri, HERE, USDA FSA, GeoEye, Maxar, U.S. Department of Energy Office of Legacy Management

OSE POD Locations

Released to Imaging: 3/21/2022 8:15:26 AM

The New Mexico Office of the State Engineer (OSE) provides this geographic data and any associated metadata "as is" without warranty of any kind, including but not limited to its completeness, fitness for a particular use, or accuracy of its content, positional or otherwise. It is the sole responsibility of the user to

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
CP-01834	none	CP-01834

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Solaris Water Midstream	469-978-5620

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
3305 Boyd Drive	Carlsbad	NM	88220

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32.439348			N
LONGITUDE	103.620688			W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

5.8-miles south of Hwy 176 on dirt road. Located approximately 20-ft from Solaris Water Midstream produced water pipeline.

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD 1690	Jason Maley	Vision Resources, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/3/2020	6/3/2020	no well constructed	105	dry hole,

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): no water measured 72-hours later

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	105	6.25	no casing, or annular material installed				

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	105	6.25	no casing or annular material installed		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	3	3	SAND (SP), reddish, loose, dry	Y ✓ N	
3	4	1	Caliche, white	Y ✓ N	
4	5	1	SAND (SP), reddish, firm, dry	Y ✓ N	
5	30	25	SAND W/ SILT (SW-SM), reddish, very fine grain, angular, firm, dry.	Y ✓ N	
30	60	30	CLAYEY SAND/SILTY SAND (SP-SM/SP-SC), reddish, firm, dry.	Y ✓ N	
85	105	20	CLAYEY SAND (SP-SC), reddish to purplish, mottled gray and white, firm, dry	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☑ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Boring drilled to evaluate the absense or presence of groundwater within the upper105-ft. No water was found.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Jason Fine

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

Sample ID	Date	Organic Matter % Rate	Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Computed						Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Excess Lime	EC	Chloride
		Lbs/A	P1 (Weak Bray) ppm-P Rate	P2 (Strong Bray) ppm--P Rate	ppm	ppm	ppm	ppm	Soil pH	Buffer Index	Cation Exchange CEC meq/100 g	Percent Base Saturation K	Mg	Ca	H	Na	ppm	ppm	ppm	ppm	ppm	ppm	ppm	Rate	Soluble Salt mmhos/com	ppm
Pyote Soil Series		0.3	NA	NA	NA	NA	NA	NA	7.15		3.46	0.2	0.38	2.1	NA	0.19	4	NA	NA	NA	NA	NA	0.13	NA	0.18 - 0.3	NA
Zeus Background	9/27/2020	0.1 VL 32	10L	17L	14 VL	121 VH	744 H	38L	7.1		4.9	0.7	20.3	75.6	0	3.3	3 VL	2 VL	0.1 VL	2 VL	3 VL	0.1 VL	0.2 VL	L	0.2 VL	13
Zeus Dirty	9/27/2020	0.1 VL 34	16L	19L	24 VL	82 H	524 M	343 VH	7.2		4.8	1.3	14	54	0	30.8	9 L	8 L	0.3 VL	7 L	4 L	0.2 VL	1.0 M	M	0.3 L	832
Zeus Dirty	9/27/2020	0.1 VL 33	10L	14L	24 VL	93 M	1001 M	797 VH	8.5		8	0.8	9.6	62.6	0	27	10 M	2 VL	0.1 VL	2 VL	2 VL	0.1 VL	2.4 H	L	0.3 L	1,540
Zeus Gyp	11/15/2020	0.5 VL 39	10 L	27 M	220 L	93 VL	8,071 VH	277 L	7.9		42.8	1.3	1.8	94.1	0	2.8	3 VL	5 L	0.4 VL	6 L	7 M	0.3 VL	1.3 M	H	2.1 H	409
Zeus Hay	11/15/2020	0.5 VL 39	11 L	17 L	264 VH	81 L	1,815 H	300 H	8.6		11.7	5.8	5.8	77.4	0	11.1	3 VL	3 VL	0.2 VL	8 L	23 H	0.3 VL	1.5 H	H	0.6 L	196
Zeus Gyp Hay	11/15/2020	0.1 VL 33	26 H	73 VH	157 L	94 VL	12,221 VH	266 L	8		63.3	0.6	1.2	96.3	0	1.8	2 VL	2 VL	0.8 VL	6 L	7 M	0.3 VL	1.8 H	H	2.2 H	269

VL = Very Low M = Medium VH = Very High
L = Low H = High NA = Not Applicable

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. 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	06/12/19	Benzene - <0.00893 Toluene - <0.00462 Ethylbenzene - <0.00609 Total Xylenes - <0.00674 Total BTEX - <0.00462	334	<9.92	<9.92	<9.92	<9.92
	0.5 - 1	Grab	06/12/19	Benzene - <0.00900 Toluene - <0.00466 Ethylbenzene - <0.00614 Total Xylenes - <0.00679 Total BTEX - <0.00466	**951**	<9.93	<9.93	<9.93	<9.93
	1.5 - 2	Grab	03/25/19	BTEX - NA	**4,100**	NA			
	3 - 3.5	Grab	03/25/19	BTEX - NA	**8,890**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	11,000	NA			
HA-2	0 - 0.5	Grab	06/12/19	Benzene - <0.00893 Toluene - <0.00462 Ethylbenzene - <0.00609 Total Xylenes - <0.00674 Total BTEX - <0.00462	**1,490**	<9.92	<9.92	<9.92	<9.92
	0.5 - 1	Grab	03/25/19	Benzene - <0.00886 Toluene - <0.00459 Ethylbenzene - <0.00604 Total Xylenes - <0.00669 Total BTEX - <0.00459	53.9	<9.92	<9.92	<9.92	<9.92
	1.5 - 2	Grab	03/25/19	BTEX - NA	**4,400**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**1,440**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	5,240	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/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 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-3	0 - 0.5	Grab	06/12/19	Benzene - <0.00893 Toluene - <0.00462 Ethylbenzene - <0.00609 Total Xylenes - <0.00674 Total BTEX - <0.00462	**1,080**	<9.99	<9.99	<9.99	<9.99
	0.5 - 1	Grab	06/12/19	Benzene - <0.00895 Toluene - <0.00463 Ethylbenzene - <0.00610 Total Xylenes - <0.00675 Total BTEX - <0.00463	**661**	<9.98	<9.98	<9.98	<9.98
	1.5 - 2	Grab	06/12/19	BTEX - NA	**5,200**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**6,240**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	1,330	NA			
HA-4	0 - 0.5	Grab	06/12/19	Benzene - <0.00911 Toluene - <0.00472 Ethylbenzene - <0.00621 Total Xylenes - <0.00688 Total BTEX - <0.00472	**4,070**	<9.90	<9.90	<9.90	<9.90
	0.5 - 1	Grab	06/12/19	Benzene - <0.00883 Toluene - <0.00457 Ethylbenzene - <0.00602 Total Xylenes - <0.00666 Total BTEX - <0.00457	**4,360**	<9.90	<9.90	<9.90	<9.90
	1.5 - 2	Grab	06/12/19	BTEX - NA	**5,260**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	544	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	6,500	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/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

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

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-5	0 - 0.5	Grab	06/12/19	Benzene - <0.00904 Toluene - <0.00468 Ethylbenzene - <0.00616 Total Xylenes - <0.00682 Total BTEX - <0.00468	**3,610**	<9.91	<9.91	<9.91	<9.91
	0.5 - 1	Grab	06/12/19	Benzene - <0.00890 Toluene - <0.00461 Ethylbenzene - <0.00606 Total Xylenes - <0.00671 Total BTEX - <0.00461	**3,870**	<9.92	<9.92	<9.92	<9.92
	1.5 - 2	Grab	06/12/19	BTEX - NA	**3,640**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**1,110**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	4,760	NA			
HA-6	0 - 0.5	Grab	06/12/19	Benzene - <0.00897 Toluene - <0.00464 Ethylbenzene - <0.00611 Total Xylenes - <0.00677 Total BTEX - <0.00464	**2,440**	<9.90	<9.90	<9.90	<9.90
	0.5 - 1	Grab	06/12/19	Benzene - <0.00869 Toluene - <0.00450 Ethylbenzene - <0.00592 Total Xylenes - <0.00656 Total BTEX - <0.00450	**3,160**	<9.93	<9.93	<9.93	<9.93
	1.5 - 2	Grab	06/12/19	BTEX - NA	**2,410**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**3,230**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	5,080	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/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
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Bold and Highlight denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Reclamation and/or Remediation and Delineation Standards.

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-7	0 - 0.5	Grab	06/12/19	Benzene - <0.00908 Toluene - <0.00470 Ethylbenzene - <0.00618 Total Xylenes - <0.00685 Total BTEX - <0.00470	**3,550**	<9.96	<9.96	<9.96	<9.96
	0.5 - 1	Grab	06/12/19	Benzene - <0.00886 Toluene - <0.00459 Ethylbenzene - <0.00604 Total Xylenes - <0.00669 Total BTEX - <0.00459	**2,340**	<9.96	<9.96	<9.96	<9.96
	1.5 - 2	Grab	06/12/19	BTEX - NA	**1,920**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**3,730**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	12,800	NA			
HA-8	0 - 0.5	Grab	06/12/19	Benzene - <0.00904 Toluene - <0.00468 Ethylbenzene - <0.00616 Total Xylenes - <0.00682 Total BTEX - <0.00468	**4,670**	<9.99	<9.99	<9.99	<9.99
	0.5 - 1	Grab	06/12/19	Benzene - <0.00863 Toluene - <0.00447 Ethylbenzene - <0.00588 Total Xylenes - <0.00651 Total BTEX - <0.00447	**2,930**	<9.91	<9.91	<9.91	<9.91
	1.5 - 2	Grab	06/12/19	BTEX - NA	**3,180**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**5,360**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	2,990	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/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

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-9	0 - 0.5	Grab	06/12/19	Benzene - <0.00915 Toluene - <0.00474 Ethylbenzene - <0.00623 Total Xylenes - <0.00690 Total BTEX - <0.00474	**2,080**	<9.95	11.2	<9.95	11.2
	0.5 - 1	Grab	06/12/19	Benzene - <0.00873 Toluene - <0.00452 Ethylbenzene - <0.00595 Total Xylenes - <0.00658 Total BTEX - <0.00452	**4,090**	<10.0	<10.0	<10.0	<10.0
	1.5 - 2	Grab	06/12/19	BTEX - NA	**3,000**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**2,040**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	4,430	NA			
HA-10	0 - 0.5	Grab	06/12/19	Benzene - <0.00911 Toluene - <0.00472 Ethylbenzene - <0.00621 Total Xylenes - <0.00688 Total BTEX - <0.00472	**3,530**	<9.91	<9.91	<9.91	<9.91
	0.5 - 1	Grab	06/12/19	Benzene - <0.00897 Toluene - <0.00464 Ethylbenzene - <0.00611 Total Xylenes - <0.00677 Total BTEX - <0.00464	**4,390**	<9.93	<9.93	<9.93	<9.93
	1.5 - 2	Grab	06/12/19	BTEX - NA	**3,350**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**2,100**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	4,210	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/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
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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Release Margin Samples									
HA-11	0 - 0.5	Grab	06/12/19	Benzene - <0.00908 Toluene - 0.0141 Ethylbenzene - <0.00618 Total Xylenes - <0.00685 Total BTEX - 0.0141	**4,360**	<9.99	<9.99	<9.99	<9.99
	0.5 - 1	Grab	06/12/19	Benzene - <0.00869 Toluene - <0.00450 Ethylbenzene - <0.00592 Total Xylenes - <0.00656 Total BTEX - <0.00450	**4,150**	<9.96	<9.96	<9.96	<9.96
	1.5 - 2	Grab	06/12/19	BTEX - NA	**1,460**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**4,330**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	5,580	NA			
HA-12	0 - 0.5	Grab	06/12/19	Benzene - <0.00915 Toluene - <0.00474 Ethylbenzene - <0.00623 Total Xylenes - <0.00690 Total BTEX - <0.00474	204	<9.92	<9.92	<9.92	<9.92
	0.5 - 1	Grab	06/12/19	Benzene - <0.00900 Toluene - <0.00466 Ethylbenzene - <0.00614 Total Xylenes - <0.00679 Total BTEX - <0.00466	478	<9.90	<9.90	<9.90	<9.90
	1.5 - 2	Grab	06/12/19	BTEX - NA	**4,500**	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	**8,040**	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	2,500	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/MRO)
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SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Background Samples									
HA-13	0 - 0.5	Grab	06/12/19	Benzene - <0.00908 Toluene - <0.00470 Ethylbenzene - <0.00618 Total Xylenes - <0.00685 Total BTEX - <0.00470	27.2	<9.90	<9.90	<9.90	<9.90
	0.5 - 1	Grab	06/12/19	Benzene - <0.00886 Toluene - <0.00459 Ethylbenzene - <0.00604 Total Xylenes - <0.00669 Total BTEX - <0.00459	18.7	<9.91	<9.91	<9.91	<9.91
	1.5 - 2	Grab	06/12/19	BTEX - NA	13.0	NA			
	3 - 3.5	Grab	06/12/19	BTEX - NA	17.2	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	55.7	NA			
HA-14	0 - 0.5	Grab	06/12/19	Benzene - <0.00893 Toluene - <0.00462 Ethylbenzene - <0.00609 Total Xylenes - <0.00674 Total BTEX - <0.00462	15.4	<9.90	<9.90	<9.90	<9.90
	0.5 - 1	Grab	06/12/19	Benzene - <0.00904 Toluene - <0.00468 Ethylbenzene - <0.00616 Total Xylenes - <0.00682 Total BTEX - <0.00468	11.2	<9.90	<9.90	<9.90	<9.90
	1.5 - 2	Grab	06/12/19	BTEX - NA	10.6	NA			
	3 - 3.5	Grab		BTEX - NA	10.5	NA			
	4.5 - 5	Grab	06/12/19	BTEX - NA	14.6	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/MRO)
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Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Vertical Trench Sampling									
V-1	5.5 - 6	Grab	12/04/19	BTEX - N/A	60.4	N/A			
	9.5 - 10	Grab	12/04/19	BTEX - N/A	1,460	N/A			
V-2	5.5 - 6	Grab	12/04/19	BTEX - N/A	6,020	N/A			
	9.5 - 10	Grab	12/04/19	BTEX - N/A	6,350	N/A			
V-3	5.5 - 6	Grab	12/04/19	BTEX - N/A	3,860	N/A			
	9.5 - 10	Grab	12/04/19	BTEX - N/A	6,690	N/A			
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/MRO)
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Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Confirmation Samples (Section 1)									
A E-4	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - 0.00114	110	ND			
A E-5	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - 0.00106	77.1	ND			
A E-6	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - ND	56.5	ND			
A D-6	4 - 4.5	Comp	07/19/21	Benzene - 0.00144 BTEX - 0.00414	149	ND			
A D-7	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - 0.0037	466	ND			
A C-8	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - ND	361	ND			
A C-9	4 - 4.5	Comp	07/19/21	Benzene - ND BTEX - ND	310	ND			
A A-10	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	38.7	ND			
A B-8	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	19.1	ND			
A B-9	1.5 - 2	Comp	07/19/21	Benzene - 0.000544 BTEX - 0.00156	8.59	ND			
A B-10	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	31	ND			
A C-6	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	39.5	ND			
A C-7	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	30.8	ND			
A C-10	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	34.4	ND			
A D-3	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	78.3	ND			
A D-4	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	38.9	ND			
A D-5	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	49.9	ND			
A D-8	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	19.6	ND			
A D-9	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	8.66	ND			
A E-2	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	108	ND			
A E-3	1.5 - 2	Comp	07/19/21	Benzene - ND BTEX - ND	86.1	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/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 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Confirmation Samples (Section 1)									
A F-2	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	26.6	ND			
A F-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	67.2	ND			
A F-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	62	ND			
A F-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	153	ND			
A F-6	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	44.1	ND			
A F-7	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A G-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	30.2	ND			
A G-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	21.6	ND			
A G-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	57.9	ND			
A G-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	272	ND			
A G-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	83.7	ND			
A G-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A H-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A H-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	35.3	ND			
A H-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	27.4	ND			
A H-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	77.9	ND			
A H-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	74.1	ND			
A H-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A I-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A I-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	154	ND			
A I-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	47.0	ND			
A I-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	37.4	ND			
A I-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	111	ND			
A I-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - 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/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

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Confirmation Samples (Section 1)

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
A J-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	25.4	ND			
A J-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	60.9	ND			
A J-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	75.8	ND			
A J-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	33.3	ND			
A J-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	15.1	ND			
A J-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A K-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A K-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	16.6	ND			
A K-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	49.4	ND			
A K-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	157	ND			
A K-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	11.9	ND			
A K-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A L-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	9.75	ND			
A L-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	16.9	ND			
A L-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	35.2	ND			
A L-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	55.4	ND			
A L-5	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	13.6	ND			
A L-6	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A M-1	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A M-2	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	30.6	ND			
A M-3	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	47.6	ND			
A M-4	4 - 4.5	Comp	08/03/21	Benzene - ND BTEX - ND	81.3	ND			
A M-5	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	9.87	ND			
A N-2	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	9.18	ND			
A N-3	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	ND	ND			
A N-4	1.5 - 2	Comp	08/03/21	Benzene - ND BTEX - ND	9.75	ND			
A N-5	1.5 - 2	Comp	08/03/21	Benzene - 0.00281 BTEX - ND	37.3	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.
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TABLE 1
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Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Confirmation Samples (Section 2)									
B F-2	4 - 4.5	Comp	07/19/21	BTEX - ND	7,670	ND			
B F-3	4 - 4.5	Comp	07/19/21	BTEX - ND	184	ND			
B E-2	4 - 4.5	Comp	07/19/21	BTEX - ND	3,200	ND			
B E-3	4 - 4.5	Comp	07/19/21	BTEX - ND	659	ND			
B E-4	4 - 4.5	Comp	07/19/21	BTEX - ND	20.2	ND			
B D-2	4 - 4.5	Comp	07/19/21	BTEX - ND	9,250	ND			
B D-3	4 - 4.5	Comp	07/19/21	BTEX - ND	166	ND			
B D-4	4 - 4.5	Comp	07/19/21	BTEX - ND	3,110	ND			
B C-2	4 - 4.5	Comp	07/19/21	BTEX - ND	12.7	ND			
B C-3	4 - 4.5	Comp	07/19/21	BTEX - ND	854	ND			
B C-4	4 - 4.5	Comp	07/19/21	BTEX - ND	761	ND			
B C-5	4 - 4.5	Comp	07/19/21	BTEX - ND	98.6	ND			
B B-2	4 - 4.5	Comp	07/19/21	BTEX - ND	33.4	ND			
B B-3	4 - 4.5	Comp	07/19/21	BTEX - ND	10.1	ND			
B B-4	4 - 4.5	Comp	07/19/21	BTEX - ND	1,610	ND			
B B-5	4 - 4.5	Comp	07/19/21	BTEX - ND	67	ND			
B A-3	1.5 - 2	Comp	07/19/21	BTEX - ND	5.77	ND			
B A-4	1.5 - 2	Comp	07/19/21	BTEX - ND	11.4	ND			
B A-5	1.5 - 2	Comp	07/19/21	BTEX - ND	21.7	ND			
B A-6	1.5 - 2	Comp	07/19/21	BTEX - ND	30.2	ND			
B B-1	1.5 - 2	Comp	07/19/21	BTEX - ND	9.54	ND			
B B-6	1.5 - 2	Comp	07/19/21	BTEX - ND	37.1	ND			
B C-1	1.5 - 2	Comp	07/19/21	BTEX - ND	6.78	ND			
B C-6	1.5 - 2	Comp	07/19/21	BTEX - ND	13.2	ND			
B D-1	1.5 - 2	Comp	07/19/21	BTEX - ND	10.5	ND			
B D-5	1.5 - 2	Comp	07/19/21	BTEX - ND	26.4	ND			
B D-6	1.5 - 2	Comp	07/19/21	BTEX - ND	10.2	ND			
B E-1	1.5 - 2	Comp	07/19/21	BTEX - ND	11.3	ND			
B E-5	1.5 - 2	Comp	07/19/21	BTEX - ND	6.73	ND			
B F-1	1.5 - 2	Comp	07/19/21	BTEX - ND	32.2	ND			
B F-4	1.5 - 2	Comp	07/19/21	BTEX - ND	27.5	ND			
B G-1	1.5 - 2	Comp	07/19/21	BTEX - ND	1.58	ND			
B G-2	1.5 - 2	Comp	07/19/21	BTEX - ND	20.2	ND			
B G-3	1.5 - 2	Comp	07/19/21	BTEX - ND	7.92	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
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Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Confirmation Samples (Section 3)									
C-A-1	4 - 4.5	Comp	08/16/21	BTEX - ND	660	ND			
C-A-1N	1.5-2	Comp	08/16/21	BTEX - ND	536	ND			
C-A-1S	1.5-2	Comp	08/16/21	BTEX - ND	519	ND			
C-B-1	4 - 4.5	Comp	08/16/21	BTEX - ND	594	ND			
C-B-1N	1.5-2	Comp	08/16/21	BTEX - ND	520	ND			
C-B-1S	1.5-2	Comp	08/16/21	BTEX - ND	535	ND			
C-C-1	4 - 4.5	Comp	08/16/21	BTEX - ND	576	ND			
C-C-10	4 - 4.5	Comp	08/16/21	BTEX - ND	550	ND			
C-C-11	4 - 4.5	Comp	08/16/21	BTEX - ND	632	ND			
C-C-1N	1.5-2	Comp	08/16/21	BTEX - ND	523	ND			
C-C-2	4 - 4.5	Comp	08/16/21	BTEX - ND	756	ND			
C-C-2E	1.5-2	Comp	08/16/21	BTEX - ND	673	ND			
C-C-2E	1.5-2	Comp	10/25/21	BTEX - ND	15.8	ND			
C-C-2W	1.5-2	Comp	08/16/21	BTEX - ND	581	ND			
C-C-3	4 - 4.5	Comp	08/16/21	BTEX - ND	535	ND			
C-C-3E	1.5-2	Comp	08/16/21	BTEX - ND	543	ND			
C-C-3W	1.5-2	Comp	08/16/21	BTEX - ND	490	ND			
C-C-4	4 - 4.5	Comp	08/16/21	BTEX - ND	525	ND			
C-C-5	4 - 4.5	Comp	08/16/21	BTEX - ND	568	ND			
C-C-6	4 - 4.5	Comp	08/16/21	BTEX - ND	568	ND			
C-C-7	4 - 4.5	Comp	08/16/21	BTEX - ND	520	ND			
C-C-8	4 - 4.5	Comp	08/16/21	BTEX - ND	645	ND			
C-C-9	4 - 4.5	Comp	08/16/21	BTEX - ND	548	ND			
C-D-1	4 - 4.5	Comp	08/16/21	BTEX - ND	617	ND			
C-D-10	4 - 4.5	Comp	08/16/21	BTEX - ND	614	ND			
C-D-11	4 - 4.5	Comp	08/16/21	BTEX - ND	954	ND			
C-D-12	4 - 4.5	Comp	08/16/21	BTEX - ND	646	ND			
C-D-13	4 - 4.5	Comp	08/16/21	BTEX - ND	694	ND			
C-D-14	4 - 4.5	Comp	08/16/21	BTEX - ND	652	ND			
C-D-15	4 - 4.5	Comp	08/16/21	BTEX - ND	763	ND			
C-D-16	4 - 4.5	Comp	08/16/21	BTEX - ND	814	ND			
C-D-17	4 - 4.5	Comp	08/16/21	BTEX - ND	765	ND			
C-D-18	4 - 4.5	Comp	08/16/21	BTEX - ND	694	ND			
C-D-19	4 - 4.5	Comp	08/16/21	BTEX - ND	746	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
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Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Confirmation Samples (Section 3)									
C-D-1E	1.5-2	Comp	08/16/21	BTEX - ND	561	ND			
C-D-1N	1.5-2	Comp	08/16/21	BTEX - ND	506	ND			
C-D-9	4 - 4.5	Comp	08/16/21	BTEX - ND	578	ND			
C-E10	1.5-2	Comp	08/16/21	BTEX - ND	598	ND			
C-E11	1.5-2	Comp	08/16/21	BTEX - ND	577	ND			
C-E6	1.5-2	Comp	08/16/21	BTEX - ND	505	ND			
C-E7	1.5-2	Comp	08/16/21	BTEX - ND	504	ND			
C-E8	1.5-2	Comp	08/16/21	BTEX - ND	504	ND			
C-E9	1.5-2	Comp	08/16/21	BTEX - ND	517	ND			
C-W10	1.5-2	Comp	08/16/21	BTEX - ND	509	ND			
C-W11	1.5-2	Comp	08/16/21	BTEX - ND	507	ND			
C-W6	1.5-2	Comp	08/16/21	BTEX - ND	504	ND			
C-W7	1.5-2	Comp	08/16/21	BTEX - ND	540	ND			
C-W8	1.5-2	Comp	08/16/21	BTEX - ND	166	ND			
C-W9	1.5-2	Comp	08/16/21	BTEX - ND	501	ND			
D-E12	1.5-2	Comp	08/16/21	BTEX - ND	505	ND			
D-W12	1.5-2	Comp	08/16/21	BTEX - ND	530	ND			
C-A-17	4 - 4.5	Comp	10/25/21	BTEX - ND	15.8	ND			
C-A-18	4 - 4.5	Comp	10/25/21	BTEX - ND	14.6	ND			
C-B-16	4 - 4.5	Comp	10/25/21	BTEX - ND	16.9	ND			
C-B-17	4 - 4.5	Comp	10/25/21	BTEX - ND	13.7	ND			
C-B-19	4 - 4.5	Comp	10/25/21	BTEX - ND	18.1	ND			
C-C-16	4 - 4.5	Comp	10/25/21	BTEX - ND	ND	ND			
C-C-17	4 - 4.5	Comp	10/25/21	BTEX - ND	18.0	ND			
C-C-18	4 - 4.5	Comp	10/25/21	BTEX - ND	18.8	ND			
C-C-19	4 - 4.5	Comp	10/25/21	BTEX - ND	17.4	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/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 1
SOIL SAMPLE ANALYTICAL RESULTS - BTEX[1], Chloride[2], and TPH[3]
Zeus SWD Release
Terracon Project No. AR197210

Sample I.D.	Sample Depth (ft. bgs)	Sample Type	Sample Date	BTEX (mg/kg)	Chloride (mg/kg)	TPH (8015M) (mg/kg)			
						GRO	DRO	MRO	TOTAL
Treated Material Confirmation Samples									
CS-1	0-0.5	Comp	10/05/21	BTEX - ND	133	ND			
CS-1	1.5-2	Comp	10/05/21	BTEX - ND	32.8	ND			
CS-2	0-0.5	Comp	10/05/21	BTEX - ND	94.4	ND			
CS-2	1.5-2	Comp	10/05/21	BTEX - ND	26.7	ND			
CS-3	0-0.5	Comp	10/05/21	BTEX - ND	73.8	ND			
CS-3	1.5-2	Comp	10/05/21	BTEX - ND	23.2	ND			
CS-4	0-0.5	Comp	10/05/21	BTEX - ND	80.4	ND			
CS-4	1.5-2	Comp	10/05/21	BTEX - ND	21.2	ND			
CS-5	0-0.5	Comp	10/05/21	BTEX - ND	15.4	ND			
CS-5	1.5-2	Comp	10/05/21	BTEX - ND	19.5	ND			
CS-6	0-0.5	Comp	10/05/21	BTEX - ND	18.4	ND			
CS-6	1.5-2	Comp	10/05/21	BTEX - ND	22.3	ND			
CS-7	0-0.5	Comp	10/05/21	BTEX - ND	15.0	ND			
CS-7	1.5-2	Comp	10/05/21	BTEX - ND	21.9	ND			
CS-8	0-0.5	Comp	10/05/21	BTEX - ND	20.9	ND			
CS-8	1.5-2	Comp	10/05/21	BTEX - ND	22.6	ND			
CS-9	0-0.5	Comp	10/05/21	BTEX - ND	86.3	ND			
CS-9	1.5-2	Comp	10/05/21	BTEX - ND	130	ND			
CS-10	0-0.5	Comp	10/05/21	BTEX - ND	96.9	ND			
CS-10	1.5-2	Comp	10/05/21	BTEX - ND	28.3	ND			
CS-11	0-0.5	Comp	10/05/21	BTEX - ND	115	ND			
CS-11	1.5-2	Comp	10/05/21	BTEX - ND	134	ND			
CS-12	0-0.5	Comp	10/05/21	BTEX - ND	86.7	ND			
CS-12	1.5-2	Comp	10/05/21	BTEX - ND	28.1	ND			
CS-13	0-0.5	Comp	10/05/21	BTEX - ND	86.4	ND			
CS-13	1.5-2	Comp	10/05/21	BTEX - ND	31.4	ND			
CS-14	0-0.5	Comp	10/05/21	BTEX - ND	105	ND			
CS-14	1.5-6	Comp	10/05/21	BTEX - ND	140	ND			
CS-15	0-0.5	Comp	10/05/21	BTEX - ND	88.4	ND			
CS-15	1.5-2	Comp	10/05/21	BTEX - ND	24.5	ND			
CS-16	0-0.5	Comp	10/05/21	BTEX - ND	93.4	ND			
CS-16	1.5-2	Comp	10/05/21	BTEX - ND	137	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/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 B – PHOTOGRAPHIC LOG

PHOTO 1: View of Release Origin, facing East. 6/07/2019

PHOTO 2: View of Release Origin, Facing South. 6/07/2019

PHOTO 3: View of site, Facing West. 6/07/2019

PHOTO 4: View of Eastern Edge of Delineation, facing Southwest. 6/07/2019

PHOTO 5: View of Release Flow Path, facing West. 6/07/2019

PHOTO 6: View of Release Flow Path, Facing North. 6/07/2019

PHOTO 7: View of Release, Facing North. 6/07/2019

PHOTO 8: View of Release, Facing West. 6/07/2019

PHOTO 9: View of Release, Facing North East. 6/07/2019

PHOTO 10: View of Release, Facing North. 6/07/2019

PHOTO 11: View of Southern End of Release, Facing West. 6/07/2019

PHOTO 12: View of Southern Section 2, Facing East.

PHOTO 13: View of Section 2, Facing North.

PHOTO 14: View of section 2, Facing West.

PHOTO 15: View of stockpile, Facing West.

PHOTO 16: View of section 1, Facing East.

PHOTO 17: View of Section 1, Facing Northeast.

PHOTO 18: View of section 1, Facing North.

PHOTO 19: View of West end of section 1, Facing Northwest.

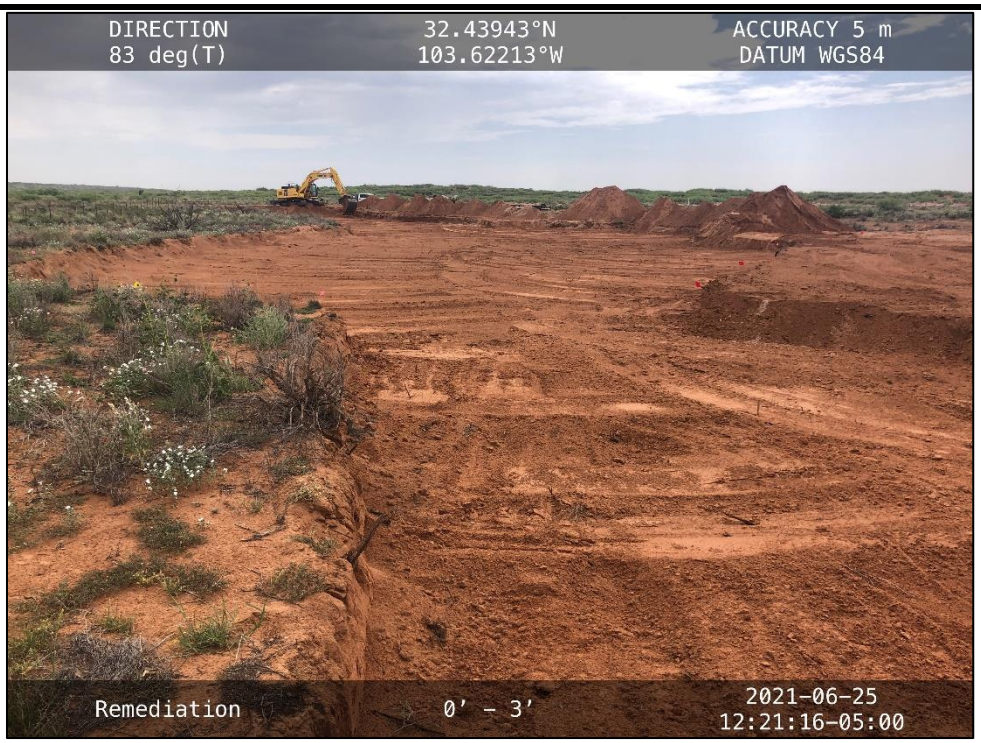

PHOTO 20: View from West end section 1, Facing East.

PHOTO 21: View of West end of section 2, Facing Southwest.

PHOTO 22: View of section 1, Facing South.

PHOTO 23: View of East portion of section 1, Facing East.

PHOTO 24: View of active remediation, Facing East.

PHOTO 25: View of section 3, Facing North.

PHOTO 26: View of section 3, Facing South.

PHOTO 27: View of South end of section 3 facing section 2, Facing Southwest.

PHOTO 28: View of section 3, Facing North.

PHOTO 29: View of North end of section 3 facing section 1, Facing West.

PHOTO 30: View of North end of section 3, Facing South.

PHOTO 31: View of section 3 facing section 1, Facing West.

PHOTO 32: View of site backfilling, Facing West.

PHOTO 33: View of site backfilling, Facing Southwest.

APPENDIX C – ANALYTICAL REPORT AND CHAIN OF CUSTODY

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-001		627588-002		627588-003		627588-004		627588-005		627588-006	
	Field Id:	HA-1 (0-0.5)		HA-1 (0.5-1)		HA-1 (1.5-2)		HA-1 (3.5-4)		HA-1 (4.5-5)		HA-2 (0-0.5)	
	Depth:	0-0.5 ft		0.5-1 ft		1.5-2 ft		3.5-4 ft		4.5-5 ft		0-0.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 11:46		Jun-12-19 11:48		Jun-12-19 11:50		Jun-12-19 11:51		Jun-12-19 11:53		Jun-12-19 11:57	
BTEX by EPA 8021B	***Extracted:***	Jun-17-19 13:00		Jun-14-19 16:00								Jun-14-19 16:00	
	Analyzed:	Jun-17-19 22:52		Jun-14-19 18:51								Jun-14-19 19:15	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		<0.00893	0.0198	<0.00900	0.0199							<0.00904	0.0200
Toluene		<0.00462	0.0198	<0.00466	0.0199							<0.00468	0.0200
Ethylbenzene		<0.00609	0.0198	<0.00614	0.0199							<0.00616	0.0200
m,p-Xylenes		<0.00674	0.0395	<0.00679	0.0398							<0.00682	0.0400
o-Xylene		<0.00674	0.0198	<0.00679	0.0199							<0.00682	0.0200
Total Xylenes		<0.00674	0.0198	<0.00679	0.0199							<0.00682	0.0200
Total BTEX		<0.00462	0.0198	<0.00466	0.0199							<0.00468	0.0200
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-14-19 15:27		Jun-14-19 15:27		Jun-19-19 16:22		Jun-19-19 16:22		Jun-19-19 16:22		Jun-14-19 15:27	
	Analyzed:	Jun-14-19 18:14		Jun-14-19 18:41		Jun-19-19 20:53		Jun-19-19 21:05		Jun-19-19 21:17		Jun-14-19 18:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		334	10.0	951	10.0	4100	10.0	8890	99.6	11000	100	1490	10.0
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***	Jun-26-19 15:59		Jun-26-19 16:08								Jun-26-19 16:11	
	Analyzed:	Jun-27-19 05:16		Jun-27-19 06:12								Jun-27-19 06:30	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<9.92	49.6	<9.93	49.7							<9.92	49.6
Diesel Range Organics (DRO)		<9.92	49.6	<9.93	49.7							<9.92	49.6
Motor Oil Range Hydrocarbons (MRO)		<9.92	49.6	<9.93	49.7							<9.92	49.6
Total TPH		<9.92	49.6	<9.93	49.7							<9.92	49.6

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-007		627588-008		627588-009		627588-010		627588-011		627588-012	
	Field Id:	HA-2 (0.5-1)		HA-2 (1.5-2)		HA-2 (3-3.5)		HA-2 (4.5-5)		HA-3 (0-0.-5)		HA-3 (0.5-1)	
	Depth:	0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft		0-0.5 ft		0.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 11:59		Jun-12-19 12:01		Jun-12-19 12:03		Jun-12-19 12:05		Jun-12-19 12:30		Jun-12-19 12:32	
BTEX by EPA 8021B	***Extracted:***	Jun-14-19 16:00								Jun-14-19 16:00		Jun-14-19 16:00	
	Analyzed:	Jun-14-19 19:39								Jun-14-19 20:03		Jun-14-19 20:27	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Benzene		<0.00886	0.0196							<0.00893	0.0198	<0.00895	0.0198
Toluene		<0.00459	0.0196							<0.00462	0.0198	<0.00463	0.0198
Ethylbenzene		<0.00604	0.0196							<0.00609	0.0198	<0.00610	0.0198
m,p-Xylenes		<0.00669	0.0392							<0.00674	0.0395	<0.00675	0.0396
o-Xylene		<0.00669	0.0196							<0.00674	0.0198	<0.00675	0.0198
Total Xylenes		<0.00669	0.0196							<0.00674	0.0198	<0.00675	0.0198
Total BTEX		<0.00459	0.0196							<0.00462	0.0198	<0.00463	0.0198
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-14-19 15:27		Jun-19-19 16:22		Jun-19-19 16:22		Jun-19-19 16:22		Jun-14-19 15:27		Jun-14-19 15:27	
	Analyzed:	Jun-14-19 18:59		Jun-19-19 21:29		Jun-19-19 21:41		Jun-19-19 22:17		Jun-14-19 19:08		Jun-14-19 19:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		53.9	10.0	4400	10.0	1440	10.0	5240	99.4	1080	10.0	661	10.0
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***	Jun-26-19 16:14								Jun-26-19 16:17		Jun-26-19 16:20	
	Analyzed:	Jun-27-19 06:49								Jun-27-19 07:07		Jun-27-19 04:19	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<9.92	49.6							<9.99	50.0	<9.98	49.9
Diesel Range Organics (DRO)		<9.92	49.6							<9.99	50.0	<9.98	49.9
Motor Oil Range Hydrocarbons (MRO)		<9.92	49.6							<9.99	50.0	<9.98	49.9
Total TPH		<9.92	49.6							<9.99	50.0	<9.98	49.9

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Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-013		627588-014		627588-015		627588-016		627588-017		627588-018	
	Field Id:	HA-3 (1.5-2)		HA-3 (3-3.5)		HA-3 (4.5-5)		HA-4 (0-0.5)		HA-4 (0.5-1)		HA-4 (1.5-2)	
	Depth:	1.5-2 ft		3-3.5 ft		4-4.5 ft		0-0.5 ft		0.5-1 ft		1.5-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 12:34		Jun-12-19 12:36		Jun-12-19 12:38		Jun-12-19 12:45		Jun-12-19 12:47		Jun-12-19 12:49	
BTEX by EPA 8021B	***Extracted:***							Jun-14-19 16:00		Jun-14-19 16:00			
	Analyzed:							Jun-14-19 20:51		Jun-14-19 21:15			
	Units/RL:							mg/kg	RL	mg/kg	RL		
Benzene								<0.00911	0.0202	<0.00883	0.0195		
Toluene								<0.00472	0.0202	<0.00457	0.0195		
Ethylbenzene								<0.00621	0.0202	<0.00602	0.0195		
m,p-Xylenes								<0.00688	0.0403	<0.00666	0.0391		
o-Xylene								<0.00688	0.0202	<0.00666	0.0195		
Total Xylenes								<0.00688	0.0202	<0.00666	0.0195		
Total BTEX								<0.00472	0.0202	<0.00457	0.0195		
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-19-19 17:20		Jun-19-19 17:20		Jun-14-19 15:27		Jun-20-19 10:35		Jun-14-19 15:27		Jun-19-19 17:20	
	Analyzed:	Jun-19-19 20:51		Jun-19-19 21:09		Jun-14-19 19:43		Jun-20-19 18:11		Jun-14-19 19:52		Jun-19-19 21:27	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5200	100	6240	99.6	1330	10.0	4070	10.0	4360	10.0	5260	99.4
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***							Jun-26-19 16:23		Jun-26-19 16:26			
	Analyzed:							Jun-27-19 04:38		Jun-27-19 04:57			
	Units/RL:							mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)								<9.90	49.5	<9.90	49.5		
Diesel Range Organics (DRO)								<9.90	49.5	<9.90	49.5		
Motor Oil Range Hydrocarbons (MRO)								<9.90	49.5	<9.90	49.5		
Total TPH								<9.90	49.5	<9.90	49.5		

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

Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-019		627588-020		627588-021		627588-022		627588-023		627588-024	
	Field Id:	HA-4 (3-3.5)		HA-4 (4.5-5)		HA-5 (0-0.5)		HA-5 (0.5-1)		HA-5 (1.5-2)		HA-5 (3-3.5)	
	Depth:	3-3.5 ft		4.5-5 ft		0-0.5 ft		0.5-1 ft		1.5-2 ft		3-3.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 12:51		Jun-12-19 12:53		Jun-12-19 12:58		Jun-12-19 13:00		Jun-12-19 13:02		Jun-12-19 13:04	
BTEX by EPA 8021B	***Extracted:***					Jun-14-19 16:00		Jun-14-19 16:00					
	Analyzed:					Jun-14-19 21:39		Jun-14-19 22:04					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Benzene						<0.00904	0.0200	<0.00890	0.0197				
Toluene						<0.00468	0.0200	<0.00461	0.0197				
Ethylbenzene						<0.00616	0.0200	<0.00606	0.0197				
m,p-Xylenes						<0.00682	0.0400	<0.00671	0.0394				
o-Xylene						<0.00682	0.0200	<0.00671	0.0197				
Total Xylenes						<0.00682	0.0200	<0.00671	0.0197				
Total BTEX						<0.00468	0.0200	<0.00461	0.0197				
Chloride by EPA 300 SUB: T104704215-19-29	***Extracted:***	Jun-19-19 17:20		Jun-19-19 17:20		Jun-14-19 15:27		Jun-14-19 15:27		Jun-19-19 17:20		Jun-19-19 17:20	
	Analyzed:	Jun-19-19 21:45		Jun-19-19 22:12		Jun-14-19 20:01		Jun-14-19 20:10		Jun-19-19 22:30		Jun-19-19 22:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		544	9.98	6500	100	3610	10.0	3870	10.0	3640	10.0	1110 X	10.0
TPH By SW8015 Mod SUB: T104704215-19-29	***Extracted:***					Jun-26-19 16:29		Jun-26-19 16:32					
	Analyzed:					Jun-27-19 05:16		Jun-27-19 05:34					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)						<9.91	49.6	<9.92	49.6				
Diesel Range Organics (DRO)						<9.91	49.6	<9.92	49.6				
Motor Oil Range Hydrocarbons (MRO)						<9.91	49.6	<9.92	49.6				
Total TPH						<9.91	49.6	<9.92	49.6				

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-025		627588-026		627588-027		627588-028		627588-029		627588-030	
	Field Id:	HA-5 (4.5-5)		HA-6 (0-0.5)		HA-6 (O.5-1)		HA-6 (1.5-2)		HA-6 (3-3.5)		HA-6 (4.5-5)	
	Depth:	4.5-5 ft		0-0.5 ft		0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 13:06		Jun-12-19 13:20		Jun-12-19 13:22		Jun-12-19 13:24		Jun-12-19 13:26		Jun-12-19 13:28	
BTEX by EPA 8021B	***Extracted:***			Jun-17-19 13:00		Jun-14-19 16:00							
	Analyzed:			Jun-18-19 02:05		Jun-15-19 00:30							
	Units/RL:			mg/kg	RL	mg/kg	RL						
Benzene				<0.00897	0.0198	<0.00869	0.0192						
Toluene				<0.00464	0.0198	<0.00450	0.0192						
Ethylbenzene				<0.00611	0.0198	<0.00592	0.0192						
m,p-Xylenes				<0.00677	0.0397	<0.00656	0.0385						
o-Xylene				<0.00677	0.0198	<0.00656	0.0192						
Total Xylenes				<0.00677	0.0198	<0.00656	0.0192						
Total BTEX				<0.00464	0.0198	<0.00450	0.0192						
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-19-19 17:20		Jun-18-19 09:55		Jun-18-19 09:55		Jun-19-19 17:20		Jun-19-19 17:20		Jun-19-19 17:20	
	Analyzed:	Jun-19-19 23:06		Jun-18-19 11:48		Jun-18-19 12:15		Jun-19-19 23:15		Jun-19-19 23:24		Jun-19-19 23:33	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		4760	9.96	2440 X	10.0	3160	9.96	2410	9.94	3230	9.98	5080	10.0
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***			Jun-26-19 16:53		Jun-26-19 16:56							
	Analyzed:			Jun-27-19 22:20		Jun-27-19 22:39							
	Units/RL:			mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)				<9.90	49.5	<9.93	49.7						
Diesel Range Organics (DRO)				<9.90	49.5	<9.93	49.7						
Motor Oil Range Hydrocarbons (MRO)				<9.90	49.5	<9.93	49.7						
Total TPH				<9.90	49.5	<9.93	49.7						

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-031		627588-032		627588-033		627588-034		627588-035		627588-036	
	Field Id:	HA-7 (0-0.5)		HA-7 (0-5-1)		HA-7 (1.5-2)		HA-7 (3-3-5)		HA-7 (4.5-5)		HA-8 (0-0.5)	
	Depth:	0-0.5 ft		0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft		0-0.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 13:32		Jun-12-19 13:34		Jun-12-19 13:36		Jun-12-19 13:38		Jun-12-19 13:40		Jun-12-19 13:45	
BTEX by EPA 8021B	***Extracted:***	Jun-14-19 16:00		Jun-14-19 16:00								Jun-14-19 16:00	
	Analyzed:	Jun-15-19 00:54		Jun-15-19 01:19								Jun-15-19 01:43	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		<0.00908	0.0201	<0.00886	0.0196							<0.00904	0.0200
Toluene		<0.00470	0.0201	<0.00459	0.0196							<0.00468	0.0200
Ethylbenzene		<0.00618	0.0201	<0.00604	0.0196							<0.00616	0.0200
m,p-Xylenes		<0.00685	0.0402	<0.00669	0.0392							<0.00682	0.0400
o-Xylene		<0.00685	0.0201	<0.00669	0.0196							<0.00682	0.0200
Total Xylenes		<0.00685	0.0201	<0.00669	0.0196							<0.00682	0.0200
Total BTEX		<0.00470	0.0201	<0.00459	0.0196							<0.00468	0.0200
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-18-19 09:55		Jun-18-19 09:55		Jun-19-19 17:20		Jun-19-19 17:20		Jun-19-19 17:20		Jun-18-19 09:55	
	Analyzed:	Jun-18-19 12:24		Jun-18-19 12:33		Jun-20-19 00:00		Jun-20-19 00:27		Jun-20-19 00:36		Jun-18-19 12:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3550	10.1	2340	9.94	1920 X	10.0	3730	9.94	12800	99.2	4670	9.96
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***	Jun-26-19 16:59		Jun-26-19 17:02								Jun-26-19 18:39	
	Analyzed:	Jun-28-19 10:18		Jun-27-19 16:18								Jun-27-19 18:37	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<9.96	49.8	<9.96	49.8							<9.99	50.0
Diesel Range Organics (DRO)		<9.96	49.8	<9.96	49.8							<9.99	50.0
Motor Oil Range Hydrocarbons (MRO)		<9.96	49.8	<9.96	49.8							<9.99	50.0
Total TPH		<9.96	49.8	<9.96	49.8							<9.99	50.0

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-037		627588-038		627588-039		627588-040		627588-041		627588-042	
	Field Id:	HA-8 (0.5-1)		HA-8 (1.5-2)		HA-8 (3-3.5)		HA-8 (4.5-5)		HA-9 (0-0.5)		HA-9 (0.5-1)	
	Depth:	0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft		0-0.5 ft		0.5-1 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 13:47		Jun-12-19 13:49		Jun-12-19 13:51		Jun-12-19 13:53		Jun-12-19 14:00		Jun-12-19 14:02	
BTEX by EPA 8021B	***Extracted:***	Jun-14-19 16:00								Jun-14-19 16:00		Jun-14-19 16:00	
	Analyzed:	Jun-15-19 02:07								Jun-15-19 02:31		Jun-15-19 02:56	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Benzene		<0.00863	0.0191							<0.00915	0.0202	<0.00873	0.0193
Toluene		<0.00447	0.0191							<0.00474	0.0202	<0.00452	0.0193
Ethylbenzene		<0.00588	0.0191							<0.00623	0.0202	<0.00595	0.0193
m,p-Xylenes		<0.00651	0.0382							<0.00690	0.0405	<0.00658	0.0386
o-Xylene		<0.00651	0.0191							<0.00690	0.0202	<0.00658	0.0193
Total Xylenes		<0.00651	0.0191							<0.00690	0.0202	<0.00658	0.0193
Total BTEX		<0.00447	0.0191							<0.00474	0.0202	<0.00452	0.0193
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-18-19 09:55		Jun-19-19 17:20		Jun-19-19 17:20		Jun-19-19 17:20		Jun-18-19 09:55		Jun-18-19 09:55	
	Analyzed:	Jun-18-19 12:51		Jun-20-19 00:54		Jun-20-19 01:03		Jun-20-19 01:21		Jun-18-19 13:00		Jun-18-19 13:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2930	10.0	3180	9.98	5360	100	2990	10.0	2080	10.0	4090	9.84
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***	Jun-26-19 18:48								Jun-26-19 18:51		Jun-26-19 19:33	
	Analyzed:	Jun-27-19 19:32								Jun-27-19 19:51		Jun-27-19 20:10	
	Units/RL:	mg/kg	RL							mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<9.91	49.6							<9.95	49.8	<10.0	50.0
Diesel Range Organics (DRO)		<9.91	49.6							11.2 J	49.8	<10.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<9.91	49.6							<9.95	49.8	<10.0	50.0
Total TPH		<9.91	49.6							11.2 J	49.8	<10.0	50.0

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Jessica Kramer
Project Assistant

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Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-043		627588-044		627588-045		627588-046		627588-047		627588-048	
	Field Id:	HA-9 (1.5-2)		HA-9 (3-3.5)		HA-9 (4.5-5)		HA-10 (0-0.5)		HA-10 (0.5-1)		HA-10 (1.5-2)	
	Depth:	1.5-2 ft		3-3.5 ft		4.5-5 ft		0-0.5 ft		0.5-1 ft		1.5-2 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 14:04		Jun-12-19 14:06		Jun-12-19 14:08		Jun-12-19 14:12		Jun-12-19 14:14		Jun-12-19 14:16	
BTEX by EPA 8021B	***Extracted:***							Jun-14-19 16:00		Jun-14-19 16:00			
	Analyzed:							Jun-15-19 03:20		Jun-15-19 03:45			
	Units/RL:							mg/kg	RL	mg/kg	RL		
Benzene								<0.00911	0.0202	<0.00897	0.0198		
Toluene								<0.00472	0.0202	<0.00464	0.0198		
Ethylbenzene								<0.00621	0.0202	<0.00611	0.0198		
m,p-Xylenes								<0.00688	0.0403	<0.00677	0.0397		
o-Xylene								<0.00688	0.0202	<0.00677	0.0198		
Total Xylenes								<0.00688	0.0202	<0.00677	0.0198		
Total BTEX								<0.00472	0.0202	<0.00464	0.0198		
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-19-19 17:20		Jun-19-19 17:20		Jun-19-19 17:20		Jun-18-19 09:55		Jun-18-19 09:55		Jun-20-19 10:35	
	Analyzed:	Jun-20-19 01:48		Jun-20-19 01:57		Jun-20-19 02:06		Jun-18-19 13:36		Jun-18-19 13:45		Jun-20-19 10:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3000	9.96	2040	10.1	4430	9.96	3530	9.90	4390	9.96	3350	200
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***							Jun-26-19 18:54		Jun-26-19 18:57			
	Analyzed:							Jun-27-19 20:28		Jun-27-19 21:06			
	Units/RL:							mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)								<9.91	49.6	<9.93	49.7		
Diesel Range Organics (DRO)								<9.91	49.6	<9.93	49.7		
Motor Oil Range Hydrocarbons (MRO)								<9.91	49.6	<9.93	49.7		
Total TPH								<9.91	49.6	<9.93	49.7		

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Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-049		627588-050		627588-051		627588-052		627588-053		627588-054	
	Field Id:	HA-10 (3-3.5)		HA-10 (4.5-5)		HA-11 (0-0.5)		HA-11 (0.5-1)		HA-11 (1.5-2)		HA-11 (3-3.5)	
	Depth:	3-3.5 ft		4.5-5 ft		0-0.5 ft		0.5-1 ft		1.5-1 ft		3-3.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 14:18		Jun-12-19 14:20		Jun-12-19 14:24		Jun-12-19 14:26		Jun-12-19 14:28		Jun-12-19 14:30	
BTEX by EPA 8021B	***Extracted:***					Jun-17-19 13:00		Jun-17-19 13:00					
	Analyzed:					Jun-17-19 21:15		Jun-17-19 23:16					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Benzene						<0.00908	0.0201	<0.00869	0.0192				
Toluene						0.0141 J	0.0201	<0.00450	0.0192				
Ethylbenzene						<0.00618	0.0201	<0.00592	0.0192				
m,p-Xylenes						<0.00685	0.0402	<0.00656	0.0385				
o-Xylene						<0.00685	0.0201	<0.00656	0.0192				
Total Xylenes						<0.00685	0.0201	<0.00656	0.0192				
Total BTEX						0.0141 J	0.0201	<0.00450	0.0192				
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-20-19 10:35		Jun-20-19 10:35		Jun-18-19 09:55		Jun-18-19 09:55		Jun-20-19 10:35		Jun-20-19 10:35	
	Analyzed:	Jun-20-19 11:22		Jun-20-19 12:10		Jun-18-19 13:54		Jun-18-19 14:03		Jun-20-19 12:22		Jun-20-19 12:34	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2100	9.96	4210	10.1	4360	10.0	4150	9.98	1460	9.92	4330	10.0
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***					Jun-26-19 19:00		Jun-26-19 19:03					
	Analyzed:					Jun-27-19 21:24		Jun-27-19 21:43					
	Units/RL:					mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)						<9.99	50.0	<9.96	49.8				
Diesel Range Organics (DRO)						<9.99	50.0	<9.96	49.8				
Motor Oil Range Hydrocarbons (MRO)						<9.99	50.0	<9.96	49.8				
Total TPH						<9.99	50.0	<9.96	49.8				

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-055		627588-056		627588-057		627588-058		627588-059		627588-060	
	Field Id:	HA-11 (4.5-5)		HA-12 (0-0.5)		HA-12 (0.5-1)		HA-12 (1.5-2)		HA-12 (3-3.5)		HA-12 (4.5-5)	
	Depth:	4.5-5 ft		0-0.5 ft		0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 14:32		Jun-12-19 14:36		Jun-12-19 14:38		Jun-12-19 14:40		Jun-12-19 14:42		Jun-12-19 14:44	
BTEX by EPA 8021B	***Extracted:***			Jun-17-19 13:00		Jun-17-19 13:00							
	Analyzed:			Jun-17-19 23:40		Jun-18-19 00:04							
	Units/RL:			mg/kg	RL	mg/kg	RL						
Benzene				<0.00915	0.0202	<0.00900	0.0199						
Toluene				<0.00474	0.0202	<0.00466	0.0199						
Ethylbenzene				<0.00623	0.0202	<0.00614	0.0199						
m,p-Xylenes				<0.00690	0.0405	<0.00679	0.0398						
o-Xylene				<0.00690	0.0202	<0.00679	0.0199						
Total Xylenes				<0.00690	0.0202	<0.00679	0.0199						
Total BTEX				<0.00474	0.0202	<0.00466	0.0199						
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-20-19 10:35		Jun-14-19 15:27		Jun-14-19 15:27		Jun-20-19 10:35		Jun-20-19 10:35		Jun-20-19 10:35	
	Analyzed:	Jun-20-19 13:10		Jun-14-19 20:19		Jun-14-19 20:46		Jun-20-19 13:34		Jun-20-19 13:46		Jun-20-19 14:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5580	99.8	204	10.0	478	10.0	4500	10.0	8040	99.6	2500	200
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***			Jun-26-19 16:35		Jun-26-19 16:38							
	Analyzed:			Jun-27-19 05:53		Jun-27-19 06:12							
	Units/RL:			mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)				<9.92	49.6	<9.90	49.5						
Diesel Range Organics (DRO)				<9.92	49.6	<9.90	49.5						
Motor Oil Range Hydrocarbons (MRO)				<9.92	49.6	<9.90	49.5						
Total TPH				<9.92	49.6	<9.90	49.5						

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-061		627588-062		627588-063		627588-064		627588-065		627588-066	
	Field Id:	HA-13 (0-0.5)		HA-13 (0.5-1)		HA-13 (1.5-2)		HA-13 (3-3.5)		HA-13 (4.5-5)		HA-14 (0-0.5)	
	Depth:	0-0.5 ft		0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft		0-0.5 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-12-19 14:50		Jun-12-19 14:52		Jun-12-19 14:54		Jun-12-19 14:56		Jun-12-19 14:58		Jun-12-19 15:00	
BTEX by EPA 8021B	***Extracted:***	Jun-17-19 13:00		Jun-17-19 13:00								Jun-17-19 13:00	
	Analyzed:	Jun-18-19 00:28		Jun-18-19 00:52								Jun-18-19 01:16	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Benzene		<0.00908	0.0201	<0.00886	0.0196							<0.00893	0.0198
Toluene		<0.00470	0.0201	<0.00459	0.0196							<0.00462	0.0198
Ethylbenzene		<0.00618	0.0201	<0.00604	0.0196							<0.00609	0.0198
m,p-Xylenes		<0.00685	0.0402	<0.00669	0.0392							<0.00674	0.0395
o-Xylene		<0.00685	0.0201	<0.00669	0.0196							<0.00674	0.0198
Total Xylenes		<0.00685	0.0201	<0.00669	0.0196							<0.00674	0.0198
Total BTEX		<0.00470	0.0201	<0.00459	0.0196							<0.00462	0.0198
Chloride by EPA 300 **SUB: T104704215-19-29**	***Extracted:***	Jun-14-19 15:27		Jun-14-19 15:27		Jun-20-19 10:35		Jun-20-19 10:35		Jun-20-19 10:35		Jun-14-19 15:27	
	Analyzed:	Jun-14-19 20:55		Jun-14-19 21:21		Jun-20-19 15:46		Jun-20-19 15:58		Jun-20-19 16:10		Jun-14-19 21:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		27.2	10.0	18.1	10.0	13.0	9.96	17.2	9.92	55.7	10.0	15.4	10.0
TPH By SW8015 Mod **SUB: T104704215-19-29**	***Extracted:***	Jun-26-19 16:41		Jun-26-19 16:44								Jun-26-19 16:47	
	Analyzed:	Jun-27-19 06:30		Jun-27-19 06:49								Jun-27-19 07:07	
	Units/RL:	mg/kg	RL	mg/kg	RL							mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<9.90	49.5	<9.91	49.6							<9.90	49.5
Diesel Range Organics (DRO)		<9.90	49.5	<9.91	49.6							<9.90	49.5
Motor Oil Range Hydrocarbons (MRO)		<9.90	49.5	<9.91	49.6							<9.90	49.5
Total TPH		<9.90	49.5	<9.91	49.6							<9.90	49.5

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Certificate of Analysis Summary 627588

Terracon-Lubbock, Lubbock, TX

Project Name: Solaris Zeus

Project Id: AR197210
Contact: John Fergerson
Project Location:

Date Received in Lab: Thu Jun-13-19 09:10 am
Report Date: 28-JUN-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	627588-067		627588-068		627588-069		627588-070					
	Field Id:	HA-14 (0.5-1)		HA-14 (1.5-2)		HA-14 (3.3-5)		HA-14 (4.5-5)					
	Depth:	0.5-1 ft		1.5-2 ft		3-3.5 ft		4.5-5 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Jun-12-19 15:02		Jun-12-19 15:04		Jun-12-19 15:06		Jun-12-19 15:08					
BTEX by EPA 8021B	***Extracted:***	Jun-17-19 13:00											
	Analyzed:	Jun-18-19 01:40											
	Units/RL:	mg/kg	RL										
Benzene		<0.00904	0.0200										
Toluene		<0.00468	0.0200										
Ethylbenzene		<0.00616	0.0200										
m,p-Xylenes		<0.00682	0.0400										
o-Xylene		<0.00682	0.0200										
Total Xylenes		<0.00682	0.0200										
Total BTEX		<0.00468	0.0200										
Chloride by EPA 300 SUB: T104704215-19-29	***Extracted:***	Jun-14-19 15:27		Jun-20-19 10:35		Jun-20-19 10:35		Jun-20-19 10:35					
	Analyzed:	Jun-14-19 21:39		Jun-20-19 16:22		Jun-20-19 16:34		Jun-20-19 16:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		11.2	10.0	10.6	10.1	10.5	9.94	14.6	9.90				
TPH By SW8015 Mod SUB: T104704215-19-29	***Extracted:***	Jun-26-19 16:50											
	Analyzed:	Jun-27-19 22:02											
	Units/RL:	mg/kg	RL										
Gasoline Range Hydrocarbons (GRO)		<9.90	49.5										
Diesel Range Organics (DRO)		<9.90	49.5										
Motor Oil Range Hydrocarbons (MRO)		<9.90	49.5										
Total TPH		<9.90	49.5										

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Version: 1.%

Jessica Kramer
Project Assistant

Final 1.000

Analytical Report 627588

for

Terracon-Lubbock

Project Manager: John Fergerson

Solaris Zeus

AR197210

28-JUN-19

Collected By: Client

6701 Aberdeen, Suite 9 Lubbock, TX 79424

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-29), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-19-19), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-20)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429), North Carolina (483)

28-JUN-19

Project Manager: **John Fergerson**
Terracon-Lubbock
5827 50th st, Suite 1
Lubbock, TX 79424

Reference: XENCO Report No(s): **627588**
Solaris Zeus
Project Address:

John Fergerson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 627588. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 627588 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

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A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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Sample Cross Reference 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
HA-1 (0-0.5)	S	06-12-19 11:46	0 - 0.5 ft	627588-001
HA-1 (0.5-1)	S	06-12-19 11:48	0.5 - 1 ft	627588-002
HA-1 (1.5-2)	S	06-12-19 11:50	1.5 - 2 ft	627588-003
HA-1 (3.5-4)	S	06-12-19 11:51	3.5 - 4 ft	627588-004
HA-1 (4.5-5)	S	06-12-19 11:53	4.5 - 5 ft	627588-005
HA-2 (0-0.5)	S	06-12-19 11:57	0 - 0.5 ft	627588-006
HA-2 (0.5-1)	S	06-12-19 11:59	0.5 - 1 ft	627588-007
HA-2 (1.5-2)	S	06-12-19 12:01	1.5 - 2 ft	627588-008
HA-2 (3-3.5)	S	06-12-19 12:03	3 - 3.5 ft	627588-009
HA-2 (4.5-5)	S	06-12-19 12:05	4.5 - 5 ft	627588-010
HA-3 (0-0.-5)	S	06-12-19 12:30	0 - 0.5 ft	627588-011
HA-3 (0.5-1)	S	06-12-19 12:32	0.5 - 1 ft	627588-012
HA-3 (1.5-2)	S	06-12-19 12:34	1.5 - 2 ft	627588-013
HA-3 (3-3.5)	S	06-12-19 12:36	3 - 3.5 ft	627588-014
HA-3 (4.5-5)	S	06-12-19 12:38	4 - 4.5 ft	627588-015
HA-4 (0-0.5)	S	06-12-19 12:45	0 - 0.5 ft	627588-016
HA-4 (0.5-1)	S	06-12-19 12:47	0.5 - 1 ft	627588-017
HA-4 (1.5-2)	S	06-12-19 12:49	1.5 - 2 ft	627588-018
HA-4 (3-3.5)	S	06-12-19 12:51	3 - 3.5 ft	627588-019
HA-4 (4.5-5)	S	06-12-19 12:53	4.5 - 5 ft	627588-020
HA-5 (0-0.5)	S	06-12-19 12:58	0 - 0.5 ft	627588-021
HA-5 (0.5-1)	S	06-12-19 13:00	0.5 - 1 ft	627588-022
HA-5 (1.5-2)	S	06-12-19 13:02	1.5 - 2 ft	627588-023
HA-5 (3-3.5)	S	06-12-19 13:04	3 - 3.5 ft	627588-024
HA-5 (4.5-5)	S	06-12-19 13:06	4.5 - 5 ft	627588-025
HA-6 (0-0.5)	S	06-12-19 13:20	0 - 0.5 ft	627588-026
HA-6 (O.5-1)	S	06-12-19 13:22	0.5 - 1 ft	627588-027
HA-6 (1.5-2)	S	06-12-19 13:24	1.5 - 2 ft	627588-028
HA-6 (3-3.5)	S	06-12-19 13:26	3 - 3.5 ft	627588-029
HA-6 (4.5-5)	S	06-12-19 13:28	4.5 - 5 ft	627588-030
HA-7 (0-0.5)	S	06-12-19 13:32	0 - 0.5 ft	627588-031
HA-7 (0-5-1)	S	06-12-19 13:34	0.5 - 1 ft	627588-032
HA-7 (1.5-2)	S	06-12-19 13:36	1.5 - 2 ft	627588-033
HA-7 (3-3-5)	S	06-12-19 13:38	3 - 3.5 ft	627588-034
HA-7 (4.5-5)	S	06-12-19 13:40	4.5 - 5 ft	627588-035
HA-8 (0-0.5)	S	06-12-19 13:45	0 - 0.5 ft	627588-036
HA-8 (0.5-1)	S	06-12-19 13:47	0.5 - 1 ft	627588-037
HA-8 (1.5-2)	S	06-12-19 13:49	1.5 - 2 ft	627588-038
HA-8 (3-3.5)	S	06-12-19 13:51	3 - 3.5 ft	627588-039
HA-8 (4.5-5)	S	06-12-19 13:53	4.5 - 5 ft	627588-040
HA-9 (0-0.5)	S	06-12-19 14:00	0 - 0.5 ft	627588-041
HA-9 (0.5-1)	S	06-12-19 14:02	0.5 - 1 ft	627588-042
HA-9 (1.5-2)	S	06-12-19 14:04	1.5 - 2 ft	627588-043

Version: 1.%

Sample Cross Reference 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

HA-9 (3-3.5)	S	06-12-19 14:06	3 - 3.5 ft	627588-044
HA-9 (4.5-5)	S	06-12-19 14:08	4.5 - 5 ft	627588-045
HA-10 (0-0.5)	S	06-12-19 14:12	0 - 0.5 ft	627588-046
HA-10 (0.5-1)	S	06-12-19 14:14	0.5 - 1 ft	627588-047
HA-10 (1.5-2)	S	06-12-19 14:16	1.5 - 2 ft	627588-048
HA-10 (3-3.5)	S	06-12-19 14:18	3 - 3.5 ft	627588-049
HA-10 (4.5-5)	S	06-12-19 14:20	4.5 - 5 ft	627588-050
HA-11 (0-0.5)	S	06-12-19 14:24	0 - 0.5 ft	627588-051
HA-11 (0.5-1)	S	06-12-19 14:26	0.5 - 1 ft	627588-052
HA-11 (1.5-2)	S	06-12-19 14:28	1.5 - 1 ft	627588-053
HA-11 (3-3.5)	S	06-12-19 14:30	3 - 3.5 ft	627588-054
HA-11 (4.5-5)	S	06-12-19 14:32	4.5 - 5 ft	627588-055
HA-12 (0-0.5)	S	06-12-19 14:36	0 - 0.5 ft	627588-056
HA-12 (0.5-1)	S	06-12-19 14:38	0.5 - 1 ft	627588-057
HA-12 (1.5-2)	S	06-12-19 14:40	1.5 - 2 ft	627588-058
HA-12 (3-3.5)	S	06-12-19 14:42	3 - 3.5 ft	627588-059
HA-12 (4.5-5)	S	06-12-19 14:44	4.5 - 5 ft	627588-060
HA-13 (0-0.5)	S	06-12-19 14:50	0 - 0.5 ft	627588-061
HA-13 (0.5-1)	S	06-12-19 14:52	0.5 - 1 ft	627588-062
HA-13 (1.5-2)	S	06-12-19 14:54	1.5 - 2 ft	627588-063
HA-13 (3-3.5)	S	06-12-19 14:56	3 - 3.5 ft	627588-064
HA-13 (4.5-5)	S	06-12-19 14:58	4.5 - 5 ft	627588-065
HA-14 (0-0.5)	S	06-12-19 15:00	0 - 0.5 ft	627588-066
HA-14 (0.5-1)	S	06-12-19 15:02	0.5 - 1 ft	627588-067
HA-14 (1.5-2)	S	06-12-19 15:04	1.5 - 2 ft	627588-068
HA-14 (3.3-5)	S	06-12-19 15:06	3 - 3.5 ft	627588-069
HA-14 (4.5-5)	S	06-12-19 15:08	4.5 - 5 ft	627588-070

CASE NARRATIVE

Client Name: Terracon-Lubbock

Project Name: Solaris Zeus

Project ID: *AR197210*
Work Order Number(s): *627588*

Report Date: *28-JUN-19*
Date Received: *06/13/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3092478 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7680054-1-BLK,627588-026,627588-047,627588-046,627588-042,627588-041,627588-037,627588-027,627588-031,627588-032,627588-036.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
m,p-Xylenes, o-Xylene recovered above QC limits in the Blank Spike and Duplicate. Samples in the analytical batch are: 627588-001, -002, -006, -007, -011, -012, -016, -017, -021, -022, -026, -027, -031, -032, -036, -037, -041, -042, -046, -047. All samples reported were non-detect, therefore the data was accepted.

Lab Sample ID 627588-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 627588-001, -002, -006, -007, -011, -012, -016, -017, -021, -022, -026, -027, -031, -032, -036, -037, -041, -042, -046, -047.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3092567 BTEX by EPA 8021B
Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 627588-061,627588-056.
Surrogate a,a,a-Trifluorotoluene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 627588-067,627588-026,627588-061.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

CASE NARRATIVE

Client Name: Terracon-Lubbock

Project Name: Solaris Zeus

Project ID: *AR197210*
Work Order Number(s): *627588*

Report Date: *28-JUN-19*
Date Received: *06/13/2019*

Batch: LBA-3092641 Inorganic Anions by SW 9056
Lab Sample ID 627588-026 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 627588-026, -027, -031, -032, -036, -037, -041, -042, -046, -047, -051, -052.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3092852 Chloride by EPA 300
Lab Sample ID 627588-033 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 627588-013, -014, -018, -019, -020, -023, -024, -025, -028, -029, -030, -033, -034, -035, -038, -039, -040, -043, -044, -045.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3093833 TPH by SW8015 Mod
Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.
Samples affected are: 627588-031.

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-001	Date Collected:	06.12.19 11.46	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**334**	10.0	0.354	mg/kg	06.14.19 18.14		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 15.59	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.92	49.6	9.92	mg/kg	06.27.19 05.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.92	49.6	9.92	mg/kg	06.27.19 05.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.92	49.6	9.92	mg/kg	06.27.19 05.16	U	1
Total TPH	PHC635	<9.92	49.6	9.92	mg/kg	06.27.19 05.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.27.19 05.16	
o-Terphenyl	84-15-1	117	%	70-135	06.27.19 05.16	

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-001	Date Collected:	06.12.19 11.46	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00893	0.0198	0.00893	mg/kg	06.17.19 22.52	U	1
Toluene	108-88-3	<0.00462	0.0198	0.00462	mg/kg	06.17.19 22.52	U	1
Ethylbenzene	100-41-4	<0.00609	0.0198	0.00609	mg/kg	06.17.19 22.52	U	1
m,p-Xylenes	179601-23-1	<0.00674	0.0395	0.00674	mg/kg	06.17.19 22.52	U	1
o-Xylene	95-47-6	<0.00674	0.0198	0.00674	mg/kg	06.17.19 22.52	U	1
Total Xylenes	1330-20-7	<0.00674	0.0198	0.00674	mg/kg	06.17.19 22.52	U	1
Total BTEX		<0.00462	0.0198	0.00462	mg/kg	06.17.19 22.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	68-120	06.17.19 22.52	
a,a,a-Trifluorotoluene	98-08-8	117	%	71-121	06.17.19 22.52	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-002	Date Collected:	06.12.19 11.48	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**951**	10.0	0.354	mg/kg	06.14.19 18.41		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.08	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.93	49.7	9.93	mg/kg	06.27.19 06.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.93	49.7	9.93	mg/kg	06.27.19 06.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.93	49.7	9.93	mg/kg	06.27.19 06.12	U	1
Total TPH	PHC635	<9.93	49.7	9.93	mg/kg	06.27.19 06.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.27.19 06.12	
o-Terphenyl	84-15-1	122	%	70-135	06.27.19 06.12	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-002	Date Collected:	06.12.19 11.48	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00900	0.0199	0.00900	mg/kg	06.14.19 18.51	U	1
Toluene	108-88-3	<0.00466	0.0199	0.00466	mg/kg	06.14.19 18.51	U	1
Ethylbenzene	100-41-4	<0.00614	0.0199	0.00614	mg/kg	06.14.19 18.51	U	1
m,p-Xylenes	179601-23-1	<0.00679	0.0398	0.00679	mg/kg	06.14.19 18.51	UH	1
o-Xylene	95-47-6	<0.00679	0.0199	0.00679	mg/kg	06.14.19 18.51	UH	1
Total Xylenes	1330-20-7	<0.00679	0.0199	0.00679	mg/kg	06.14.19 18.51	U	1
Total BTEX		<0.00466	0.0199	0.00466	mg/kg	06.14.19 18.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	82	%	68-120	06.14.19 18.51	
a,a,a-Trifluorotoluene	98-08-8	73	%	71-121	06.14.19 18.51	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-003	Date Collected:	06.12.19 11.50	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4100**	10.0	0.354	mg/kg	06.19.19 20.53		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (3.5-4)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-004	Date Collected:	06.12.19 11.51	Sample Depth:	3.5 - 4 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8890**	99.6	3.53	mg/kg	06.19.19 21.05		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-1 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-005	Date Collected:	06.12.19 11.53	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11000**	100	3.55	mg/kg	06.19.19 21.17		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-006	Date Collected:	06.12.19 11.57	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1490**	10.0	0.354	mg/kg	06.14.19 18.50		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.11	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.92	49.6	9.92	mg/kg	06.27.19 06.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.92	49.6	9.92	mg/kg	06.27.19 06.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.92	49.6	9.92	mg/kg	06.27.19 06.30	U	1
Total TPH	PHC635	<9.92	49.6	9.92	mg/kg	06.27.19 06.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.27.19 06.30	
o-Terphenyl	84-15-1	120	%	70-135	06.27.19 06.30	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-006	Date Collected:	06.12.19 11.57	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00904	0.0200	0.00904	mg/kg	06.14.19 19.15	U	1
Toluene	108-88-3	<0.00468	0.0200	0.00468	mg/kg	06.14.19 19.15	U	1
Ethylbenzene	100-41-4	<0.00616	0.0200	0.00616	mg/kg	06.14.19 19.15	U	1
m,p-Xylenes	179601-23-1	<0.00682	0.0400	0.00682	mg/kg	06.14.19 19.15	UH	1
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	06.14.19 19.15	UH	1
Total Xylenes	1330-20-7	<0.00682	0.0200	0.00682	mg/kg	06.14.19 19.15	U	1
Total BTEX		<0.00468	0.0200	0.00468	mg/kg	06.14.19 19.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	170	%	68-120	06.14.19 19.15	**
a,a,a-Trifluorotoluene	98-08-8	151	%	71-121	06.14.19 19.15	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-007	Date Collected:	06.12.19 11.59	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**53.9**	10.0	0.354	mg/kg	06.14.19 18.59		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.14	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.92	49.6	9.92	mg/kg	06.27.19 06.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.92	49.6	9.92	mg/kg	06.27.19 06.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.92	49.6	9.92	mg/kg	06.27.19 06.49	U	1
Total TPH	PHC635	<9.92	49.6	9.92	mg/kg	06.27.19 06.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.27.19 06.49	
o-Terphenyl	84-15-1	124	%	70-135	06.27.19 06.49	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-007	Date Collected:	06.12.19 11.59	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00886	0.0196	0.00886	mg/kg	06.14.19 19.39	U	1
Toluene	108-88-3	<0.00459	0.0196	0.00459	mg/kg	06.14.19 19.39	U	1
Ethylbenzene	100-41-4	<0.00604	0.0196	0.00604	mg/kg	06.14.19 19.39	U	1
m,p-Xylenes	179601-23-1	<0.00669	0.0392	0.00669	mg/kg	06.14.19 19.39	UH	1
o-Xylene	95-47-6	<0.00669	0.0196	0.00669	mg/kg	06.14.19 19.39	UH	1
Total Xylenes	1330-20-7	<0.00669	0.0196	0.00669	mg/kg	06.14.19 19.39	U	1
Total BTEX		<0.00459	0.0196	0.00459	mg/kg	06.14.19 19.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	83	%	68-120	06.14.19 19.39	
a,a,a-Trifluorotoluene	98-08-8	77	%	71-121	06.14.19 19.39	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-008	Date Collected:	06.12.19 12.01	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4400**	10.0	0.355	mg/kg	06.19.19 21.29		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-009	Date Collected:	06.12.19 12.03	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1440**	10.0	0.354	mg/kg	06.19.19 21.41		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-2 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-010	Date Collected:	06.12.19 12.05	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 16.22	Basis:	Wet Weight
Seq Number:	3092857			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5240**	99.4	3.52	mg/kg	06.19.19 22.29		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (0-0.-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-011	Date Collected:	06.12.19 12.30	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1080**	10.0	0.354	mg/kg	06.14.19 19.08		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.17	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.99	50.0	9.99	mg/kg	06.27.19 07.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.99	50.0	9.99	mg/kg	06.27.19 07.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.99	50.0	9.99	mg/kg	06.27.19 07.07	U	1
Total TPH	PHC635	<9.99	50.0	9.99	mg/kg	06.27.19 07.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.27.19 07.07	
o-Terphenyl	84-15-1	128	%	70-135	06.27.19 07.07	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (0-0.-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-011	Date Collected:	06.12.19 12.30	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00893	0.0198	0.00893	mg/kg	06.14.19 20.03	U	1
Toluene	108-88-3	<0.00462	0.0198	0.00462	mg/kg	06.14.19 20.03	U	1
Ethylbenzene	100-41-4	<0.00609	0.0198	0.00609	mg/kg	06.14.19 20.03	U	1
m,p-Xylenes	179601-23-1	<0.00674	0.0395	0.00674	mg/kg	06.14.19 20.03	UH	1
o-Xylene	95-47-6	<0.00674	0.0198	0.00674	mg/kg	06.14.19 20.03	UH	1
Total Xylenes	1330-20-7	<0.00674	0.0198	0.00674	mg/kg	06.14.19 20.03	U	1
Total BTEX		<0.00462	0.0198	0.00462	mg/kg	06.14.19 20.03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	92	%	68-120	06.14.19 20.03	
a,a,a-Trifluorotoluene	98-08-8	79	%	71-121	06.14.19 20.03	

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Solaris Zeus

Sample Id:	**HA-3 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-012	Date Collected:	06.12.19 12.32	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**661**	10.0	0.354	mg/kg	06.14.19 19.34		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.20	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.98	49.9	9.98	mg/kg	06.27.19 04.19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.98	49.9	9.98	mg/kg	06.27.19 04.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.98	49.9	9.98	mg/kg	06.27.19 04.19	U	1
Total TPH	PHC635	<9.98	49.9	9.98	mg/kg	06.27.19 04.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	06.27.19 04.19	
o-Terphenyl	84-15-1	122	%	70-135	06.27.19 04.19	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-012	Date Collected:	06.12.19 12.32	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00895	0.0198	0.00895	mg/kg	06.14.19 20.27	U	1
Toluene	108-88-3	<0.00463	0.0198	0.00463	mg/kg	06.14.19 20.27	U	1
Ethylbenzene	100-41-4	<0.00610	0.0198	0.00610	mg/kg	06.14.19 20.27	U	1
m,p-Xylenes	179601-23-1	<0.00675	0.0396	0.00675	mg/kg	06.14.19 20.27	UH	1
o-Xylene	95-47-6	<0.00675	0.0198	0.00675	mg/kg	06.14.19 20.27	UH	1
Total Xylenes	1330-20-7	<0.00675	0.0198	0.00675	mg/kg	06.14.19 20.27	U	1
Total BTEX		<0.00463	0.0198	0.00463	mg/kg	06.14.19 20.27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	68-120	06.14.19 20.27	
a,a,a-Trifluorotoluene	98-08-8	82	%	71-121	06.14.19 20.27	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-013	Date Collected:	06.12.19 12.34	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5200**	100	3.54	mg/kg	06.19.19 21.00		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-014	Date Collected:	06.12.19 12.36	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6240**	99.6	3.53	mg/kg	06.19.19 21.18		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-3 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-015	Date Collected:	06.12.19 12.38	Sample Depth:	4 - 4.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1330**	10.0	0.354	mg/kg	06.14.19 19.43		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-4 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-016	Date Collected:	06.12.19 12.45	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4070**	10.0	0.354	mg/kg	06.20.19 18.11		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.23	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 04.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 04.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 04.38	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 04.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	06.27.19 04.38	
o-Terphenyl	84-15-1	117	%	70-135	06.27.19 04.38	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-4 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-016	Date Collected:	06.12.19 12.45	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00911	0.0202	0.00911	mg/kg	06.14.19 20.51	U	1
Toluene	108-88-3	<0.00472	0.0202	0.00472	mg/kg	06.14.19 20.51	U	1
Ethylbenzene	100-41-4	<0.00621	0.0202	0.00621	mg/kg	06.14.19 20.51	U	1
m,p-Xylenes	179601-23-1	<0.00688	0.0403	0.00688	mg/kg	06.14.19 20.51	UH	1
o-Xylene	95-47-6	<0.00688	0.0202	0.00688	mg/kg	06.14.19 20.51	UH	1
Total Xylenes	1330-20-7	<0.00688	0.0202	0.00688	mg/kg	06.14.19 20.51	U	1
Total BTEX		<0.00472	0.0202	0.00472	mg/kg	06.14.19 20.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	68-120	06.14.19 20.51	
a,a,a-Trifluorotoluene	98-08-8	86	%	71-121	06.14.19 20.51	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-4 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-017	Date Collected:	06.12.19 12.47	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4360**	10.0	0.354	mg/kg	06.14.19 19.52		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.26	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 04.57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 04.57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 04.57	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 04.57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.27.19 04.57	
o-Terphenyl	84-15-1	121	%	70-135	06.27.19 04.57	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-4 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-017	Date Collected:	06.12.19 12.47	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00883	0.0195	0.00883	mg/kg	06.14.19 21.15	U	1
Toluene	108-88-3	<0.00457	0.0195	0.00457	mg/kg	06.14.19 21.15	U	1
Ethylbenzene	100-41-4	<0.00602	0.0195	0.00602	mg/kg	06.14.19 21.15	U	1
m,p-Xylenes	179601-23-1	<0.00666	0.0391	0.00666	mg/kg	06.14.19 21.15	UH	1
o-Xylene	95-47-6	<0.00666	0.0195	0.00666	mg/kg	06.14.19 21.15	UH	1
Total Xylenes	1330-20-7	<0.00666	0.0195	0.00666	mg/kg	06.14.19 21.15	U	1
Total BTEX		<0.00457	0.0195	0.00457	mg/kg	06.14.19 21.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	96	%	68-120	06.14.19 21.15	
a,a,a-Trifluorotoluene	98-08-8	87	%	71-121	06.14.19 21.15	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-4 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-018	Date Collected:	06.12.19 12.49	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5260**	99.4	3.52	mg/kg	06.19.19 21.36		10

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Solaris Zeus

Sample Id:	**HA-4 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-019	Date Collected:	06.12.19 12.51	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**544**	9.98	0.353	mg/kg	06.19.19 21.45		1

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Solaris Zeus

Sample Id:	**HA-4 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-020	Date Collected:	06.12.19 12.53	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6500**	100	3.55	mg/kg	06.19.19 22.21		10

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Solaris Zeus

Sample Id:	**HA-5 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-021	Date Collected:	06.12.19 12.58	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3610**	10.0	0.354	mg/kg	06.14.19 20.01		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.29	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.91	49.6	9.91	mg/kg	06.27.19 05.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.91	49.6	9.91	mg/kg	06.27.19 05.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.91	49.6	9.91	mg/kg	06.27.19 05.16	U	1
Total TPH	PHC635	<9.91	49.6	9.91	mg/kg	06.27.19 05.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	06.27.19 05.16	
o-Terphenyl	84-15-1	110	%	70-135	06.27.19 05.16	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-5 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-021	Date Collected:	06.12.19 12.58	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00904	0.0200	0.00904	mg/kg	06.14.19 21.39	U	1
Toluene	108-88-3	<0.00468	0.0200	0.00468	mg/kg	06.14.19 21.39	U	1
Ethylbenzene	100-41-4	<0.00616	0.0200	0.00616	mg/kg	06.14.19 21.39	U	1
m,p-Xylenes	179601-23-1	<0.00682	0.0400	0.00682	mg/kg	06.14.19 21.39	UH	1
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	06.14.19 21.39	UH	1
Total Xylenes	1330-20-7	<0.00682	0.0200	0.00682	mg/kg	06.14.19 21.39	U	1
Total BTEX		<0.00468	0.0200	0.00468	mg/kg	06.14.19 21.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	68-120	06.14.19 21.39	
a,a,a-Trifluorotoluene	98-08-8	89	%	71-121	06.14.19 21.39	

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Solaris Zeus

Sample Id:	**HA-5 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-022	Date Collected:	06.12.19 13.00	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3870**	10.0	0.354	mg/kg	06.14.19 20.10		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.32	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.92	49.6	9.92	mg/kg	06.27.19 05.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.92	49.6	9.92	mg/kg	06.27.19 05.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.92	49.6	9.92	mg/kg	06.27.19 05.34	U	1
Total TPH	PHC635	<9.92	49.6	9.92	mg/kg	06.27.19 05.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.27.19 05.34	
o-Terphenyl	84-15-1	120	%	70-135	06.27.19 05.34	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-5 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-022	Date Collected:	06.12.19 13.00	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00890	0.0197	0.00890	mg/kg	06.14.19 22.04	U	1
Toluene	108-88-3	<0.00461	0.0197	0.00461	mg/kg	06.14.19 22.04	U	1
Ethylbenzene	100-41-4	<0.00606	0.0197	0.00606	mg/kg	06.14.19 22.04	U	1
m,p-Xylenes	179601-23-1	<0.00671	0.0394	0.00671	mg/kg	06.14.19 22.04	UH	1
o-Xylene	95-47-6	<0.00671	0.0197	0.00671	mg/kg	06.14.19 22.04	UH	1
Total Xylenes	1330-20-7	<0.00671	0.0197	0.00671	mg/kg	06.14.19 22.04	U	1
Total BTEX		<0.00461	0.0197	0.00461	mg/kg	06.14.19 22.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	68-120	06.14.19 22.04	
a,a,a-Trifluorotoluene	98-08-8	96	%	71-121	06.14.19 22.04	

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Solaris Zeus

Sample Id:	**HA-5 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-023	Date Collected:	06.12.19 13.02	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3640**	10.0	0.355	mg/kg	06.19.19 22.30		1

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Solaris Zeus

Sample Id:	**HA-5 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-024	Date Collected:	06.12.19 13.04	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1110**	10.0	0.354	mg/kg	06.19.19 22.39	X	1

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Solaris Zeus

Sample Id:	**HA-5 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-025	Date Collected:	06.12.19 13.06	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4760**	9.96	0.353	mg/kg	06.19.19 23.06		1

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Solaris Zeus

Sample Id:	**HA-6 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-026	Date Collected:	06.12.19 13.20	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2440**	10.0	0.354	mg/kg	06.18.19 11.48	X	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.53	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 22.20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 22.20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 22.20	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 22.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	06.27.19 22.20	
o-Terphenyl	84-15-1	131	%	70-135	06.27.19 22.20	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-026	Date Collected:	06.12.19 13.20	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00897	0.0198	0.00897	mg/kg	06.18.19 02.05	U	1
Toluene	108-88-3	<0.00464	0.0198	0.00464	mg/kg	06.18.19 02.05	U	1
Ethylbenzene	100-41-4	<0.00611	0.0198	0.00611	mg/kg	06.18.19 02.05	U	1
m,p-Xylenes	179601-23-1	<0.00677	0.0397	0.00677	mg/kg	06.18.19 02.05	U	1
o-Xylene	95-47-6	<0.00677	0.0198	0.00677	mg/kg	06.18.19 02.05	U	1
Total Xylenes	1330-20-7	<0.00677	0.0198	0.00677	mg/kg	06.18.19 02.05	U	1
Total BTEX		<0.00464	0.0198	0.00464	mg/kg	06.18.19 02.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	68-120	06.18.19 02.05	
a,a,a-Trifluorotoluene	98-08-8	122	%	71-121	06.18.19 02.05	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (O.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-027	Date Collected:	06.12.19 13.22	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3160**	9.96	0.353	mg/kg	06.18.19 12.15		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.56	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.93	49.7	9.93	mg/kg	06.27.19 22.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.93	49.7	9.93	mg/kg	06.27.19 22.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.93	49.7	9.93	mg/kg	06.27.19 22.39	U	1
Total TPH	PHC635	<9.93	49.7	9.93	mg/kg	06.27.19 22.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.27.19 22.39	
o-Terphenyl	84-15-1	116	%	70-135	06.27.19 22.39	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (O.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-027	Date Collected:	06.12.19 13.22	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00869	0.0192	0.00869	mg/kg	06.15.19 00.30	U	1
Toluene	108-88-3	<0.00450	0.0192	0.00450	mg/kg	06.15.19 00.30	U	1
Ethylbenzene	100-41-4	<0.00592	0.0192	0.00592	mg/kg	06.15.19 00.30	U	1
m,p-Xylenes	179601-23-1	<0.00656	0.0385	0.00656	mg/kg	06.15.19 00.30	UH	1
o-Xylene	95-47-6	<0.00656	0.0192	0.00656	mg/kg	06.15.19 00.30	UH	1
Total Xylenes	1330-20-7	<0.00656	0.0192	0.00656	mg/kg	06.15.19 00.30	U	1
Total BTEX		<0.00450	0.0192	0.00450	mg/kg	06.15.19 00.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	134	%	68-120	06.15.19 00.30	**
a,a,a-Trifluorotoluene	98-08-8	109	%	71-121	06.15.19 00.30	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-028	Date Collected:	06.12.19 13.24	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2410**	9.94	0.352	mg/kg	06.19.19 23.15		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-029	Date Collected:	06.12.19 13.26	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3230**	9.98	0.353	mg/kg	06.19.19 23.24		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-6 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-030	Date Collected:	06.12.19 13.28	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5080**	10.0	0.355	mg/kg	06.19.19 23.33		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-031	Date Collected:	06.12.19 13.32	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3550**	10.1	0.356	mg/kg	06.18.19 12.24		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.59	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.96	49.8	9.96	mg/kg	06.28.19 10.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.96	49.8	9.96	mg/kg	06.28.19 10.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.96	49.8	9.96	mg/kg	06.28.19 10.18	U	1
Total TPH	PHC635	<9.96	49.8	9.96	mg/kg	06.28.19 10.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	132	%	70-135	06.28.19 10.18	
o-Terphenyl	84-15-1	140	%	70-135	06.28.19 10.18	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-031	Date Collected:	06.12.19 13.32	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00908	0.0201	0.00908	mg/kg	06.15.19 00.54	U	1
Toluene	108-88-3	<0.00470	0.0201	0.00470	mg/kg	06.15.19 00.54	U	1
Ethylbenzene	100-41-4	<0.00618	0.0201	0.00618	mg/kg	06.15.19 00.54	U	1
m,p-Xylenes	179601-23-1	<0.00685	0.0402	0.00685	mg/kg	06.15.19 00.54	UH	1
o-Xylene	95-47-6	<0.00685	0.0201	0.00685	mg/kg	06.15.19 00.54	UH	1
Total Xylenes	1330-20-7	<0.00685	0.0201	0.00685	mg/kg	06.15.19 00.54	U	1
Total BTEX		<0.00470	0.0201	0.00470	mg/kg	06.15.19 00.54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	139	%	68-120	06.15.19 00.54	**
a,a,a-Trifluorotoluene	98-08-8	114	%	71-121	06.15.19 00.54	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (0-5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-032	Date Collected:	06.12.19 13.34	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2340**	9.94	0.352	mg/kg	06.18.19 12.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 17.02	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.96	49.8	9.96	mg/kg	06.27.19 16.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.96	49.8	9.96	mg/kg	06.27.19 16.18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.96	49.8	9.96	mg/kg	06.27.19 16.18	U	1
Total TPH	PHC635	<9.96	49.8	9.96	mg/kg	06.27.19 16.18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.27.19 16.18	
o-Terphenyl	84-15-1	134	%	70-135	06.27.19 16.18	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (0-5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-032	Date Collected:	06.12.19 13.34	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00886	0.0196	0.00886	mg/kg	06.15.19 01.19	U	1
Toluene	108-88-3	<0.00459	0.0196	0.00459	mg/kg	06.15.19 01.19	U	1
Ethylbenzene	100-41-4	<0.00604	0.0196	0.00604	mg/kg	06.15.19 01.19	U	1
m,p-Xylenes	179601-23-1	<0.00669	0.0392	0.00669	mg/kg	06.15.19 01.19	UH	1
o-Xylene	95-47-6	<0.00669	0.0196	0.00669	mg/kg	06.15.19 01.19	UH	1
Total Xylenes	1330-20-7	<0.00669	0.0196	0.00669	mg/kg	06.15.19 01.19	U	1
Total BTEX		<0.00459	0.0196	0.00459	mg/kg	06.15.19 01.19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	154	%	68-120	06.15.19 01.19	**
a,a,a-Trifluorotoluene	98-08-8	120	%	71-121	06.15.19 01.19	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-033	Date Collected:	06.12.19 13.36	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1920**	10.0	0.354	mg/kg	06.20.19 00.00	X	1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (3-3-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-034	Date Collected:	06.12.19 13.38	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3730**	9.94	0.352	mg/kg	06.20.19 00.27		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-7 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-035	Date Collected:	06.12.19 13.40	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12800**	99.2	3.51	mg/kg	06.20.19 00.45		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-036	Date Collected:	06.12.19 13.45	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4670**	9.96	0.353	mg/kg	06.18.19 12.42		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 18.39	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.99	50.0	9.99	mg/kg	06.27.19 18.37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.99	50.0	9.99	mg/kg	06.27.19 18.37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.99	50.0	9.99	mg/kg	06.27.19 18.37	U	1
Total TPH	PHC635	<9.99	50.0	9.99	mg/kg	06.27.19 18.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.27.19 18.37	
o-Terphenyl	84-15-1	111	%	70-135	06.27.19 18.37	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-036	Date Collected:	06.12.19 13.45	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00904	0.0200	0.00904	mg/kg	06.15.19 01.43	U	1
Toluene	108-88-3	<0.00468	0.0200	0.00468	mg/kg	06.15.19 01.43	U	1
Ethylbenzene	100-41-4	<0.00616	0.0200	0.00616	mg/kg	06.15.19 01.43	U	1
m,p-Xylenes	179601-23-1	<0.00682	0.0400	0.00682	mg/kg	06.15.19 01.43	UH	1
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	06.15.19 01.43	UH	1
Total Xylenes	1330-20-7	<0.00682	0.0200	0.00682	mg/kg	06.15.19 01.43	U	1
Total BTEX		<0.00468	0.0200	0.00468	mg/kg	06.15.19 01.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	154	%	68-120	06.15.19 01.43	**
a,a,a-Trifluorotoluene	98-08-8	120	%	71-121	06.15.19 01.43	

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Solaris Zeus

Sample Id:	**HA-8 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-037	Date Collected:	06.12.19 13.47	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2930**	10.0	0.355	mg/kg	06.18.19 12.51		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 18.48	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.91	49.6	9.91	mg/kg	06.27.19 19.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.91	49.6	9.91	mg/kg	06.27.19 19.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.91	49.6	9.91	mg/kg	06.27.19 19.32	U	1
Total TPH	PHC635	<9.91	49.6	9.91	mg/kg	06.27.19 19.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	06.27.19 19.32	
o-Terphenyl	84-15-1	115	%	70-135	06.27.19 19.32	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-037	Date Collected:	06.12.19 13.47	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00863	0.0191	0.00863	mg/kg	06.15.19 02.07	U	1
Toluene	108-88-3	<0.00447	0.0191	0.00447	mg/kg	06.15.19 02.07	U	1
Ethylbenzene	100-41-4	<0.00588	0.0191	0.00588	mg/kg	06.15.19 02.07	U	1
m,p-Xylenes	179601-23-1	<0.00651	0.0382	0.00651	mg/kg	06.15.19 02.07	UH	1
o-Xylene	95-47-6	<0.00651	0.0191	0.00651	mg/kg	06.15.19 02.07	UH	1
Total Xylenes	1330-20-7	<0.00651	0.0191	0.00651	mg/kg	06.15.19 02.07	U	1
Total BTEX		<0.00447	0.0191	0.00447	mg/kg	06.15.19 02.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	157	%	68-120	06.15.19 02.07	**
a,a,a-Trifluorotoluene	98-08-8	123	%	71-121	06.15.19 02.07	**

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-038	Date Collected:	06.12.19 13.49	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3180**	9.98	0.353	mg/kg	06.20.19 00.54		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-039	Date Collected:	06.12.19 13.51	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5360**	100	3.55	mg/kg	06.20.19 01.12		10

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-8 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-040	Date Collected:	06.12.19 13.53	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2990**	10.0	0.354	mg/kg	06.20.19 01.21		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-041	Date Collected:	06.12.19 14.00	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2080**	10.0	0.354	mg/kg	06.18.19 13.00		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 18.51	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.95	49.8	9.95	mg/kg	06.27.19 19.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	**11.2**	49.8	9.95	mg/kg	06.27.19 19.51	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.95	49.8	9.95	mg/kg	06.27.19 19.51	U	1
Total TPH	PHC635	**11.2**	49.8	9.95	mg/kg	06.27.19 19.51	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	124	%	70-135	06.27.19 19.51	
o-Terphenyl	84-15-1	132	%	70-135	06.27.19 19.51	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-041	Date Collected:	06.12.19 14.00	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00915	0.0202	0.00915	mg/kg	06.15.19 02.31	U	1
Toluene	108-88-3	<0.00474	0.0202	0.00474	mg/kg	06.15.19 02.31	U	1
Ethylbenzene	100-41-4	<0.00623	0.0202	0.00623	mg/kg	06.15.19 02.31	U	1
m,p-Xylenes	179601-23-1	<0.00690	0.0405	0.00690	mg/kg	06.15.19 02.31	UH	1
o-Xylene	95-47-6	<0.00690	0.0202	0.00690	mg/kg	06.15.19 02.31	UH	1
Total Xylenes	1330-20-7	<0.00690	0.0202	0.00690	mg/kg	06.15.19 02.31	U	1
Total BTEX		<0.00474	0.0202	0.00474	mg/kg	06.15.19 02.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	164	%	68-120	06.15.19 02.31	**
a,a,a-Trifluorotoluene	98-08-8	124	%	71-121	06.15.19 02.31	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-042	Date Collected:	06.12.19 14.02	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4090**	9.84	0.348	mg/kg	06.18.19 13.09		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 19.33	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<10.0	50.0	10.0	mg/kg	06.27.19 20.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<10.0	50.0	10.0	mg/kg	06.27.19 20.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<10.0	50.0	10.0	mg/kg	06.27.19 20.10	U	1
Total TPH	PHC635	<10.0	50.0	10.0	mg/kg	06.27.19 20.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.27.19 20.10	
o-Terphenyl	84-15-1	121	%	70-135	06.27.19 20.10	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-042	Date Collected:	06.12.19 14.02	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00873	0.0193	0.00873	mg/kg	06.15.19 02.56	U	1
Toluene	108-88-3	<0.00452	0.0193	0.00452	mg/kg	06.15.19 02.56	U	1
Ethylbenzene	100-41-4	<0.00595	0.0193	0.00595	mg/kg	06.15.19 02.56	U	1
m,p-Xylenes	179601-23-1	<0.00658	0.0386	0.00658	mg/kg	06.15.19 02.56	UH	1
o-Xylene	95-47-6	<0.00658	0.0193	0.00658	mg/kg	06.15.19 02.56	UH	1
Total Xylenes	1330-20-7	<0.00658	0.0193	0.00658	mg/kg	06.15.19 02.56	U	1
Total BTEX		<0.00452	0.0193	0.00452	mg/kg	06.15.19 02.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	184	%	68-120	06.15.19 02.56	**
a,a,a-Trifluorotoluene	98-08-8	134	%	71-121	06.15.19 02.56	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-043	Date Collected:	06.12.19 14.04	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3000**	9.96	0.353	mg/kg	06.20.19 01.48		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-044	Date Collected:	06.12.19 14.06	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2040**	10.1	0.356	mg/kg	06.20.19 01.57		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-9 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-045	Date Collected:	06.12.19 14.08	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.19.19 17.20	Basis:	Wet Weight
Seq Number:	3092852			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4430**	9.96	0.353	mg/kg	06.20.19 02.06		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-046	Date Collected:	06.12.19 14.12	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3530**	9.90	0.350	mg/kg	06.18.19 13.36		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 18.54	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.91	49.6	9.91	mg/kg	06.27.19 20.28	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.91	49.6	9.91	mg/kg	06.27.19 20.28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.91	49.6	9.91	mg/kg	06.27.19 20.28	U	1
Total TPH	PHC635	<9.91	49.6	9.91	mg/kg	06.27.19 20.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	06.27.19 20.28	
o-Terphenyl	84-15-1	122	%	70-135	06.27.19 20.28	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-046	Date Collected:	06.12.19 14.12	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00911	0.0202	0.00911	mg/kg	06.15.19 03.20	U	1
Toluene	108-88-3	<0.00472	0.0202	0.00472	mg/kg	06.15.19 03.20	U	1
Ethylbenzene	100-41-4	<0.00621	0.0202	0.00621	mg/kg	06.15.19 03.20	U	1
m,p-Xylenes	179601-23-1	<0.00688	0.0403	0.00688	mg/kg	06.15.19 03.20	UH	1
o-Xylene	95-47-6	<0.00688	0.0202	0.00688	mg/kg	06.15.19 03.20	UH	1
Total Xylenes	1330-20-7	<0.00688	0.0202	0.00688	mg/kg	06.15.19 03.20	U	1
Total BTEX		<0.00472	0.0202	0.00472	mg/kg	06.15.19 03.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	182	%	68-120	06.15.19 03.20	**
a,a,a-Trifluorotoluene	98-08-8	131	%	71-121	06.15.19 03.20	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-047	Date Collected:	06.12.19 14.14	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4390**	9.96	0.353	mg/kg	06.18.19 13.45		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 18.57	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.93	49.7	9.93	mg/kg	06.27.19 21.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.93	49.7	9.93	mg/kg	06.27.19 21.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.93	49.7	9.93	mg/kg	06.27.19 21.06	U	1
Total TPH	PHC635	<9.93	49.7	9.93	mg/kg	06.27.19 21.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	06.27.19 21.06	
o-Terphenyl	84-15-1	125	%	70-135	06.27.19 21.06	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-047	Date Collected:	06.12.19 14.14	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.14.19 16.00	Basis:	Wet Weight
Seq Number:	3092478				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00897	0.0198	0.00897	mg/kg	06.15.19 03.45	U	1
Toluene	108-88-3	<0.00464	0.0198	0.00464	mg/kg	06.15.19 03.45	U	1
Ethylbenzene	100-41-4	<0.00611	0.0198	0.00611	mg/kg	06.15.19 03.45	U	1
m,p-Xylenes	179601-23-1	<0.00677	0.0397	0.00677	mg/kg	06.15.19 03.45	UH	1
o-Xylene	95-47-6	<0.00677	0.0198	0.00677	mg/kg	06.15.19 03.45	UH	1
Total Xylenes	1330-20-7	<0.00677	0.0198	0.00677	mg/kg	06.15.19 03.45	U	1
Total BTEX		<0.00464	0.0198	0.00464	mg/kg	06.15.19 03.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	191	%	68-120	06.15.19 03.45	**
a,a,a-Trifluorotoluene	98-08-8	134	%	71-121	06.15.19 03.45	**

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-048	Date Collected:	06.12.19 14.16	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**3350**	200	7.08	mg/kg	06.20.19 11.34		20

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-049	Date Collected:	06.12.19 14.18	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2100**	9.96	0.353	mg/kg	06.20.19 11.22		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-10 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-050	Date Collected:	06.12.19 14.20	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4210**	10.1	0.357	mg/kg	06.20.19 12.10		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-051	Date Collected:	06.12.19 14.24	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4360**	10.0	0.354	mg/kg	06.18.19 13.54		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 19.00	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.99	50.0	9.99	mg/kg	06.27.19 21.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.99	50.0	9.99	mg/kg	06.27.19 21.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.99	50.0	9.99	mg/kg	06.27.19 21.24	U	1
Total TPH	PHC635	<9.99	50.0	9.99	mg/kg	06.27.19 21.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	06.27.19 21.24	
o-Terphenyl	84-15-1	118	%	70-135	06.27.19 21.24	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-051	Date Collected:	06.12.19 14.24	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00908	0.0201	0.00908	mg/kg	06.17.19 21.15	U	1
Toluene	108-88-3	**0.0141**	0.0201	0.00470	mg/kg	06.17.19 21.15	J	1
Ethylbenzene	100-41-4	<0.00618	0.0201	0.00618	mg/kg	06.17.19 21.15	U	1
m,p-Xylenes	179601-23-1	<0.00685	0.0402	0.00685	mg/kg	06.17.19 21.15	U	1
o-Xylene	95-47-6	<0.00685	0.0201	0.00685	mg/kg	06.17.19 21.15	U	1
Total Xylenes	1330-20-7	<0.00685	0.0201	0.00685	mg/kg	06.17.19 21.15	U	1
Total BTEX		**0.0141**	0.0201	0.00470	mg/kg	06.17.19 21.15	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	68-120	06.17.19 21.15	
a,a,a-Trifluorotoluene	98-08-8	114	%	71-121	06.17.19 21.15	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-052	Date Collected:	06.12.19 14.26	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.18.19 09.55	Basis:	Wet Weight
Seq Number:	3092641			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4150**	9.98	0.353	mg/kg	06.18.19 14.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 19.03	Basis:	Wet Weight
Seq Number:	3093839			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.96	49.8	9.96	mg/kg	06.27.19 21.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.96	49.8	9.96	mg/kg	06.27.19 21.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.96	49.8	9.96	mg/kg	06.27.19 21.43	U	1
Total TPH	PHC635	<9.96	49.8	9.96	mg/kg	06.27.19 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	06.27.19 21.43	
o-Terphenyl	84-15-1	129	%	70-135	06.27.19 21.43	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-052	Date Collected:	06.12.19 14.26	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00869	0.0192	0.00869	mg/kg	06.17.19 23.16	U	1
Toluene	108-88-3	<0.00450	0.0192	0.00450	mg/kg	06.17.19 23.16	U	1
Ethylbenzene	100-41-4	<0.00592	0.0192	0.00592	mg/kg	06.17.19 23.16	U	1
m,p-Xylenes	179601-23-1	<0.00656	0.0385	0.00656	mg/kg	06.17.19 23.16	U	1
o-Xylene	95-47-6	<0.00656	0.0192	0.00656	mg/kg	06.17.19 23.16	U	1
Total Xylenes	1330-20-7	<0.00656	0.0192	0.00656	mg/kg	06.17.19 23.16	U	1
Total BTEX		<0.00450	0.0192	0.00450	mg/kg	06.17.19 23.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	68-120	06.17.19 23.16	
a,a,a-Trifluorotoluene	98-08-8	120	%	71-121	06.17.19 23.16	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-053	Date Collected:	06.12.19 14.28	Sample Depth:	1.5 - 1 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1460**	9.92	0.351	mg/kg	06.20.19 12.22		1

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-11 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-054	Date Collected:	06.12.19 14.30	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4330**	10.0	0.354	mg/kg	06.20.19 12.34		1

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Solaris Zeus

Sample Id:	**HA-11 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-055	Date Collected:	06.12.19 14.32	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5580**	99.8	3.53	mg/kg	06.20.19 13.22		10

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Solaris Zeus

Sample Id:	**HA-12 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-056	Date Collected:	06.12.19 14.36	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**204**	10.0	0.354	mg/kg	06.14.19 20.19		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.35	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.92	49.6	9.92	mg/kg	06.27.19 05.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.92	49.6	9.92	mg/kg	06.27.19 05.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.92	49.6	9.92	mg/kg	06.27.19 05.53	U	1
Total TPH	PHC635	<9.92	49.6	9.92	mg/kg	06.27.19 05.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	06.27.19 05.53	
o-Terphenyl	84-15-1	116	%	70-135	06.27.19 05.53	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-12 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-056	Date Collected:	06.12.19 14.36	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00915	0.0202	0.00915	mg/kg	06.17.19 23.40	U	1
Toluene	108-88-3	<0.00474	0.0202	0.00474	mg/kg	06.17.19 23.40	U	1
Ethylbenzene	100-41-4	<0.00623	0.0202	0.00623	mg/kg	06.17.19 23.40	U	1
m,p-Xylenes	179601-23-1	<0.00690	0.0405	0.00690	mg/kg	06.17.19 23.40	U	1
o-Xylene	95-47-6	<0.00690	0.0202	0.00690	mg/kg	06.17.19 23.40	U	1
Total Xylenes	1330-20-7	<0.00690	0.0202	0.00690	mg/kg	06.17.19 23.40	U	1
Total BTEX		<0.00474	0.0202	0.00474	mg/kg	06.17.19 23.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	122	%	68-120	06.17.19 23.40	**
a,a,a-Trifluorotoluene	98-08-8	121	%	71-121	06.17.19 23.40	

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Solaris Zeus

Sample Id:	**HA-12 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-057	Date Collected:	06.12.19 14.38	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**478**	10.0	0.354	mg/kg	06.14.19 20.46		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.38	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 06.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 06.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 06.12	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 06.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	06.27.19 06.12	
o-Terphenyl	84-15-1	117	%	70-135	06.27.19 06.12	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-12 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-057	Date Collected:	06.12.19 14.38	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00900	0.0199	0.00900	mg/kg	06.18.19 00.04	U	1
Toluene	108-88-3	<0.00466	0.0199	0.00466	mg/kg	06.18.19 00.04	U	1
Ethylbenzene	100-41-4	<0.00614	0.0199	0.00614	mg/kg	06.18.19 00.04	U	1
m,p-Xylenes	179601-23-1	<0.00679	0.0398	0.00679	mg/kg	06.18.19 00.04	U	1
o-Xylene	95-47-6	<0.00679	0.0199	0.00679	mg/kg	06.18.19 00.04	U	1
Total Xylenes	1330-20-7	<0.00679	0.0199	0.00679	mg/kg	06.18.19 00.04	U	1
Total BTEX		<0.00466	0.0199	0.00466	mg/kg	06.18.19 00.04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	68-120	06.18.19 00.04	
a,a,a-Trifluorotoluene	98-08-8	117	%	71-121	06.18.19 00.04	

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Solaris Zeus

Sample Id:	**HA-12 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-058	Date Collected:	06.12.19 14.40	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4500**	10.0	0.355	mg/kg	06.20.19 13.34		1

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Solaris Zeus

Sample Id:	**HA-12 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-059	Date Collected:	06.12.19 14.42	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8040**	99.6	3.53	mg/kg	06.20.19 13.58		10

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Solaris Zeus

Sample Id:	**HA-12 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-060	Date Collected:	06.12.19 14.44	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2500**	200	7.08	mg/kg	06.20.19 14.46		20

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Solaris Zeus

Sample Id:	**HA-13 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-061	Date Collected:	06.12.19 14.50	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**27.2**	10.0	0.354	mg/kg	06.14.19 20.55		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.41	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 06.30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 06.30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 06.30	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 06.30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	06.27.19 06.30	
o-Terphenyl	84-15-1	120	%	70-135	06.27.19 06.30	

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Solaris Zeus

Sample Id:	**HA-13 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-061	Date Collected:	06.12.19 14.50	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00908	0.0201	0.00908	mg/kg	06.18.19 00.28	U	1
Toluene	108-88-3	<0.00470	0.0201	0.00470	mg/kg	06.18.19 00.28	U	1
Ethylbenzene	100-41-4	<0.00618	0.0201	0.00618	mg/kg	06.18.19 00.28	U	1
m,p-Xylenes	179601-23-1	<0.00685	0.0402	0.00685	mg/kg	06.18.19 00.28	U	1
o-Xylene	95-47-6	<0.00685	0.0201	0.00685	mg/kg	06.18.19 00.28	U	1
Total Xylenes	1330-20-7	<0.00685	0.0201	0.00685	mg/kg	06.18.19 00.28	U	1
Total BTEX		<0.00470	0.0201	0.00470	mg/kg	06.18.19 00.28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	68-120	06.18.19 00.28	**
a,a,a-Trifluorotoluene	98-08-8	122	%	71-121	06.18.19 00.28	**

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Solaris Zeus

Sample Id:	**HA-13 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-062	Date Collected:	06.12.19 14.52	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.1**	10.0	0.354	mg/kg	06.14.19 21.21		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.44	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.91	49.6	9.91	mg/kg	06.27.19 06.49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.91	49.6	9.91	mg/kg	06.27.19 06.49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.91	49.6	9.91	mg/kg	06.27.19 06.49	U	1
Total TPH	PHC635	<9.91	49.6	9.91	mg/kg	06.27.19 06.49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.27.19 06.49	
o-Terphenyl	84-15-1	113	%	70-135	06.27.19 06.49	

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Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-13 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-062	Date Collected:	06.12.19 14.52	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00886	0.0196	0.00886	mg/kg	06.18.19 00.52	U	1
Toluene	108-88-3	<0.00459	0.0196	0.00459	mg/kg	06.18.19 00.52	U	1
Ethylbenzene	100-41-4	<0.00604	0.0196	0.00604	mg/kg	06.18.19 00.52	U	1
m,p-Xylenes	179601-23-1	<0.00669	0.0392	0.00669	mg/kg	06.18.19 00.52	U	1
o-Xylene	95-47-6	<0.00669	0.0196	0.00669	mg/kg	06.18.19 00.52	U	1
Total Xylenes	1330-20-7	<0.00669	0.0196	0.00669	mg/kg	06.18.19 00.52	U	1
Total BTEX		<0.00459	0.0196	0.00459	mg/kg	06.18.19 00.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	68-120	06.18.19 00.52	
a,a,a-Trifluorotoluene	98-08-8	117	%	71-121	06.18.19 00.52	

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-13 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-063	Date Collected:	06.12.19 14.54	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.0**	9.96	0.353	mg/kg	06.20.19 15.46		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-13 (3-3.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-064	Date Collected:	06.12.19 14.56	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**17.2**	9.92	0.351	mg/kg	06.20.19 15.58		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-13 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-065	Date Collected:	06.12.19 14.58	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**55.7**	10.0	0.355	mg/kg	06.20.19 16.10		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-066	Date Collected:	06.12.19 15.00	Sample Depth:	0 - 0.5 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.4**	10.0	0.354	mg/kg	06.14.19 21.30		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.47	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 07.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 07.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 07.07	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 07.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	06.27.19 07.07	
o-Terphenyl	84-15-1	120	%	70-135	06.27.19 07.07	

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (0-0.5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-066	Date Collected:	06.12.19 15.00	Sample Depth:	0 - 0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00893	0.0198	0.00893	mg/kg	06.18.19 01.16	U	1
Toluene	108-88-3	<0.00462	0.0198	0.00462	mg/kg	06.18.19 01.16	U	1
Ethylbenzene	100-41-4	<0.00609	0.0198	0.00609	mg/kg	06.18.19 01.16	U	1
m,p-Xylenes	179601-23-1	<0.00674	0.0395	0.00674	mg/kg	06.18.19 01.16	U	1
o-Xylene	95-47-6	<0.00674	0.0198	0.00674	mg/kg	06.18.19 01.16	U	1
Total Xylenes	1330-20-7	<0.00674	0.0198	0.00674	mg/kg	06.18.19 01.16	U	1
Total BTEX		<0.00462	0.0198	0.00462	mg/kg	06.18.19 01.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	68-120	06.18.19 01.16	
a,a,a-Trifluorotoluene	98-08-8	120	%	71-121	06.18.19 01.16	

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-067	Date Collected:	06.12.19 15.02	Sample Depth:	0.5 - 1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.14.19 15.27	Basis:	Wet Weight
Seq Number:	3092370			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.2**	10.0	0.354	mg/kg	06.14.19 21.39		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ISU			% Moisture:	
Analyst:	ISU	Date Prep:	06.26.19 16.50	Basis:	Wet Weight
Seq Number:	3093833			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<9.90	49.5	9.90	mg/kg	06.27.19 22.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<9.90	49.5	9.90	mg/kg	06.27.19 22.02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<9.90	49.5	9.90	mg/kg	06.27.19 22.02	U	1
Total TPH	PHC635	<9.90	49.5	9.90	mg/kg	06.27.19 22.02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	06.27.19 22.02	
o-Terphenyl	84-15-1	109	%	70-135	06.27.19 22.02	

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (0.5-1)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-067	Date Collected:	06.12.19 15.02	Sample Depth:	0.5 - 1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	RNL			% Moisture:	
Analyst:	RNL	Date Prep:	06.17.19 13.00	Basis:	Wet Weight
Seq Number:	3092567				

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00904	0.0200	0.00904	mg/kg	06.18.19 01.40	U	1
Toluene	108-88-3	<0.00468	0.0200	0.00468	mg/kg	06.18.19 01.40	U	1
Ethylbenzene	100-41-4	<0.00616	0.0200	0.00616	mg/kg	06.18.19 01.40	U	1
m,p-Xylenes	179601-23-1	<0.00682	0.0400	0.00682	mg/kg	06.18.19 01.40	U	1
o-Xylene	95-47-6	<0.00682	0.0200	0.00682	mg/kg	06.18.19 01.40	U	1
Total Xylenes	1330-20-7	<0.00682	0.0200	0.00682	mg/kg	06.18.19 01.40	U	1
Total BTEX		<0.00468	0.0200	0.00468	mg/kg	06.18.19 01.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	117	%	68-120	06.18.19 01.40	
a,a,a-Trifluorotoluene	98-08-8	122	%	71-121	06.18.19 01.40	**

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (1.5-2)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-068	Date Collected:	06.12.19 15.04	Sample Depth:	1.5 - 2 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.6**	10.1	0.356	mg/kg	06.20.19 16.22		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (3.3-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-069	Date Collected:	06.12.19 15.06	Sample Depth:	3 - 3.5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.5**	9.94	0.352	mg/kg	06.20.19 16.34		1

Certificate of Analytical Results 627588

Terracon-Lubbock, Lubbock, TX

Solaris Zeus

Sample Id:	**HA-14 (4.5-5)**	Matrix:	Soil	Date Received:	06.13.19 09.10
Lab Sample Id:	627588-070	Date Collected:	06.12.19 15.08	Sample Depth:	4.5 - 5 ft
Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	JYM			% Moisture:	
Analyst:	JYM	Date Prep:	06.20.19 10.35	Basis:	Wet Weight
Seq Number:	3093025			SUB:	T104704215-19-29

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.6**	9.90	0.350	mg/kg	06.20.19 16.46		1

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092370 — Matrix: Solid — Date Prep: 06.14.19
MB Sample Id: 7679943-1-BLK — LCS Sample Id: 7679943-1-BKS — LCSD Sample Id: 7679943-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	100	100	101	101	80-120	1	20	mg/kg	06.14.19 17:56	

Analytical Method: Chloride by EPA 300 — Prep Method: SW9056P
Seq Number: 3092641 — Matrix: Solid — Date Prep: 06.18.19
MB Sample Id: 7680104-1-BLK — LCS Sample Id: 7680104-1-BKS — LCSD Sample Id: 7680104-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	0.608	100	99.5	100	99.5	100	80-120	0	20	mg/kg	06.18.19 09:42	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092857 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680259-1-BLK — LCS Sample Id: 7680259-1-BKS — LCSD Sample Id: 7680259-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	0.383	100	99.4	99	99.4	99	80-120	0	20	mg/kg	06.19.19 16:16	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092852 — Matrix: Solid — Date Prep: 06.19.19
MB Sample Id: 7680261-1-BLK — LCS Sample Id: 7680261-1-BKS — LCSD Sample Id: 7680261-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	98.9	99	98.3	98	80-120	1	20	mg/kg	06.19.19 20:33	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093025 — Matrix: Solid — Date Prep: 06.20.19
MB Sample Id: 7680301-1-BLK — LCS Sample Id: 7680301-1-BKS — LCSD Sample Id: 7680301-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	100	98.3	98	98.1	98	80-120	0	20	mg/kg	06.20.19 09:35	

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

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092370 — Matrix: Soil — Date Prep: 06.14.19
Parent Sample Id: 627588-001 — MS Sample Id: 627588-001 S — MSD Sample Id: 627588-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	334	100	423	89	423	89	80-120	0	20	mg/kg	06.14.19 18:23	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092370 — Matrix: Soil — Date Prep: 06.14.19
Parent Sample Id: 627588-056 — MS Sample Id: 627588-056 S — MSD Sample Id: 627588-056 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	204	100	298	94	299	95	80-120	0	20	mg/kg	06.14.19 20:28	

Analytical Method: Chloride by EPA 300 — Prep Method: SW9056P
Seq Number: 3092641 — Matrix: Soil — Date Prep: 06.18.19
Parent Sample Id: 627002-001 — MS Sample Id: 627002-001 S — MSD Sample Id: 627002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	21.5	100	116	95	117	96	80-120	1	20	mg/kg	06.18.19 10:09	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092641 — Matrix: Soil — Date Prep: 06.18.19
Parent Sample Id: 627588-026 — MS Sample Id: 627588-026 S — MSD Sample Id: 627588-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2440	100	2510	70	2510	70	80-120	0	20	mg/kg	06.18.19 11:57	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092857 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 627588-009 — MS Sample Id: 627588-009 S — MSD Sample Id: 627588-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1440	100	1530	90	1530	90	80-120	0	20	mg/kg	06.19.19 21:53	

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

Final 1.000

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092857 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 628041-008 — MS Sample Id: 628041-008 S — MSD Sample Id: 628041-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	900	100	985	85	1010	110	80-120	3	20	mg/kg	06.19.19 18:41	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092852 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 627588-024 — MS Sample Id: 627588-024 S — MSD Sample Id: 627588-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1110	100	1180	70	1180	70	80-120	0	20	mg/kg	06.19.19 22:48	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3092852 — Matrix: Soil — Date Prep: 06.19.19
Parent Sample Id: 627588-033 — MS Sample Id: 627588-033 S — MSD Sample Id: 627588-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1920	100	1970	50	1960	40	80-120	1	20	mg/kg	06.20.19 00:09	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093025 — Matrix: Soil — Date Prep: 06.20.19
Parent Sample Id: 627588-048 — MS Sample Id: 627588-048 S — MSD Sample Id: 627588-048 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3350	2000	5440	103	5430	103	80-120	0	20	mg/kg	06.20.19 11:46	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3093025 — Matrix: Soil — Date Prep: 06.20.19
Parent Sample Id: 627588-060 — MS Sample Id: 627588-060 S — MSD Sample Id: 627588-060 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2500	2000	4440	99	4440	99	80-120	0	20	mg/kg	06.20.19 14:58	

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

Final 1.000

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093833 — Matrix: Solid — Date Prep: 06.26.19
MB Sample Id: 7680792-1-BLK — LCS Sample Id: 7680792-1-BKS — LCSD Sample Id: 7680792-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<10.0	1000	1020	102	1020	102	70-135	0	35	mg/kg	06.27.19 04:38	
Diesel Range Organics (DRO)	<10.0	1000	1040	104	1040	104	70-135	0	35	mg/kg	06.27.19 04:38	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		117		114		70-135	%	06.27.19 04:38
o-Terphenyl	134		110		114		70-135	%	06.27.19 04:38

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093839 — Matrix: Solid — Date Prep: 06.26.19
MB Sample Id: 7680793-1-BLK — LCS Sample Id: 7680793-1-BKS — LCSD Sample Id: 7680793-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<10.0	1000	1100	110	1090	109	70-135	1	35	mg/kg	06.27.19 17:58	
Diesel Range Organics (DRO)	<10.0	1000	986	99	982	98	70-135	0	35	mg/kg	06.27.19 17:58	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		113		110		70-135	%	06.27.19 17:58
o-Terphenyl	113		112		108		70-135	%	06.27.19 17:58

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093833 — Matrix: Soil — Date Prep: 06.26.19
Parent Sample Id: 627588-001 — MS Sample Id: 627588-001 S — MSD Sample Id: 627588-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<9.91	991	1060	107	994	100	70-135	6	35	mg/kg	06.27.19 05:34	
Diesel Range Organics (DRO)	<9.91	991	1080	109	1020	103	70-135	6	35	mg/kg	06.27.19 05:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		115		70-135	%	06.27.19 05:34
o-Terphenyl	119		109		70-135	%	06.27.19 05:34

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

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3093839 — Matrix: Soil — Date Prep: 06.26.19
Parent Sample Id: 627588-036 — MS Sample Id: 627588-036 S — MSD Sample Id: 627588-036 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<9.95	995	1150	116	1120	113	70-135	3	35	mg/kg	06.27.19 18:55	
Diesel Range Organics (DRO)	<9.95	995	1040	105	1010	102	70-135	3	35	mg/kg	06.27.19 18:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		113		70-135	%	06.27.19 18:55
o-Terphenyl	116		107		70-135	%	06.27.19 18:55

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3092478 — Matrix: Solid — Date Prep: 06.14.19
MB Sample Id: 7680054-1-BLK — LCS Sample Id: 7680054-1-BKS — LCSD Sample Id: 7680054-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00904	2.00	2.01	101	2.11	106	55-120	5	20	mg/kg	06.14.19 14:40	
Toluene	<0.00468	2.00	2.02	101	2.16	108	77-120	7	20	mg/kg	06.14.19 14:40	
Ethylbenzene	<0.00616	2.00	2.16	108	2.18	109	77-120	1	20	mg/kg	06.14.19 14:40	
m,p-Xylenes	<0.00682	4.00	4.96	124	4.93	123	78-120	1	20	mg/kg	06.14.19 14:40	H
o-Xylene	<0.00682	2.00	2.42	121	2.60	130	78-120	7	20	mg/kg	06.14.19 14:40	H

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	142	**	113		114		68-120	%	06.14.19 14:40
a,a,a-Trifluorotoluene	116		99		99		71-121	%	06.14.19 14:40

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3092567 — Matrix: Solid — Date Prep: 06.17.19
MB Sample Id: 7680102-1-BLK — LCS Sample Id: 7680102-1-BKS — LCSD Sample Id: 7680102-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00904	2.00	2.13	107	2.11	106	55-120	1	20	mg/kg	06.17.19 19:14	
Toluene	<0.00468	2.00	2.11	106	2.15	108	77-120	2	20	mg/kg	06.17.19 19:14	
Ethylbenzene	<0.00616	2.00	2.22	111	2.26	113	77-120	2	20	mg/kg	06.17.19 19:14	
m,p-Xylenes	<0.00682	4.00	4.43	111	4.50	113	78-120	2	20	mg/kg	06.17.19 19:14	
o-Xylene	<0.00682	2.00	2.24	112	2.27	114	78-120	1	20	mg/kg	06.17.19 19:14	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	114		105		105		68-120	%	06.17.19 19:14
a,a,a-Trifluorotoluene	111		107		106		71-121	%	06.17.19 19:14

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

QC Summary 627588

Terracon-Lubbock

Solaris Zeus

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092478 | Matrix: Soil | Date Prep: 06.14.19
Parent Sample Id: 627588-001 | MS Sample Id: 627588-001 S | MSD Sample Id: 627588-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	4.10	2.00	4.10	0	4.42	0	54-120	8	25	mg/kg	06.14.19 22:28	X
Toluene	3.94	2.00	3.94	0	4.22	0	57-120	7	25	mg/kg	06.14.19 22:28	X
Ethylbenzene	3.29	2.00	3.29	0	3.67	0	58-131	11	25	mg/kg	06.14.19 22:28	X
m,p-Xylenes	6.82	4.00	6.82	0	8.51	0	62-124	22	25	mg/kg	06.14.19 22:28	X
o-Xylene	4.42	2.00	4.42	0	5.03	0	62-124	13	25	mg/kg	06.14.19 22:28	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	108		117		68-120	%	06.14.19 22:28
a,a,a-Trifluorotoluene	100		101		71-121	%	06.14.19 22:28

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3092567 | Matrix: Soil | Date Prep: 06.17.19
Parent Sample Id: 627588-051 | MS Sample Id: 627588-051 S | MSD Sample Id: 627588-051 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00904	2.00	2.19	110	2.30	115	54-120	5	25	mg/kg	06.17.19 21:39	
Toluene	0.0141	2.00	2.18	108	2.32	115	57-120	6	25	mg/kg	06.17.19 21:39	
Ethylbenzene	<0.00616	2.00	2.17	109	2.32	116	58-131	7	25	mg/kg	06.17.19 21:39	
m,p-Xylenes	<0.00682	4.00	4.35	109	4.66	117	62-124	7	25	mg/kg	06.17.19 21:39	
o-Xylene	<0.00682	2.00	2.14	107	2.31	116	62-124	8	25	mg/kg	06.17.19 21:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	107		108		68-120	%	06.17.19 21:39
a,a,a-Trifluorotoluene	119		116		71-121	%	06.17.19 21:39

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

Released to Imaging: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

627588

627588

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Project Manager: John Fergerson
Contact:
Sampler's Name: Joseph Guesnier
SRS #:
Sampler's Signature

Project Number: AR197210
Project Name: Solaris Zeus

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: 2 oz Glass	4 oz Glass	5035 kit	40 ml VOA	Chloride (EPA Method 300)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold	Lab Sample ID
S	6/12/2019	11:46		X	HA-1 (0-0.5)	0'	0.5'		X			X	X	X		1
S	6/12/2019	11:48		X	HA-1 (0.5-1)	0.5'	1'		X			X	X	X		2
S	6/12/2019	11:50		X	HA-1 (1.5-2)	1.5'	2'		X						X	3
S	6/12/2019	11:51		X	HA-1 (3.5-4)	3.5'	4'		X						X	4
S	6/12/2019	11:53		X	HA-1 (4.5-5)	4.5'	5'		X						X	5
S	6/12/2019	11:57		X	HA-2 (0-0.5)	0'	0.5'		X			X	X	X		6
S	6/12/2019	11:59		X	HA-2 (0.5-1)	0.5'	1'		X			X	X	X		7
S	6/12/2019	12:01		X	HA-2 (1.5-2)	1.5'	2'		X						X	8
S	6/12/2019	12:03		X	HA-2 (3-3.5)	3'	3.5'		X						X	9
S	6/12/2019	12:05		X	HA-2 (4.5-5)	4.5'	5'		X						X	10
S	6/12/2019	12:30		X	HA-3 (0-0.5)	0'	0.5'		X			X	X	X		11
S	6/12/2019	12:32		X	HA-3 (0.5-1)	0.5'	1'		X			X	X	X		12
S	6/12/2019	12:34		X	HA-3 (1.5-2)	1.5'	2'		X						X	13
S	6/12/2019	12:36		X	HA-3 (3-3.5)	3'	3.5'		X						X	14
S	6/12/2019	12:38		X	HA-3 (4.5-5)	4.5'	5'		X						X	15
																~~16~~ Bad
																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:
	6-13-19	9:10		6-13-19	9:10
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: Solaris

e-mail results to:
john.fergerson@terracon.com
kristina.kohl@terracon.com
jrguesnier@terracon.com

IR3 2.1/2.0

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: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

627588

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424
Phone:
Contact:
SRS #:

Office Location: Lubbock
Project Manager: John Fergerson
Sampler's Name: Joseph Guesnier
Sampler's Signature

Project Number: AR197210
Project Name: Solaris Zeus

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: 2 oz Glass	4 oz Glass	5035 kit	40 ml VOA	Chloride (EPA Method 300)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold	Lab Sample ID
S	6/12/2019	12:45		X	HA-4 (0-0.5)	0'	0.5'		X			X	X	X		16
S	6/12/2019	12:47		X	HA-4 (0.5-1)	0.5'	1'		X			X	X	X		17
S	6/12/2019	12:49		X	HA-4 (1.5-2)	1.5'	2'		X						X	18
S	6/12/2019	12:51		X	HA-4 (3-3.5)	3'	3.5'		X						X	19
S	6/12/2019	12:53		X	HA-4 (4.5-5)	4.5'	5'		X						X	20
S	6/12/2019	12:58		X	HA-5 (0-0.5)	0'	0.5'		X			X	X	X		21
S	6/12/2019	13:00		X	HA-5 (0.5-1)	0.5'	1'		X			X	X	X		22
S	6/12/2019	13:02		X	HA-5 (1.5-2)	1.5'	2'		X						X	23
S	6/12/2019	13:04		X	HA-5 (3-3.5)	3'	3.5'		X						X	24
S	6/12/2019	13:06		X	HA-5 (4.5-5)	4.5'	5'		X						X	25
S	6/12/2019	13:20		X	HA-6 (0-0.5)	0'	0.5'		X			X	X	X		26
S	6/12/2019	13:22		X	HA-6 (0.5-1)	0.5'	1'		X			X	X	X		27
S	6/12/2019	13:24		X	HA-6 (1.5-2)	1.5'	2'		X						X	28
S	6/12/2019	13:26		X	HA-6 (3-3.5)	3'	3.5'		X						X	29
S	6/12/2019	13:28		X	HA-6 (4.5-5)	4.5'	5'		X						X	30

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
	6-13-19	9:10		6-13-19	9:10
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		

NOTES: Client: Solaris

e-mail results to:
john.fergerson@terracon.com
kristina.kohl@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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627588

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Project Manager: John Fergerson
Contact:
Sampler's Name: Joseph Guesnier
SRS #:
Sampler's Signature

ANALYSIS REQUESTED

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

Project Number: AR197210
Project Name: Solaris Zeus

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 Extended 8015	BTEX (EPA Method 8021B)	Hold	Lab Sample ID
S	6/12/2019	13:32		X	HA-7 (0-0.5)	0'	0.5'		X			X	X	X		31
S	6/12/2019	13:34		X	HA-7 (0.5-1)	0.5'	1'		X			X	X	X		32
S	6/12/2019	13:36		X	HA-7 (1.5-2)	1.5'	2'		X						X	33
S	6/12/2019	13:38		X	HA-7 (3-3.5)	3'	3.5'		X						X	34
S	6/12/2019	13:40		X	HA-7 (4.5-5)	4.5'	5'		X						X	35
S	6/12/2019	13:45		X	HA-8 (0-0.5)	0'	0.5'		X			X	X	X		36
S	6/12/2019	13:47		X	HA-8 (0.5-1)	0.5'	1'		X			X	X	X		37
S	6/12/2019	13:49		X	HA-8 (1.5-2)	1.5'	2'		X						X	38
S	6/12/2019	13:51		X	HA-8 (3-3.5)	3'	3.5'		X						X	39
S	6/12/2019	13:53		X	HA-8 (4.5-5)	4.5'	5'		X						X	40
S	6/12/2019	14:00		X	HA-9 (0-0.5)	0'	0.5'		X			X	X	X		N1
S	6/12/2019	14:02		X	HA-9 (0.5-1)	0.5'	1'		X			X	X	X		N2
S	6/12/2019	14:04		X	HA-9 (1.5-2)	1.5'	2'		X						X	N3
S	6/12/2019	14:06		X	HA-9 (3-3.5)	3'	3.5'		X						X	N4
S	6/12/2019	14:08		X	HA-9 (4.5-5)	4.5'	5'		X						X	N5

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

TRRP Laboratory Review Checklist ☐ Yes ☐ No

	Date	Time		Date	Time
Relinquished by (Signature)	6-13-19	9:10	Received by (Signature)	6-13-19	9:10
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		

NOTES: Client: Solaris

e-mail results to:

john.fergerson@terracon.com
kristina.kohl@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: 3/21/2022 8:15:26 AM

Received by OCD: 2/16/2022 9:49:04 AM

627588

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Phone:
Contact:
Project Manager: John Fergerson
SRS #:
Sampler's Name: Joseph Guesnier
Sampler's Signature

Project Number: AR197210
Project Name: Solaris Zeus

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: 2 oz Glass	4 oz Glass	5035 kit	40 ml VOA	Chloride (EPA Method 300)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold	Lab Sample ID
S	6/12/2019	14:12		X	HA-10 (0-0.5)	0'	0.5'		X			X	X	X		46
S	6/12/2019	14:14		X	HA-10 (0.5-1)	0.5'	1'		X			X	X	X		47
S	6/12/2019	14:16		X	HA-10 (1.5-2)	1.5'	2'		X						X	48
S	6/12/2019	14:18		X	HA-10 (3-3.5)	3'	3.5'		X						X	49
S	6/12/2019	14:20		X	HA-10 (4.5-5)	4.5'	5'		X						X	50
S	6/12/2019	14:24		X	HA-11 (0-0.5)	0'	0.5'		X			X	X	X		51
S	6/12/2019	14:26		X	HA-11 (0.5-1)	0.5'	1'		X			X	X	X		52
S	6/12/2019	14:28		X	HA-11 (1.5-2)	1.5'	2'		X						X	53
S	6/12/2019	14:30		X	HA-11 (3-3.5)	3'	3.5'		X						X	54
S	6/12/2019	14:32		X	HA-11 (4.5-5)	4.5'	5'		X						X	55
S	6/12/2019	14:36		X	HA-12 (0-0.5)	0'	0.5'		X			X	X	X		56
S	6/12/2019	14:38		X	HA-12 (0.5-1)	0.5'	1'		X			X	X	X		57
S	6/12/2019	14:40		X	HA-12 (1.5-2)	1.5'	2'		X						X	58
S	6/12/2019	14:42		X	HA-12 (3-3.5)	3'	3.5'		X						X	59
S	6/12/2019	14:44		X	HA-12 (4.5-5)	4.5'	5'		X						X	60

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
	6-13-19	9:10		6-13-19	9:10
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: Solaris

e-mail results to:
john.fergerson@terracon.com
kristina.kohl@terracon.com
jrguesnier@terracon.com

1 x 3 2.0 / 2.0

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: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

627588

Terracon

CHAIN OF CUSTODY RECORD

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424
Phone:
Contact:
SRS #:

Office Location: Lubbock
Project Manager: John Fergerson
Sampler's Name: Joseph Guesnier
Sampler's Signature

Project Number: AR197210
Project Name: Solaris Zeus

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)
Page 5 of 5

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 Extended 8015	BTEX (EPA Method 8021B)	Hold	Lab Sample ID
S	6/12/2019	14:50		X	HA-13 (0-0.5)	0'	0.5'		X			X	X	X		61
S	6/12/2019	14:52		X	HA-13 (0.5-1)	0.5'	1'		X			X	X	X		62
S	6/12/2019	14:54		X	HA-13 (1.5-2)	1.5'	2'		X						X	63
S	6/12/2019	14:56		X	HA-13 (3-3.5)	3'	3.5'		X						X	64
S	6/12/2019	14:58		X	HA-13 (4.5-5)	4.5'	5'		X						X	65
S	6/12/2019	15:00		X	HA-14 (0-0.5)	0'	0.5'		X			X	X	X		66
S	6/12/2019	15:02		X	HA-14 (0.5-1)	0.5'	1'		X			X	X	X		67
S	6/12/2019	15:04		X	HA-14 (1.5-2)	1.5'	2'		X						X	68
S	6/12/2019	15:06		X	HA-14 (3-3.5)	3'	3.5'		X						X	69
S	6/12/2019	15:08		X	HA-14 (4.5-5)	4.5'	5'		X						X	70

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
	6-13-19	9:10		6-13-19	9:10
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: Solaris

e-mail results to:
john.fergerson@terracon.com
kristina.kohl@terracon.com
jrguesnier@terracon.com

2.1 2.0 6/13/19
1.23 2.0

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 _____

Inter-Office Shipment

IOS Number : 41401

Date/Time:	06.13.2019 18:16	Created by:	Brenda Ward	Please send report to:	Jessica Kramer
Lab# From:	**Lubbock**	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	**Houston**	Air Bill No.:	775471304288	E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
627588-001	S	HA-1 (0-0.5)	06.12.2019 11:46	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-001	S	HA-1 (0-0.5)	06.12.2019 11:46	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-002	S	HA-1 (0.5-1)	06.12.2019 11:48	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-002	S	HA-1 (0.5-1)	06.12.2019 11:48	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-006	S	HA-2 (0-0.5)	06.12.2019 11:57	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-006	S	HA-2 (0-0.5)	06.12.2019 11:57	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-007	S	HA-2 (0.5-1)	06.12.2019 11:59	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-007	S	HA-2 (0.5-1)	06.12.2019 11:59	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-011	S	HA-3 (0-0.-5)	06.12.2019 12:30	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-011	S	HA-3 (0-0.-5)	06.12.2019 12:30	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-012	S	HA-3 (0.5-1)	06.12.2019 12:32	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-012	S	HA-3 (0.5-1)	06.12.2019 12:32	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-016	S	HA-4 (0-0.5)	06.12.2019 12:38	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-016	S	HA-4 (0-0.5)	06.12.2019 12:38	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-017	S	HA-4 (0.5-1)	06.12.2019 11:46	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-017	S	HA-4 (0.5-1)	06.12.2019 11:46	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-021	S	HA-5 (0-0.5)	06.12.2019 12:58	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-021	S	HA-5 (0-0.5)	06.12.2019 12:58	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-022	S	HA-5 (0.5-1)	06.12.2019 13:00	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-022	S	HA-5 (0.5-1)	06.12.2019 13:00	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-026	S	HA-6 (0-0.5)	06.12.2019 13:20	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-026	S	HA-6 (0-0.5)	06.12.2019 13:20	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-027	S	HA-6 (O.5-1)	06.12.2019 13:22	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-027	S	HA-6 (O.5-1)	06.12.2019 13:22	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-031	S	HA-7 (0-0.5)	06.12.2019 13:32	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	

Inter-Office Shipment

IOS Number : 41401

Date/Time:	06.13.2019 18:16	Created by:	Brenda Ward	Please send report to:	Jessica Kramer
Lab# From:	**Lubbock**	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	**Houston**	Air Bill No.:	775471304288	E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
627588-031	S	HA-7 (0-0.5)	06.12.2019 13:32	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-032	S	HA-7 (0-5-1)	06.12.2019 13:34	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-032	S	HA-7 (0-5-1)	06.12.2019 13:34	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-036	S	HA-8 (0-0.5)	06.12.2019 13:45	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-036	S	HA-8 (0-0.5)	06.12.2019 13:45	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-037	S	HA-8 (0.5-1)	06.12.2019 13:47	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-037	S	HA-8 (0.5-1)	06.12.2019 13:47	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-041	S	HA-9 (0-0.5)	06.12.2019 14:00	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-041	S	HA-9 (0-0.5)	06.12.2019 14:00	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-042	S	HA-9 (0.5-1)	06.12.2019 14:02	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-042	S	HA-9 (0.5-1)	06.12.2019 14:02	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-046	S	HA-10 (0-0.5)	06.12.2019 14:12	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-046	S	HA-10 (0-0.5)	06.12.2019 14:12	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-047	S	HA-10 (0.5-1)	06.12.2019 14:14	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-047	S	HA-10 (0.5-1)	06.12.2019 14:14	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-051	S	HA-11 (0-0.5)	06.12.2019 14:24	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-051	S	HA-11 (0-0.5)	06.12.2019 14:24	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-052	S	HA-11 (0.5-1)	06.12.2019 14:26	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-052	S	HA-11 (0.5-1)	06.12.2019 14:26	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-056	S	HA-12 (0-0.5)	06.12.2019 14:36	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-056	S	HA-12 (0-0.5)	06.12.2019 14:36	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-057	S	HA-12 (0.5-1)	06.12.2019 14:38	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-057	S	HA-12 (0.5-1)	06.12.2019 14:38	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-061	S	HA-13 (0-0.5)	06.12.2019 14:50	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-061	S	HA-13 (0-0.5)	06.12.2019 14:50	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	

Inter Office Shipment or Sample Comments:

Inter-Office Shipment

IOS Number : 41401

Date/Time:	06.13.2019 18:16	Created by:	Brenda Ward	Please send report to:	Jessica Kramer
Lab# From:	**Lubbock**	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	**Houston**	Air Bill No.:	775471304288	E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
627588-062	S	HA-13 (0.5-1)	06.12.2019 14:52	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-062	S	HA-13 (0.5-1)	06.12.2019 14:52	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-066	S	HA-14 (0-0.5)	06.12.2019 15:00	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-066	S	HA-14 (0-0.5)	06.12.2019 15:00	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	
627588-067	S	HA-14 (0.5-1)	06.12.2019 15:02	E300_CL	Chloride by EPA 300	06.19.2019	12.09.2019	JKR	CL	
627588-067	S	HA-14 (0.5-1)	06.12.2019 15:02	SW8015MOD_NM	TPH By SW8015 Mod	06.19.2019	06.26.2019	JKR	PHCC10C28 PHCC28C3	

Inter Office Shipment or Sample Comments:

Some of the jars might not ibe n cooler. They forgot to get some out of cooler and their co-worker took the cooler to Midland. Will bring in tomorrow and will send to you tomorrorw evening. 06-13-19 BW

Relinquished By: Brenda Ward

Brenda Ward

Date Relinquished: 06.13.2019

Received By: Monica Shakhshir

Date Received: 06.14.2019 09:50

Cooler Temperature: 1.4

Inter-Office Shipment

IOS Number : 41631

Date/Time:	06.18.2019 11:19	Created by:	Brenda Ward	Please send report to:	Jessica Kramer
Lab# From:	**Lubbock**	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	**Houston**	Air Bill No.:	775507266299	E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
627588-003	S	HA-1 (1.5-2)	06.12.2019 11:50	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-004	S	HA-1 (3.5-4)	06.12.2019 11:51	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-005	S	HA-1 (4.5-5)	06.12.2019 11:53	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-008	S	HA-2 (1.5-2)	06.12.2019 12:01	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-009	S	HA-2 (3-3.5)	06.12.2019 12:03	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-010	S	HA-2 (4.5-5)	06.12.2019 12:05	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-013	S	HA-3 (1.5-2)	06.12.2019 12:34	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-014	S	HA-3 (3-3.5)	06.12.2019 12:36	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-015	S	HA-3 (4.5-5)	06.12.2019 12:38	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-018	S	HA-4 (1.5-2)	06.12.2019 12:49	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-019	S	HA-4 (3-3.5)	06.12.2019 12:51	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-020	S	HA-4 (4.5-5)	06.12.2019 12:53	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-023	S	HA-5 (1.5-2)	06.12.2019 13:02	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-024	S	HA-5 (3-3.5)	06.12.2019 13:04	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-025	S	HA-5 (4.5-5)	06.12.2019 13:06	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-028	S	HA-6 (1.5-2)	06.12.2019 13:24	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-029	S	HA-6 (3-3.5)	06.12.2019 13:26	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-030	S	HA-6 (4.5-5)	06.12.2019 13:28	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-033	S	HA-7 (1.5-2)	06.12.2019 13:36	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-034	S	HA-7 (3-3-5)	06.12.2019 13:38	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-035	S	HA-7 (4.5-5)	06.12.2019 13:40	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-038	S	HA-8 (1.5-2)	06.12.2019 13:49	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-039	S	HA-8 (3-3.5)	06.12.2019 13:51	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-040	S	HA-8 (4.5-5)	06.12.2019 13:53	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-043	S	HA-9 (1.5-2)	06.12.2019 14:04	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	

Inter-Office Shipment

IOS Number : 41631

Date/Time: 06.18.2019 11:19
Lab# From: **Lubbock**
Lab# To: **Houston**
Created by: Brenda Ward
Delivery Priority:
Air Bill No.: 775507266299

Please send report to: Jessica Kramer
Address: 6701 Aberdeen, Suite 9 Lubbock, TX 79424
E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
627588-044	S	HA-9 (3-3.5)	06.12.2019 14:06	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-045	S	HA-9 (4.5-5)	06.12.2019 14:08	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-048	S	HA-10 (1.5-2)	06.12.2019 14:16	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-049	S	HA-10 (3-3.5)	06.12.2019 14:18	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-050	S	HA-10 (4.5-5)	06.12.2019 14:20	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-053	S	HA-11 (1.5-2)	06.12.2019 14:28	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-054	S	HA-11 (3-3.5)	06.12.2019 14:30	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-055	S	HA-11 (4.5-5)	06.12.2019 14:32	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-058	S	HA-12 (1.5-2)	06.12.2019 14:40	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-059	S	HA-12 (3-3.5)	06.12.2019 14:42	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-060	S	HA-12 (4.5-5)	06.12.2019 14:44	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-063	S	HA-13 (1.5-2)	06.12.2019 14:54	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-064	S	HA-13 (3-3.5)	06.12.2019 14:56	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-065	S	HA-13 (4.5-5)	06.12.2019 14:58	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-068	S	HA-14 (1.5-2)	06.12.2019 15:04	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-069	S	HA-14 (3.3-5)	06.12.2019 15:06	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	
627588-070	S	HA-14 (4.5-5)	06.12.2019 15:08	E300_CL	Chloride by EPA 300	06.21.2019	12.09.2019	JKR	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Brenda Ward
Brenda Ward

Date Relinquished: 06.18.2019

Received By: Travis Simmons
Travis Simmons

Date Received: 06.19.2019 09:30

Cooler Temperature: 4.0

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 41401

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : HOU-068

Sent By: Brenda Ward **Date Sent:** 06.13.2019 06.16 PM

Received By: Monica Shakhshir **Date Received:** 06.14.2019 09.50 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.4	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 *Custody Seals Signed and dated for Containers/coolers	**Yes**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Some of the jars might not ibe n cooler. They forgot to get some out of cooler and their co-worker took the cooler to Midland. Will bring in tomorrow and will send to you tomorrorw evening. 06-13-19 BW

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 06.14.2019

Monica Shakhshir

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 41631

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : HOU-068

Sent By: Brenda Ward **Date Sent:** 06.18.2019 11.19 AM

Received By: Travis Simmons **Date Received:** 06.19.2019 09.30 AM

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

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: Travis Simmons Date: 06.19.2019

Travis Simmons

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Terracon-Lubbock

Date/ Time Received: 06/13/2019 09:10:00 AM

Work Order #: 627588

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

Temperature Measuring device used : IR-3

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**Yes**	Chlorides & SW8015 sent to Stafford
#18 Water VOC samples have zero headspace?	**N/A**	

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

Analyst: PH Device/Lot#:

Checklist completed by: Brenda Ward Date: 06/13/2019
Brenda Ward

Checklist reviewed by: Jessica Kramer Date: 06/13/2019
Jessica Kramer

Analytical Report 645372

for

Terracon-Lubbock

Project Manager: Joseph Guesnier

Solaris - Zeus SWD

AR197210

12-DEC-19

Collected By: Client

6701 Aberdeen, Suite 9 Lubbock, TX 79424

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

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

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

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12-DEC-19

Project Manager: **Joseph Guesnier**
Terracon-Lubbock
5827 50th st, Suite 1
Lubbock, TX 79424

Reference: XENCO Report No(s): **645372**
Solaris - Zeus SWD
Project Address:

Joseph Guesnier:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 645372. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 645372 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 645372

Terracon-Lubbock, Lubbock, TX

Solaris - Zeus SWD

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
V-1 (5.5-6)	S	12-04-19 00:00	5.5 - 6 ft	645372-001
V-1 (9.5-10)	S	12-04-19 00:00	5.5 - 6 ft	645372-005
V-2 (5.5-6)	S	12-04-19 00:00	5.5 - 6 ft	645372-006
V-2 (9.5-10)	S	12-04-19 00:00	9.5 - 10 ft	645372-010
V-3 (5.5-6)	S	12-04-19 00:00	5.5 - 6 ft	645372-011
V-3 (9.5-10)	S	12-04-19 00:00	9.5 - 10 ft	645372-015
V-1 (6.5-7)	S	12-04-19 00:00	5.5 - 6 ft	Not Analyzed
V-1 (7.5-8)	S	12-04-19 00:00	5.5 - 6 ft	Not Analyzed
V-1 (8.5-9)	S	12-04-19 00:00	5.5 - 6 ft	Not Analyzed
V-2 (6.5-7)	S	12-04-19 00:00	6.5 - 7 ft	Not Analyzed
V-2 (7.5-8)	S	12-04-19 00:00	7.5 - 8 ft	Not Analyzed
V-2 (8.5-9)	S	12-04-19 00:00	8.5 - 9 ft	Not Analyzed
V-3 (6.5-7)	S	12-04-19 00:00	6.5 - 7 ft	Not Analyzed
V-3 (7.5-8)	S	12-04-19 00:00	7.5 - 8 ft	Not Analyzed
V-3 (8.5-9)	S	12-04-19 00:00	8.5 - 9 ft	Not Analyzed

CASE NARRATIVE

Client Name: Terracon-Lubbock

Project Name: Solaris - Zeus SWD

Project ID: *AR197210*
Work Order Number(s): *645372*

Report Date: *12-DEC-19*
Date Received: *12/05/2019*

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3109849 Inorganic Anions by SW 9056
Lab Sample ID 645407-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference.
Samples in the analytical batch are: 645372-001, -005, -006, -010, -011, -015.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results

645372

Terracon-Lubbock, Lubbock, TX

Solaris - Zeus SWD

Sample Id: **V-1 (5.5-6)** Matrix: Soil Sample Depth: 5.5 - 6 ft

Lab Sample Id: 645372-001 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**60.4**	9.96	0.353	mg/kg	12.09.19 11:14		1

Sample Id: **V-1 (9.5-10)** Matrix: Soil Sample Depth: 5.5 - 6 ft

Lab Sample Id: 645372-005 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**1460**	10.0	0.354	mg/kg	12.09.19 11:26	X	1

Sample Id: **V-2 (5.5-6)** Matrix: Soil Sample Depth: 5.5 - 6 ft

Lab Sample Id: 645372-006 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**6020**	99.8	3.53	mg/kg	12.09.19 12:03		10

Sample Id: **V-2 (9.5-10)** Matrix: Soil Sample Depth: 9.5 - 10 ft

Lab Sample Id: 645372-010 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**6350**	98.4	3.48	mg/kg	12.09.19 12:15		10

Certificate of Analytical Results
645372

Terracon-Lubbock, Lubbock, TX
Solaris - Zeus SWD

Sample Id: **V-3 (5.5-6)** Matrix: Soil Sample Depth: 5.5 - 6 ft

Lab Sample Id: 645372-011 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**3860**	10.1	0.358	mg/kg	12.09.19 12:28		1

Sample Id: **V-3 (9.5-10)** Matrix: Soil Sample Depth: 9.5 - 10 ft

Lab Sample Id: 645372-015 Date Collected: 12.04.19 00.00 Date Received: 12.05.19 16.45

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Analyst: JYM % Moist: Tech: JYM

Seq Number: 3109849 Date Prep: 12.09.19 11.00

Subcontractor: SUB: T104704215-19-30 Prep seq: 7691953

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	**6690**	101	3.58	mg/kg	12.09.19 13:04		10

Certificate of Analytical Results

645372

Terracon-Lubbock, Lubbock, TX

Solaris - Zeus SWD

Sample Id:	**7691953-1-BLK**	Matrix:	Solid	Sample Depth:	
Lab Sample Id:	7691953-1-BLK	Date Collected:		Date Received:	
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Analyst:	JYM	% Moist:		Tech:	JYM
Seq Number:	3109849	Date Prep:	12.09.19 11.00		
Subcontractor:	SUB: T104704215-19-30	Prep seq:	7691953		

Parameter	CAS Number	Result	MQL	SDL	Units	Analysis Date	Flag	Dil Factor
Chloride	16887-00-6	<0.354	10.0	0.354	mg/kg	12.09.19 10:06	U	1

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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

BS / BSD Recoveries

Project Name: Solaris - Zeus SWD

Work Order #: 645372 **Project ID:** AR197210

Analyst: JYM **Date Prepared:** 12/09/2019 **Date Analyzed:** 12/09/2019

Lab Batch ID: 3109849 **Sample:** 7691953-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.354	100	107	107	100	107	107	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.%

Form 3 - MS / MSD Recoveries

Project Name: Solaris - Zeus SWD

Work Order # : 645372 **Project ID:** AR197210

Lab Batch ID: 3109849 **QC- Sample ID:** 645372-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/09/2019 **Date Prepared:** 12/09/2019 **Analyst:** JYM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	1460	99.8	1530	70	100	1540	80	1	80-120	20	X

Lab Batch ID: 3109849 **QC- Sample ID:** 645407-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/09/2019 **Date Prepared:** 12/09/2019 **Analyst:** JYM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	1210	100	1290	80	99.6	1290	80	0	80-120	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Released to Imaging: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

6453372

Terracon

CHAIN OF CUSTODY RECORD

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424
Phone:
Contact:
SRS #:

Office Location: Lubbock
Project Manager: Joseph Guesnier
Sampler's Name: Brett Dennis
Sampler's Signature:

Project Number: AR197210
Project Name: Solaris - Zeus SWD

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 1R4 3.5

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	Chloride (EPA Method 300)	Hold	Lab Sample ID
S	12/4/2019	-		X	V-1 (5.5-6)	5.5'	6'	1	X		
S	12/4/2019	-		X	V-1 (6.5-7)	6.5'	7'	1		X	
S	12/4/2019	-		X	V-1 (7.5-8)	7.5'	8'	1		X	
S	12/4/2019	-		X	V-1 (8.5-9)	8.5'	9'	1		X	
S	12/4/2019	-		X	V-1 (9.5-10)	9.5'	10'	1	X	X 130	
S	12/4/2019	-		X	V-2 (5.5-6)	5.5'	6'	1	X		
S	12/4/2019	-		X	V-2 (6.5-7)	6.5'	7'	1		X	
S	12/4/2019	-		X	V-2 (7.5-8)	7.5'	8'	1		X	
S	12/4/2019	-		X	V-2 (8.5-9)	8.5'	9'	1		X	
S	12/4/2019	-		X	V-2 (9.5-10)	9.5'	10'	1	X	X 130	

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:
Brett Dennis	12-5-19	16:45		12-5-19	16:45

NOTES: Bill directly to Plains Pipeline

e-mail results to:
irguesnier@terracon.com
brett.dennis@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: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

645372

Terracon

CHAIN OF CUSTODY RECORD

645372

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Project Manager: Joseph Guesnier
Sampler's Name: Brett Dennis
Phone:
Contact:
SRS #:
Sampler's Signature: BD

Project Number: AR197210
Project Name: Solaris - Zeus SWD

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 1.2 / 3.5

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	No. Type of Containers: 4 oz Glass	Chloride (EPA Method 300)	Hold	Lab Sample ID
S	12/4/2019	-		X	V-3 (5.5-6)	5.5'	6'	1	X		
S	12/4/2019	-		X	V-3 (6.5-7)	6.5'	7'	1		X	
S	12/4/2019	-		X	V-3 (7.5-8)	7.5'	8'	1		X	
S	12/4/2019	-		X	V-3 (8.5-9)	8.5'	9'	1		X	
S	12/4/2019	-		X	V-3 (9.5-10)	9.5'	10'	1	X	X BTEX	

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

TRRP Laboratory Review Checklist ☐ Yes ☐ No

	Date	Time		Date	Time
Relinquished by (Signature)	12-5-19	16:45	Received by (Signature)	12-5-19	16:45
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		
Relinquished by (Signature)			Received by (Signature)		

NOTES: Bill directly to Plains Pipeline

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

Inter-Office Shipment

IOS Number : 53680

Date/Time:	12.06.2019	Created by:	Brenda Ward	Please send report to:	Jessica Kramer
Lab# From:	**Lubbock**	Delivery Priority:		Address:	6701 Aberdeen, Suite 9 Lubbock, TX 79424
Lab# To:	**Houston**	Air Bill No.:	777178251305	E-Mail:	jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
645372-001	S	V-1 (5.5-6)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	
645372-002	S	V-1 (6.5-7)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-003	S	V-1 (7.5-8)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-004	S	V-1 (8.5-9)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-005	S	V-1 (9.5-10)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	
645372-006	S	V-2 (5.5-6)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	
645372-007	S	V-2 (6.5-7)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-008	S	V-2 (7.5-8)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-009	S	V-2 (8.5-9)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-010	S	V-2 (9.5-10)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	
645372-011	S	V-3 (5.5-6)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	
645372-012	S	V-3 (6.5-7)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-013	S	V-3 (7.5-8)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-014	S	V-3 (8.5-9)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	HOLD	01.01.2020	JKR	CL	
645372-015	S	V-3 (9.5-10)	12.04.2019 00:00	E300	Inorganic Anions by EPA 300/300.1	12.11.2019	01.01.2020	JKR	CL	

Inter Office Shipment or Sample Comments:

Relinquished By: Brenda Ward
Brenda Ward

Date Relinquished: 12.06.2019

Received By: Ashly Kowalski

Date Received: 12.07.2019

Cooler Temperature: 2.2

XENCO Laboratories

Inter Office Report- Sample Receipt Checklist

Sent To: Houston

IOS #: 53680

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient
Temperature Measuring device used : HOU-068

Sent By: Brenda Ward **Date Sent:** 12.06.2019 11.07 AM

Received By: Ashly Kowalski **Date Received:** 12.07.2019 09.00 AM

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	2.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received with appropriate temperature?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 *Custody Seals Signed and dated for Containers/coolers	**N/A**	
#6 *IOS present?	**Yes**	
#7 Any missing/extra samples?	**No**	
#8 IOS agrees with sample label(s)/matrix?	**Yes**	
#9 Sample matrix/ properties agree with IOS?	**Yes**	
#10 Samples in proper container/ bottle?	**Yes**	
#11 Samples properly preserved?	**Yes**	
#12 Sample container(s) intact?	**Yes**	
#13 Sufficient sample amount for indicated test(s)?	**Yes**	
#14 All samples received within hold time?	**Yes**	

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

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ **Contacted by :** _____ **Date:** _____

Checklist reviewed by: _____ Date: 12.07.2019

Ashly Kowalski

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 820-780-1
Client Project/Site: Zeus SWD Release

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

Attn: Joseph Guesnier

JKramer

Authorized for release by:
5/26/2021 1:27:07 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
5/26/2021 1:27:07 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Laboratory Job ID: 820-780-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists Job ID: 820-780-1
Project/Site: Zeus SWD Release

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: Zeus SWD Release

Job ID: 820-780-1

Job ID: 820-780-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative
820-780-1

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 -9.3°C

HPLC/IC

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

Released to Imaging: 3/21/2022 8:15:26 AM

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-1 (0-0.5)
Lab Sample ID: 820-780-1
Date Collected: 05/20/21 15:05
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.2		5.05		mg/Kg			05/25/21 16:42	1

Client Sample ID: SP-1 (1.5-2)
Lab Sample ID: 820-780-2
Date Collected: 05/20/21 15:10
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.0		5.04		mg/Kg			05/25/21 16:57	1

Client Sample ID: SP-1 (3.5-4)
Lab Sample ID: 820-780-3
Date Collected: 05/20/21 15:15
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	179		5.02		mg/Kg			05/25/21 17:02	1

Client Sample ID: SP-2 (0-0.5)
Lab Sample ID: 820-780-4
Date Collected: 05/20/21 15:20
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.18		5.03		mg/Kg			05/25/21 17:07	1

Client Sample ID: SP-2 (1.5-2)
Lab Sample ID: 820-780-5
Date Collected: 05/20/21 15:25
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.71		5.00		mg/Kg			05/25/21 19:34	1

Client Sample ID: SP-2 (3.5-4)
Lab Sample ID: 820-780-6
Date Collected: 05/20/21 15:30
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.8		5.04		mg/Kg			05/25/21 19:48	1

Client Sample ID: SP-3 (0-0.5)
Lab Sample ID: 820-780-7
Date Collected: 05/20/21 15:35
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.7		5.05		mg/Kg			05/25/21 19:53	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-3 (1.5-2)
Lab Sample ID: 820-780-8
Date Collected: 05/20/21 15:40
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.40		5.02		mg/Kg			05/25/21 19:58	1

Client Sample ID: SP-3 (3.5-4)
Lab Sample ID: 820-780-9
Date Collected: 05/20/21 15:45
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.8		4.99		mg/Kg			05/25/21 20:03	1

Client Sample ID: SP-4 (0-0.5)
Lab Sample ID: 820-780-10
Date Collected: 05/20/21 15:50
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.38		4.97		mg/Kg			05/25/21 20:18	1

Client Sample ID: SP-4 (1.5-2)
Lab Sample ID: 820-780-11
Date Collected: 05/20/21 15:55
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.79		4.95		mg/Kg			05/25/21 20:23	1

Client Sample ID: SP-4 (3.5-4)
Lab Sample ID: 820-780-12
Date Collected: 05/20/21 16:00
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.9		4.95		mg/Kg			05/25/21 20:28	1

Client Sample ID: SP-5 (0-0.5)
Lab Sample ID: 820-780-13
Date Collected: 05/20/21 16:05
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	209		5.04		mg/Kg			05/25/21 20:32	1

Client Sample ID: SP-5 (1.5-2)
Lab Sample ID: 820-780-14
Date Collected: 05/20/21 16:10
Matrix: Solid
Date Received: 05/24/21 16:25

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	694		5.03		mg/Kg			05/25/21 20:37	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-5 (3.5-4)
Date Collected: 05/20/21 16:15
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-15
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2910		25.0		mg/Kg			05/25/21 20:42	5

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3464/1-A
Matrix: Solid
Analysis Batch: 3488

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 16:28	1

Lab Sample ID: LCS 880-3464/2-A
Matrix: Solid
Analysis Batch: 3488

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	251.1		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-3464/3-A
Matrix: Solid
Analysis Batch: 3488

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	251.4		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 820-780-1 MS
Matrix: Solid
Analysis Batch: 3488

Client Sample ID: SP-1 (0-0.5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	13.2		253	270.8		mg/Kg		102	90 - 110		

Lab Sample ID: 820-780-1 MSD
Matrix: Solid
Analysis Batch: 3488

Client Sample ID: SP-1 (0-0.5)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	13.2		253	270.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-3465/1-A
Matrix: Solid
Analysis Batch: 3489

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 19:19	1

Lab Sample ID: LCS 880-3465/2-A
Matrix: Solid
Analysis Batch: 3489

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-3465/3-A
Matrix: Solid
Analysis Batch: 3489

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	252.4		mg/Kg		101	90 - 110	0	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 820-780-5 MS
Matrix: Solid
Analysis Batch: 3489

Client Sample ID: SP-2 (1.5-2)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	7.71		250	265.0		mg/Kg		103	90 - 110		

Lab Sample ID: 820-780-5 MSD
Matrix: Solid
Analysis Batch: 3489

Client Sample ID: SP-2 (1.5-2)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.71		250	265.0		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 820-780-15 MS
Matrix: Solid
Analysis Batch: 3489

Client Sample ID: SP-5 (3.5-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	2910		1250	4245		mg/Kg		107	90 - 110		

Lab Sample ID: 820-780-15 MSD
Matrix: Solid
Analysis Batch: 3489

Client Sample ID: SP-5 (3.5-4)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2910		1250	4244		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-780-1
Project/Site: Zeus SWD Release

HPLC/IC

Leach Batch: 3464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-780-1	SP-1 (0-0.5)	Soluble	Solid	DI Leach	
820-780-2	SP-1 (1.5-2)	Soluble	Solid	DI Leach	
820-780-3	SP-1 (3.5-4)	Soluble	Solid	DI Leach	
820-780-4	SP-2 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-3464/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3464/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3464/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-780-1 MS	SP-1 (0-0.5)	Soluble	Solid	DI Leach	
820-780-1 MSD	SP-1 (0-0.5)	Soluble	Solid	DI Leach	

Leach Batch: 3465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-780-5	SP-2 (1.5-2)	Soluble	Solid	DI Leach	
820-780-6	SP-2 (3.5-4)	Soluble	Solid	DI Leach	
820-780-7	SP-3 (0-0.5)	Soluble	Solid	DI Leach	
820-780-8	SP-3 (1.5-2)	Soluble	Solid	DI Leach	
820-780-9	SP-3 (3.5-4)	Soluble	Solid	DI Leach	
820-780-10	SP-4 (0-0.5)	Soluble	Solid	DI Leach	
820-780-11	SP-4 (1.5-2)	Soluble	Solid	DI Leach	
820-780-12	SP-4 (3.5-4)	Soluble	Solid	DI Leach	
820-780-13	SP-5 (0-0.5)	Soluble	Solid	DI Leach	
820-780-14	SP-5 (1.5-2)	Soluble	Solid	DI Leach	
820-780-15	SP-5 (3.5-4)	Soluble	Solid	DI Leach	
MB 880-3465/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3465/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3465/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-780-5 MS	SP-2 (1.5-2)	Soluble	Solid	DI Leach	
820-780-5 MSD	SP-2 (1.5-2)	Soluble	Solid	DI Leach	
820-780-15 MS	SP-5 (3.5-4)	Soluble	Solid	DI Leach	
820-780-15 MSD	SP-5 (3.5-4)	Soluble	Solid	DI Leach	

Analysis Batch: 3488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-780-1	SP-1 (0-0.5)	Soluble	Solid	300.0	3464
820-780-2	SP-1 (1.5-2)	Soluble	Solid	300.0	3464
820-780-3	SP-1 (3.5-4)	Soluble	Solid	300.0	3464
820-780-4	SP-2 (0-0.5)	Soluble	Solid	300.0	3464
MB 880-3464/1-A	Method Blank	Soluble	Solid	300.0	3464
LCS 880-3464/2-A	Lab Control Sample	Soluble	Solid	300.0	3464
LCSD 880-3464/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3464
820-780-1 MS	SP-1 (0-0.5)	Soluble	Solid	300.0	3464
820-780-1 MSD	SP-1 (0-0.5)	Soluble	Solid	300.0	3464

Analysis Batch: 3489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-780-5	SP-2 (1.5-2)	Soluble	Solid	300.0	3465
820-780-6	SP-2 (3.5-4)	Soluble	Solid	300.0	3465
820-780-7	SP-3 (0-0.5)	Soluble	Solid	300.0	3465
820-780-8	SP-3 (1.5-2)	Soluble	Solid	300.0	3465
820-780-9	SP-3 (3.5-4)	Soluble	Solid	300.0	3465
820-780-10	SP-4 (0-0.5)	Soluble	Solid	300.0	3465

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

HPLC/IC (Continued)

Analysis Batch: 3489 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-780-11	SP-4 (1.5-2)	Soluble	Solid	300.0	3465
820-780-12	SP-4 (3.5-4)	Soluble	Solid	300.0	3465
820-780-13	SP-5 (0-0.5)	Soluble	Solid	300.0	3465
820-780-14	SP-5 (1.5-2)	Soluble	Solid	300.0	3465
820-780-15	SP-5 (3.5-4)	Soluble	Solid	300.0	3465
MB 880-3465/1-A	Method Blank	Soluble	Solid	300.0	3465
LCS 880-3465/2-A	Lab Control Sample	Soluble	Solid	300.0	3465
LCSD 880-3465/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3465
820-780-5 MS	SP-2 (1.5-2)	Soluble	Solid	300.0	3465
820-780-5 MSD	SP-2 (1.5-2)	Soluble	Solid	300.0	3465
820-780-15 MS	SP-5 (3.5-4)	Soluble	Solid	300.0	3465
820-780-15 MSD	SP-5 (3.5-4)	Soluble	Solid	300.0	3465

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-1 (0-0.5)
Date Collected: 05/20/21 15:05
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	3464	05/25/21 11:49	CH	XEN MID
Soluble	Analysis	300.0		1			3488	05/25/21 16:42	CH	XEN MID

Client Sample ID: SP-1 (1.5-2)
Date Collected: 05/20/21 15:10
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	3464	05/25/21 11:49	CH	XEN MID
Soluble	Analysis	300.0		1			3488	05/25/21 16:57	CH	XEN MID

Client Sample ID: SP-1 (3.5-4)
Date Collected: 05/20/21 15:15
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	3464	05/25/21 11:49	CH	XEN MID
Soluble	Analysis	300.0		1			3488	05/25/21 17:02	CH	XEN MID

Client Sample ID: SP-2 (0-0.5)
Date Collected: 05/20/21 15:20
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	3464	05/25/21 11:49	CH	XEN MID
Soluble	Analysis	300.0		1			3488	05/25/21 17:07	CH	XEN MID

Client Sample ID: SP-2 (1.5-2)
Date Collected: 05/20/21 15:25
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-5
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			5.00 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 19:34	CH	XEN MID

Client Sample ID: SP-2 (3.5-4)
Date Collected: 05/20/21 15:30
Date Received: 05/24/21 16:25

Lab Sample ID: 820-780-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 19:48	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-3 (0-0.5)

Lab Sample ID: 820-780-7
Matrix: Solid
Date Collected: 05/20/21 15:35
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	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 19:53	CH	XEN MID

Client Sample ID: SP-3 (1.5-2)

Lab Sample ID: 820-780-8
Matrix: Solid
Date Collected: 05/20/21 15:40
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			4.98 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 19:58	CH	XEN MID

Client Sample ID: SP-3 (3.5-4)

Lab Sample ID: 820-780-9
Matrix: Solid
Date Collected: 05/20/21 15:45
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			5.01 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:03	CH	XEN MID

Client Sample ID: SP-4 (0-0.5)

Lab Sample ID: 820-780-10
Matrix: Solid
Date Collected: 05/20/21 15:50
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			5.03 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:18	CH	XEN MID

Client Sample ID: SP-4 (1.5-2)

Lab Sample ID: 820-780-11
Matrix: Solid
Date Collected: 05/20/21 15:55
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			5.05 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:23	CH	XEN MID

Client Sample ID: SP-4 (3.5-4)

Lab Sample ID: 820-780-12
Matrix: Solid
Date Collected: 05/20/21 16:00
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			5.05 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:28	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Client Sample ID: SP-5 (0-0.5)

Lab Sample ID: 820-780-13

Date Collected: 05/20/21 16:05
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			4.96 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:32	CH	XEN MID

Client Sample ID: SP-5 (1.5-2)

Lab Sample ID: 820-780-14

Date Collected: 05/20/21 16:10
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	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		1			3489	05/25/21 20:37	CH	XEN MID

Client Sample ID: SP-5 (3.5-4)

Lab Sample ID: 820-780-15

Date Collected: 05/20/21 16:15
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			5.00 g	50 mL	3465	05/25/21 11:51	CH	XEN MID
Soluble	Analysis	300.0		5			3489	05/25/21 20:42	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: 820-780-1
Project/Site: Zeus SWD Release

Laboratory: Eurofins Xenco, Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

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

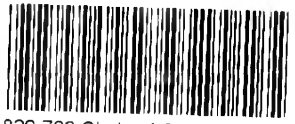
Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD Release

Job ID: 820-780-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
820-780-1	SP-1 (0-0.5)	Solid	05/20/21 15:05	05/24/21 16:25	
820-780-2	SP-1 (1.5-2)	Solid	05/20/21 15:10	05/24/21 16:25	
820-780-3	SP-1 (3.5-4)	Solid	05/20/21 15:15	05/24/21 16:25	
820-780-4	SP-2 (0-0.5)	Solid	05/20/21 15:20	05/24/21 16:25	
820-780-5	SP-2 (1.5-2)	Solid	05/20/21 15:25	05/24/21 16:25	
820-780-6	SP-2 (3.5-4)	Solid	05/20/21 15:30	05/24/21 16:25	
820-780-7	SP-3 (0-0.5)	Solid	05/20/21 15:35	05/24/21 16:25	
820-780-8	SP-3 (1.5-2)	Solid	05/20/21 15:40	05/24/21 16:25	
820-780-9	SP-3 (3.5-4)	Solid	05/20/21 15:45	05/24/21 16:25	
820-780-10	SP-4 (0-0.5)	Solid	05/20/21 15:50	05/24/21 16:25	
820-780-11	SP-4 (1.5-2)	Solid	05/20/21 15:55	05/24/21 16:25	
820-780-12	SP-4 (3.5-4)	Solid	05/20/21 16:00	05/24/21 16:25	
820-780-13	SP-5 (0-0.5)	Solid	05/20/21 16:05	05/24/21 16:25	
820-780-14	SP-5 (1.5-2)	Solid	05/20/21 16:10	05/24/21 16:25	
820-780-15	SP-5 (3.5-4)	Solid	05/20/21 16:15	05/24/21 16:25	

Released to Imaging: 3/21/2022 8:15:26 AM

Received by OCD: 2/16/2022 9:49:04 AM



820-780 Chain of Custody

Loc: 820
780

AIN OF CUSTODY RECORD

Terracon

Lubbock, Texas 79424

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C) -9.3/-9.34

Page 1 of 1

Office Location: Lubbock
Phone:
Project Manager: Joseph Guesnier
Contact: Joeph Guesnier (806) 544-9276
Sampler's Name: Joseph Guesnier
SRS #:
Sampler's Signature:

Project Number: AR197210
Project Name: Zeus SWD Release

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 Extended 8015	BTEX (EPA Method 8021B)	Lab Sample ID
S	5/20/2021	15:05		X	SP-1 (0 - .5)	0	0.5'		X			X			820-780-1
S	5/20/2021	15:10		X	SP-1 (1.5 - 2)	1.5'	2'		X			X			2
S	5/20/2021	15:15		X	SP-1 (3.5 - 4)	3.5'	4'		X			X			3
S	5/20/2021	15:20		X	SP-2 (0 - .5)	0	0.5'		X			X			4
S	5/20/2021	15:25		X	SP-2 (1.5 - 2)	1.5'	2'		X			X			5
S	5/20/2021	15:30		X	SP-2 (3.5 - 4)	3.5'	4'		X			X			6
S	5/20/2021	15:35		X	SP-3 (0 - .5)	0	0.5'		X			X			7
S	5/20/2021	15:40		X	SP-3 (1.5 - 2)	1.5'	2'		X			X			8
S	5/20/2021	15:45		X	SP-3 (3.5 - 4)	3.5'	4'		X			X			9
S	5/20/2021	15:50		X	SP-4 (0 - .5)	0	0.5'		X			X			10
S	5/20/2021	15:55		X	SP-4 (1.5 - 2)	1.5'	2'		X			X			11
S	5/20/2021	16:00		X	SP-4 (3.5 - 4)	3.5'	4'		X			X			12
S	5/20/2021	16:05		X	SP-5 (0 - .5)	0	0.5'		X			X			13
S	5/20/2021	16:10		X	SP-5 (1.5 - 2)	1.5'	2'		X			X			14
S	5/20/2021	16:15		X	SP-5 (3.5 - 4)	3.5'	4'		X			X			15

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

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 _____

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists Job Number: 820-780-1

Login Number: 780 **List Source: Eurofins Xenco, Lubbock**
List Number: 1
Creator: Turner, Michael

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: 820-780-1

Login Number: 780
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 05/25/21 11:25 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, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-4209-1
Client Project/Site: Zeus

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

Attn: Joseph Guesnier

JKRAMER

Authorized for release by:
7/29/2021 12:55:51 PM

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

LINKS

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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.

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Laboratory Job ID: 880-4209-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists Job ID: 880-4209-1
Project/Site: Zeus

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

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: Zeus

Job ID: 880-4209-1

Job ID: 880-4209-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-4209-1

Receipt
The samples were received on 7/21/2021 12:19 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 11.2°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: B D-7 (880-4209-5), B B-8 (880-4209-9), B B-9 (880-4209-10) and B C-10 (880-4209-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: A-D-5 (880-4209-47), A-F-1 (880-4209-51) and A-G-1 (880-4209-53). 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.

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 880-5536 and 880-5536 and analytical batch 880-5622 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: A-C-3 (880-4209-31), A-C-4 (880-4209-32), A-C-5 (880-4209-33), A-B-2 (880-4209-34), A-B-3 (880-4209-35), A-B-4 (880-4209-36), A-B-5 (880-4209-37), A-A-3 (880-4209-38), A-A-4 (880-4209-39), A-A-5 (880-4209-40), (880-4209-A-31-D MS) and (880-4209-A-31-E 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: Zeus

Job ID: 880-4209-1

Client Sample ID: B E-4

Lab Sample ID: 880-4209-1

Date Collected: 07/19/21 10:00
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
Ethylbenzene	**0.00114**	**J**	0.00199	0.000563	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:13	1
Total BTEX	**0.00114**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:13*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:13*	*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		07/21/21 16:03	07/28/21 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 12:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 12:23	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*07/21/21 16:03*	*07/28/21 12:23*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/21/21 16:03*	*07/28/21 12:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		5.04	0.865	mg/Kg			07/25/21 06:37	1

Client Sample ID: B E-5

Lab Sample ID: 880-4209-2

Date Collected: 07/19/21 10:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
o-Xylene	**0.00106**	**J**	0.00199	0.000343	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
Xylenes, Total	**0.00106**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:33	1
Total BTEX	**0.00106**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:15	07/22/21 08:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:33*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B E-5

Lab Sample ID: 880-4209-2
Matrix: Solid
Date Collected: 07/19/21 10:05
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:03	07/28/21 13:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 13:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 13:23	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*07/21/21 16:03*	*07/28/21 13:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/21/21 16:03*	*07/28/21 13:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**77.1**		4.99	0.857	mg/Kg			07/25/21 06:53	1

Client Sample ID: B E-6

Lab Sample ID: 880-4209-3
Matrix: Solid
Date Collected: 07/19/21 10:10
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
Toluene	**0.000638**	**J**	0.00201	0.000459	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:15	07/22/21 08:54	1
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:15	07/22/21 08:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:54*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:15*	*07/22/21 08:54*	*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		07/21/21 16:03	07/28/21 13:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 13:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 13:43	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/21/21 16:03*	*07/28/21 13:43*	*1*
o-Terphenyl	*103*		*70 - 130*	*07/21/21 16:03*	*07/28/21 13:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.5**		4.96	0.851	mg/Kg			07/25/21 06:59	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B D-6

Lab Sample ID: 880-4209-4

Date Collected: 07/19/21 10:15
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00144**	**J**	0.00200	0.000385	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
m-Xylene & p-Xylene	**0.00209**	**J**	0.00400	0.00101	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
o-Xylene	**0.000614**	**J**	0.00200	0.000344	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
Xylenes, Total	**0.00270**	**J**	0.00400	0.00101	mg/Kg		07/21/21 13:15	07/22/21 09:15	1
Total BTEX	**0.00414**		0.00400	0.00101	mg/Kg		07/21/21 13:15	07/22/21 09:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/21/21 13:15*	*07/22/21 09:15*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/21/21 13:15*	*07/22/21 09:15*	*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		07/21/21 16:03	07/28/21 14:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 14:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 14:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:04*	*1*
o-Terphenyl	*110*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**149**		4.96	0.851	mg/Kg			07/25/21 07:04	1

Client Sample ID: B D-7

Lab Sample ID: 880-4209-5

Date Collected: 07/19/21 10:20
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
Toluene	**0.000560**	**J**	0.00199	0.000454	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
Ethylbenzene	**0.000910**	**J**	0.00199	0.000563	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
m-Xylene & p-Xylene	**0.00159**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
o-Xylene	**0.000637**	**J**	0.00199	0.000343	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
Xylenes, Total	**0.00223**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:28	1
Total BTEX	**0.00370**	**J**	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*07/21/21 13:25*	*07/22/21 01:28*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*07/21/21 13:25*	*07/22/21 01:28*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B D-7

Lab Sample ID: 880-4209-5
Matrix: Solid
Date Collected: 07/19/21 10:20
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:03	07/28/21 14:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/21/21 16:03	07/28/21 14:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/21/21 16:03	07/28/21 14:23	1
Total TPH	<49.8	U	49.8		mg/Kg		07/21/21 16:03	07/28/21 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:23*	*1*
o-Terphenyl	*115*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**166**		4.99	0.857	mg/Kg			07/25/21 07:09	1

Client Sample ID: B C-8

Lab Sample ID: 880-4209-6
Matrix: Solid
Date Collected: 07/19/21 10:25
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:48	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*07/21/21 13:25*	*07/22/21 01:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 01:48*	*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	<49.7	U	49.7		mg/Kg		07/21/21 16:03	07/28/21 14:44	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/21/21 16:03	07/28/21 14:44	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/21/21 16:03	07/28/21 14:44	1
Total TPH	<49.7	U	49.7		mg/Kg		07/21/21 16:03	07/28/21 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:44*	*1*
o-Terphenyl	*110*		*70 - 130*	*07/21/21 16:03*	*07/28/21 14:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**361**		5.05	0.867	mg/Kg			07/25/21 07:26	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B C-9

Lab Sample ID: 880-4209-7

Date Collected: 07/19/21 10:30
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:09	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:09*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:09*	*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		07/21/21 16:03	07/28/21 15:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 15:04	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 15:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:04*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		5.03	0.863	mg/Kg			07/25/21 07:31	1

Client Sample ID: B A-10

Lab Sample ID: 880-4209-8

Date Collected: 07/19/21 10:35
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:29	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:29*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:29*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B A-10

Lab Sample ID: 880-4209-8
Matrix: Solid
Date Collected: 07/19/21 10:35
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

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		07/21/21 16:03	07/28/21 15:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:24	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:24*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.7**		5.02	0.862	mg/Kg			07/25/21 07:36	1

Client Sample ID: B B-8

Lab Sample ID: 880-4209-9
Matrix: Solid
Date Collected: 07/19/21 10:40
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
Toluene	**0.000454**	**J**	0.00199	0.000453	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 02:50	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:50*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*07/21/21 13:25*	*07/22/21 02:50*	*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		07/21/21 16:03	07/28/21 15:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:44	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:44*	*1*
o-Terphenyl	*111*		*70 - 130*	*07/21/21 16:03*	*07/28/21 15:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.1**		5.00	0.858	mg/Kg			07/25/21 07:42	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B B-9

Lab Sample ID: 880-4209-10

Date Collected: 07/19/21 10:45
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000544**	**J**	0.00200	0.000385	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
Toluene	**0.000601**	**J**	0.00200	0.000456	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
o-Xylene	**0.000416**	**J**	0.00200	0.000344	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:10	1
Total BTEX	**0.00156**	**J**	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:10*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:10*	*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	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 16:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 16:04	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 16:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*07/21/21 16:03*	*07/28/21 16:04*	*1*
o-Terphenyl	*114*		*70 - 130*	*07/21/21 16:03*	*07/28/21 16:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.59**		4.98	0.855	mg/Kg			07/25/21 07:47	1

Client Sample ID: B B-10

Lab Sample ID: 880-4209-11

Date Collected: 07/19/21 10:50
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000382	U	0.00198	0.000382	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
Toluene	<0.000452	U	0.00198	0.000452	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
Ethylbenzene	<0.000561	U	0.00198	0.000561	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
m-Xylene & p-Xylene	<0.00100	U	0.00397	0.00100	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
Xylenes, Total	<0.00100	U	0.00397	0.00100	mg/Kg		07/21/21 13:25	07/22/21 03:31	1
Total BTEX	<0.00100	U	0.00397	0.00100	mg/Kg		07/21/21 13:25	07/22/21 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:31*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:31*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: B B-10
Lab Sample ID: 880-4209-11
Date Collected: 07/19/21 10:50
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

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		07/21/21 16:03	07/28/21 16:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 16:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 16:44	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/21/21 16:03*	*07/28/21 16:44*	*1*
o-Terphenyl	*116*		*70 - 130*	*07/21/21 16:03*	*07/28/21 16:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31.0**		4.98	0.855	mg/Kg			07/25/21 07:53	1

Client Sample ID: B C-6
Lab Sample ID: 880-4209-12
Date Collected: 07/19/21 10:55
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
o-Xylene	**0.000393**	**J**	0.00199	0.000343	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:51	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:51*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 03:51*	*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	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 17:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 17:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 17:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:04*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.5**		5.02	0.862	mg/Kg			07/25/21 08:09	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: B C-7
Lab Sample ID: 880-4209-13
Date Collected: 07/19/21 11:00
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 04:11	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 04:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/21/21 13:25*	*07/22/21 04:11*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/21/21 13:25*	*07/22/21 04:11*	*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		07/21/21 16:03	07/28/21 17:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:24	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:24*	*1*
o-Terphenyl	*107*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.8**		4.96	0.851	mg/Kg			07/25/21 08:14	1

Client Sample ID: B C-10
Lab Sample ID: 880-4209-14
Date Collected: 07/19/21 11:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
o-Xylene	**0.000388**	**J**	0.00198	0.000341	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 04:32	1
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*07/21/21 13:25*	*07/22/21 04:32*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*07/21/21 13:25*	*07/22/21 04:32*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: B C-10
Lab Sample ID: 880-4209-14
Date Collected: 07/19/21 11:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

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		07/21/21 16:03	07/28/21 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:44	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:44*	*1*
o-Terphenyl	*90*		*70 - 130*	*07/21/21 16:03*	*07/28/21 17:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**34.4**		4.95	0.850	mg/Kg			07/25/21 08:30	1

Client Sample ID: B D-3
Lab Sample ID: 880-4209-15
Date Collected: 07/19/21 11:10
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 06:21	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 06:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/21/21 13:25*	*07/22/21 06:21*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 06:21*	*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		07/21/21 16:03	07/28/21 18:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 18:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 18:05	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:05*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.3**		5.00	0.858	mg/Kg			07/25/21 08:36	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: B D-4
Lab Sample ID: 880-4209-16
Date Collected: 07/19/21 11:15
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 06:41	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 06:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*07/21/21 13:25*	*07/22/21 06:41*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/21/21 13:25*	*07/22/21 06:41*	*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		07/21/21 16:03	07/28/21 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:25	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:25*	*1*
o-Terphenyl	*110*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.9**		4.97	0.853	mg/Kg			07/25/21 08:41	1

Client Sample ID: B D-5
Lab Sample ID: 880-4209-17
Date Collected: 07/19/21 11:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
Toluene	**0.000540**	**J**	0.00198	0.000451	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 07:02	1
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:25	07/22/21 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:25*	*07/22/21 07:02*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 07:02*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B D-5

Lab Sample ID: 880-4209-17
Matrix: Solid
Date Collected: 07/19/21 11:20
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

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		07/21/21 16:03	07/28/21 18:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:45	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:45*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.9**		4.95	0.850	mg/Kg			07/25/21 08:46	1

Client Sample ID: B D-8

Lab Sample ID: 880-4209-18
Matrix: Solid
Date Collected: 07/19/21 11:25
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
o-Xylene	**0.000931**	**J**	0.00200	0.000345	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:22	1
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*X*	*70 - 130*	*07/21/21 13:25*	*07/22/21 07:22*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*07/21/21 13:25*	*07/22/21 07:22*	*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		07/21/21 16:03	07/28/21 19:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 19:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 19:06	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:03	07/28/21 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:06*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.6**		4.95	0.850	mg/Kg			07/25/21 08:52	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: B D-9
Lab Sample ID: 880-4209-19
Date Collected: 07/19/21 11:30
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:43	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:25	07/22/21 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*07/21/21 13:25*	*07/22/21 07:43*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/21/21 13:25*	*07/22/21 07:43*	*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		07/21/21 16:03	07/28/21 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:26	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:26*	*1*
o-Terphenyl	*97*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.66**		5.04	0.865	mg/Kg			07/25/21 08:57	1

Client Sample ID: B E-2
Lab Sample ID: 880-4209-20
Date Collected: 07/19/21 11:35
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:03	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:03*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:03*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B E-2

Lab Sample ID: 880-4209-20
Matrix: Solid
Date Collected: 07/19/21 11:35
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2

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		07/21/21 16:03	07/28/21 19:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:46	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:46*	*1*
o-Terphenyl	*109*		*70 - 130*	*07/21/21 16:03*	*07/28/21 19:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**108**		5.05	0.867	mg/Kg			07/25/21 09:03	1

Client Sample ID: B E-3

Lab Sample ID: 880-4209-21
Matrix: Solid
Date Collected: 07/19/21 11:40
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:25	07/22/21 08:23	1
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:25	07/22/21 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:23*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:23*	*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	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 12:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 12:23	1
Total TPH	<50.0	U F1	50.0		mg/Kg		07/21/21 16:18	07/28/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/21/21 16:18*	*07/28/21 12:23*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/21/21 16:18*	*07/28/21 12:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.1**		5.00	0.858	mg/Kg			07/25/21 23:50	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A F-2
Lab Sample ID: 880-4209-22
Date Collected: 07/19/21 11:45
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:44	1
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:25	07/22/21 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:44*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/21/21 13:25*	*07/22/21 08:44*	*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		07/21/21 16:18	07/28/21 13:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 13:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 13:23	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/21/21 16:18*	*07/28/21 13:23*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/21/21 16:18*	*07/28/21 13:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7670**		49.6	8.51	mg/Kg			07/26/21 00:06	10

Client Sample ID: A F-3
Lab Sample ID: 880-4209-23
Date Collected: 07/19/21 11:50
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 09:04	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:25	07/22/21 09:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/21/21 13:25*	*07/22/21 09:04*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/21/21 13:25*	*07/22/21 09:04*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A F-3

Lab Sample ID: 880-4209-23
Matrix: Solid
Date Collected: 07/19/21 11:50
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:18	07/28/21 13:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 13:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 13:43	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/21/21 16:18*	*07/28/21 13:43*	*1*
o-Terphenyl	*97*		*70 - 130*	*07/21/21 16:18*	*07/28/21 13:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**184**		4.95	0.850	mg/Kg			07/26/21 00:11	1

Client Sample ID: A-E-2

Lab Sample ID: 880-4209-24
Matrix: Solid
Date Collected: 07/19/21 11:55
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 09:25	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:25	07/22/21 09:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*07/21/21 13:25*	*07/22/21 09:25*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:25*	*07/22/21 09:25*	*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		07/21/21 16:18	07/28/21 14:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 14:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 14:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:04*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3200**		24.8	4.26	mg/Kg			07/26/21 00:16	5

Eurofins Xenco, Midland

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-E-3
Lab Sample ID: 880-4209-25
Date Collected: 07/19/21 12:00
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:00	1
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*X*	*70 - 130*	*07/21/21 13:29*	*07/21/21 19:00*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*07/21/21 13:29*	*07/21/21 19:00*	*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	<49.8	U	49.8		mg/Kg		07/21/21 16:18	07/28/21 14:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/21/21 16:18	07/28/21 14:23	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/21/21 16:18	07/28/21 14:23	1
Total TPH	<49.8	U	49.8		mg/Kg		07/21/21 16:18	07/28/21 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:23*	*1*
o-Terphenyl	*99*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**659**		5.02	0.862	mg/Kg			07/26/21 00:22	1

Client Sample ID: A-E-4
Lab Sample ID: 880-4209-26
Date Collected: 07/19/21 12:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:26	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/21/21 13:29*	*07/21/21 19:26*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*07/21/21 13:29*	*07/21/21 19:26*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-E-4
Lab Sample ID: 880-4209-26
Date Collected: 07/19/21 12:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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	<49.7	U	49.7		mg/Kg		07/21/21 16:18	07/28/21 14:44	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/21/21 16:18	07/28/21 14:44	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/21/21 16:18	07/28/21 14:44	1
Total TPH	<49.7	U	49.7		mg/Kg		07/21/21 16:18	07/28/21 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:44*	*1*
o-Terphenyl	*83*		*70 - 130*	*07/21/21 16:18*	*07/28/21 14:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.2**		5.05	0.867	mg/Kg			07/26/21 00:38	1

Client Sample ID: A-D-2
Lab Sample ID: 880-4209-27
Date Collected: 07/19/21 12:10
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:51	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/21/21 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*07/21/21 13:29*	*07/21/21 19:51*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/21/21 13:29*	*07/21/21 19:51*	*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		07/21/21 16:18	07/28/21 15:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 15:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 15:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:04*	*1*
o-Terphenyl	*109*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9250**		50.3	8.63	mg/Kg			07/26/21 00:43	10

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-D-3
Lab Sample ID: 880-4209-28
Date Collected: 07/19/21 12:15
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/21/21 20:17	1
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/21/21 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*07/21/21 13:29*	*07/21/21 20:17*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*07/21/21 13:29*	*07/21/21 20:17*	*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	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:24	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:24*	*1*
o-Terphenyl	*116*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**166**		5.02	0.862	mg/Kg			07/26/21 00:49	1

Client Sample ID: A-D-4
Lab Sample ID: 880-4209-29
Date Collected: 07/19/21 12:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 20:42	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/21/21 13:29*	*07/21/21 20:42*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/21/21 13:29*	*07/21/21 20:42*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-D-4
Lab Sample ID: 880-4209-29
Date Collected: 07/19/21 12:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:18	07/28/21 15:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:44	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:44*	*1*
o-Terphenyl	*108*		*70 - 130*	*07/21/21 16:18*	*07/28/21 15:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3110**		25.0	4.29	mg/Kg			07/26/21 00:54	5

Client Sample ID: A-C-2
Lab Sample ID: 880-4209-30
Date Collected: 07/19/21 12:25
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/21/21 21:08	1
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/21/21 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:08*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:08*	*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		07/21/21 16:18	07/28/21 16:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 16:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 16:04	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/21/21 16:18*	*07/28/21 16:04*	*1*
o-Terphenyl	*109*		*70 - 130*	*07/21/21 16:18*	*07/28/21 16:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.7**		4.98	0.855	mg/Kg			07/26/21 00:59	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-C-3
Lab Sample ID: 880-4209-31
Matrix: Solid
Date Collected: 07/19/21 12:30
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:34	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:34*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:34*	*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		07/21/21 16:18	07/28/21 16:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 16:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 16:44	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*07/21/21 16:18*	*07/28/21 16:44*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/21/21 16:18*	*07/28/21 16:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**854**		4.95	0.850	mg/Kg			07/26/21 01:05	1

Client Sample ID: A-C-4
Lab Sample ID: 880-4209-32
Matrix: Solid
Date Collected: 07/19/21 12:35
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:59	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/21/21 13:29	07/21/21 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:59*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/21/21 13:29*	*07/21/21 21:59*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-C-4

Lab Sample ID: 880-4209-32
Matrix: Solid
Date Collected: 07/19/21 12:35
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:18	07/28/21 17:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 17:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 17:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:04*	*1*
o-Terphenyl	*101*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**761**		5.02	0.862	mg/Kg			07/26/21 01:21	1

Client Sample ID: A-C-5

Lab Sample ID: 880-4209-33
Matrix: Solid
Date Collected: 07/19/21 12:40
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/21/21 22:25	1
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/21/21 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/21/21 13:29*	*07/21/21 22:25*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/21/21 13:29*	*07/21/21 22:25*	*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		07/21/21 16:18	07/28/21 17:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:24	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:24*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98.6**		5.04	0.865	mg/Kg			07/26/21 01:26	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-B-2
Lab Sample ID: 880-4209-34
Date Collected: 07/19/21 12:45
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 22:51	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*07/21/21 13:29*	*07/21/21 22:51*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*07/21/21 13:29*	*07/21/21 22:51*	*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		07/21/21 16:18	07/28/21 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:44	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:44*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/21/21 16:18*	*07/28/21 17:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.4**		4.95	0.850	mg/Kg			07/26/21 01:43	1

Client Sample ID: A-B-3
Lab Sample ID: 880-4209-35
Date Collected: 07/19/21 12:50
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:32	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*07/21/21 13:29*	*07/22/21 00:32*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*07/21/21 13:29*	*07/22/21 00:32*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-B-3

Lab Sample ID: 880-4209-35
Matrix: Solid
Date Collected: 07/19/21 12:50
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

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		07/21/21 16:18	07/28/21 18:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 18:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 18:05	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:05*	*1*
o-Terphenyl	*122*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		5.00	0.858	mg/Kg			07/26/21 01:48	1

Client Sample ID: A-B-4

Lab Sample ID: 880-4209-36
Matrix: Solid
Date Collected: 07/19/21 12:55
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:57	1
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg		07/21/21 13:29	07/22/21 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*07/21/21 13:29*	*07/22/21 00:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/21/21 13:29*	*07/22/21 00:57*	*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		07/21/21 16:18	07/28/21 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:25	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:25*	*1*
o-Terphenyl	*117*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1610**		24.9	4.27	mg/Kg			07/26/21 01:53	5

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-B-5
Lab Sample ID: 880-4209-37
Date Collected: 07/19/21 13:00
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 4 - 4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		07/21/21 13:29	07/22/21 01:23	1
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg		07/21/21 13:29	07/22/21 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*07/21/21 13:29*	*07/22/21 01:23*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/21/21 13:29*	*07/22/21 01:23*	*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	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:45	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:45*	*1*
o-Terphenyl	*89*		*70 - 130*	*07/21/21 16:18*	*07/28/21 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**67.0**		4.95	0.850	mg/Kg			07/26/21 01:59	1

Client Sample ID: A-A-3
Lab Sample ID: 880-4209-38
Date Collected: 07/19/21 13:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/22/21 01:48	1
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg		07/21/21 13:29	07/22/21 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*07/21/21 13:29*	*07/22/21 01:48*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/21/21 13:29*	*07/22/21 01:48*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-A-3
Lab Sample ID: 880-4209-38
Date Collected: 07/19/21 13:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/21/21 16:18	07/28/21 19:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 19:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 19:06	1
Total TPH	<49.9	U	49.9		mg/Kg		07/21/21 16:18	07/28/21 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:06*	*1*
o-Terphenyl	*99*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.77**		4.98	0.855	mg/Kg			07/26/21 02:04	1

Client Sample ID: A-A-4
Lab Sample ID: 880-4209-39
Date Collected: 07/19/21 13:10
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:13	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*07/21/21 13:29*	*07/22/21 02:13*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/21/21 13:29*	*07/22/21 02:13*	*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		07/21/21 16:18	07/28/21 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:26	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:26*	*1*
o-Terphenyl	*85*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.4**		5.04	0.865	mg/Kg			07/26/21 02:09	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-A-5
Lab Sample ID: 880-4209-40
Date Collected: 07/19/21 13:15
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:38	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/21/21 13:29	07/22/21 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*07/21/21 13:29*	*07/22/21 02:38*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/21/21 13:29*	*07/22/21 02:38*	*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	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:46	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:46*	*1*
o-Terphenyl	*92*		*70 - 130*	*07/21/21 16:18*	*07/28/21 19:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.7**		5.00	0.858	mg/Kg			07/26/21 02:15	1

Client Sample ID: A-A-6
Lab Sample ID: 880-4209-41
Date Collected: 07/19/21 13:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/22/21 03:03	1
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg		07/21/21 13:29	07/22/21 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:03*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:03*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-A-6
Lab Sample ID: 880-4209-41
Date Collected: 07/19/21 13:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/22/21 09:48	07/28/21 22:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 22:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 22:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*07/22/21 09:48*	*07/28/21 22:04*	*1*
o-Terphenyl	*96*		*70 - 130*	*07/22/21 09:48*	*07/28/21 22:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.2**		5.00	0.858	mg/Kg			07/26/21 02:58	1

Client Sample ID: A-B-1
Lab Sample ID: 880-4209-42
Date Collected: 07/19/21 13:25
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 03:29	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 03:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:29*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:29*	*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		07/22/21 09:48	07/28/21 23:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/28/21 23:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/28/21 23:08	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/28/21 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:08*	*1*
o-Terphenyl	*91*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.54**		4.98	0.855	mg/Kg			07/26/21 03:14	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-B-6

Lab Sample ID: 880-4209-43
Matrix: Solid
Date Collected: 07/19/21 13:30
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/22/21 03:54	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/22/21 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:54*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*07/21/21 13:29*	*07/22/21 03:54*	*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		07/22/21 09:48	07/28/21 23:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:29	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:29*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.1**		4.95	0.850	mg/Kg			07/26/21 03:20	1

Client Sample ID: A-C-1

Lab Sample ID: 880-4209-44
Matrix: Solid
Date Collected: 07/19/21 13:35
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 04:19	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/21/21 13:29	07/22/21 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/21/21 13:29*	*07/22/21 04:19*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/21/21 13:29*	*07/22/21 04:19*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-C-1

Lab Sample ID: 880-4209-44
Matrix: Solid
Date Collected: 07/19/21 13:35
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/22/21 09:48	07/28/21 23:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:49	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:49*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/22/21 09:48*	*07/28/21 23:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.78**		4.96	0.851	mg/Kg			07/26/21 03:25	1

Client Sample ID: A-C-6

Lab Sample ID: 880-4209-45
Matrix: Solid
Date Collected: 07/19/21 13:40
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 20:22	1
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*X*	*70 - 130*	*07/22/21 09:30*	*07/22/21 20:22*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*07/22/21 09:30*	*07/22/21 20:22*	*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		07/22/21 09:48	07/29/21 00:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/22/21 09:48	07/29/21 00:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/22/21 09:48	07/29/21 00:10	1
Total TPH	<49.8	U	49.8		mg/Kg		07/22/21 09:48	07/29/21 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:10*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.2**		4.99	0.857	mg/Kg			07/26/21 03:30	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-D-1
Lab Sample ID: 880-4209-46
Date Collected: 07/19/21 13:45
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 22:03	1
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg		07/22/21 09:30	07/22/21 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*07/22/21 09:30*	*07/22/21 22:03*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*07/22/21 09:30*	*07/22/21 22:03*	*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	<49.7	U	49.7		mg/Kg		07/22/21 09:48	07/29/21 00:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/22/21 09:48	07/29/21 00:31	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/22/21 09:48	07/29/21 00:31	1
Total TPH	<49.7	U	49.7		mg/Kg		07/22/21 09:48	07/29/21 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:31*	*1*
o-Terphenyl	*84*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.5**		5.05	0.867	mg/Kg			07/26/21 03:47	1

Client Sample ID: A-D-5
Lab Sample ID: 880-4209-47
Date Collected: 07/19/21 13:50
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
Toluene	**0.000482**	**J**	0.00200	0.000456	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:29	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*07/22/21 09:30*	*07/22/21 22:29*	*1*
1,4-Difluorobenzene (Surr)	*69*	*X*	*70 - 130*	*07/22/21 09:30*	*07/22/21 22:29*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-D-5

Lab Sample ID: 880-4209-47
Matrix: Solid
Date Collected: 07/19/21 13:50
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/22/21 09:48	07/29/21 00:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 00:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 00:52	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:52*	*1*
o-Terphenyl	*87*		*70 - 130*	*07/22/21 09:48*	*07/29/21 00:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.4**		5.03	0.863	mg/Kg			07/26/21 03:52	1

Client Sample ID: A-D-6

Lab Sample ID: 880-4209-48
Matrix: Solid
Date Collected: 07/19/21 13:55
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:54	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/22/21 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*07/22/21 09:30*	*07/22/21 22:54*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/22/21 09:30*	*07/22/21 22:54*	*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		07/22/21 09:48	07/29/21 01:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:12	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:12*	*1*
o-Terphenyl	*82*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.2**		5.01	0.860	mg/Kg			07/26/21 03:57	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-E-1
Lab Sample ID: 880-4209-49
Date Collected: 07/19/21 14:00
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		07/22/21 09:30	07/22/21 23:20	1
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg		07/22/21 09:30	07/22/21 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*X*	*70 - 130*	*07/22/21 09:30*	*07/22/21 23:20*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/22/21 09:30*	*07/22/21 23:20*	*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		07/22/21 09:48	07/29/21 01:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:33	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:33*	*1*
o-Terphenyl	*89*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.3**		5.00	0.858	mg/Kg			07/26/21 04:03	1

Client Sample ID: A-E-5
Lab Sample ID: 880-4209-50
Date Collected: 07/19/21 14:05
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		07/22/21 09:30	07/22/21 23:45	1
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg		07/22/21 09:30	07/22/21 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*07/22/21 09:30*	*07/22/21 23:45*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/22/21 09:30*	*07/22/21 23:45*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-E-5

Lab Sample ID: 880-4209-50
Matrix: Solid
Date Collected: 07/19/21 14:05
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/22/21 09:48	07/29/21 01:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 01:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 01:54	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*07/22/21 09:48*	*07/29/21 01:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.73**		4.98	0.855	mg/Kg			07/26/21 04:08	1

Client Sample ID: A-F-1

Lab Sample ID: 880-4209-51
Matrix: Solid
Date Collected: 07/19/21 14:10
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		07/22/21 09:30	07/23/21 00:10	1
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg		07/22/21 09:30	07/23/21 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/22/21 09:30*	*07/23/21 00:10*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*07/22/21 09:30*	*07/23/21 00:10*	*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		07/22/21 09:48	07/29/21 02:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:35	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*07/22/21 09:48*	*07/29/21 02:35*	*1*
o-Terphenyl	*85*		*70 - 130*	*07/22/21 09:48*	*07/29/21 02:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.2**		4.98	0.855	mg/Kg			07/26/21 04:13	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-F-4
Lab Sample ID: 880-4209-52
Date Collected: 07/19/21 14:15
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/23/21 00:35	1
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg		07/22/21 09:30	07/23/21 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/22/21 09:30*	*07/23/21 00:35*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*07/22/21 09:30*	*07/23/21 00:35*	*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	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:56	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/29/21 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/22/21 09:48*	*07/29/21 02:56*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/22/21 09:48*	*07/29/21 02:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.5**		5.01	0.860	mg/Kg			07/26/21 04:30	1

Client Sample ID: A-G-1
Lab Sample ID: 880-4209-53
Date Collected: 07/19/21 14:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:01	1
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:01*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:01*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-G-1
Lab Sample ID: 880-4209-53
Date Collected: 07/19/21 14:20
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

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		07/22/21 09:48	07/29/21 03:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:17	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:17*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.58**	**J**	5.01	0.860	mg/Kg			07/25/21 22:59	1

Client Sample ID: A-G-2
Lab Sample ID: 880-4209-54
Date Collected: 07/19/21 14:25
Matrix: Solid
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:26	1
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:26*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:26*	*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		07/22/21 09:48	07/29/21 03:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:38	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:38*	*1*
o-Terphenyl	*101*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.2**		4.95	0.850	mg/Kg			07/25/21 23:16	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-G-3

Date Collected: 07/19/21 14:30
Date Received: 07/21/21 12:19
Sample Depth: 1.5' - 2'

Lab Sample ID: 880-4209-55

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:51	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/23/21 01:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:51*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*07/22/21 09:30*	*07/23/21 01:51*	*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		07/22/21 09:48	07/29/21 03:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:59	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:59	1
Total TPH	<49.9	U	49.9		mg/Kg		07/22/21 09:48	07/29/21 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:59*	*1*
o-Terphenyl	*103*		*70 - 130*	*07/22/21 09:48*	*07/29/21 03:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.92**		4.96	0.851	mg/Kg			07/25/21 23:21	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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)										
880-4209-1	B E-4	109	104										
880-4209-2	B E-5	108	103										
880-4209-3	B E-6	124	109										
880-4209-4	B D-6	107	103										
880-4209-5	B D-7	124	82										
880-4209-5 MS	B D-7	105	92										
880-4209-5 MSD	B D-7	99	95										
880-4209-6	B C-8	115	99										
880-4209-7	B C-9	115	95										
880-4209-8	B A-10	112	99										
880-4209-9	B B-8	127	91										
880-4209-10	B B-9	129	93										
880-4209-11	B B-10	104	98										
880-4209-12	B C-6	118	99										
880-4209-13	B C-7	114	102										
880-4209-14	B C-10	126	86										
880-4209-15	B D-3	105	99										
880-4209-16	B D-4	113	100										
880-4209-17	B D-5	109	99										
880-4209-18	B D-8	135 X	91										
880-4209-19	B D-9	110	98										
880-4209-20	B E-2	114	101										
880-4209-21	B E-3	109	98										
880-4209-22	A F-2	110	101										
880-4209-23	A F-3	114	102										
880-4209-24	A-E-2	113	99										
880-4209-25	A-E-3	132 X	72										
880-4209-25 MS	A-E-3	129	107										
880-4209-25 MSD	A-E-3	116	105										
880-4209-26	A-E-4	91	74										
880-4209-27	A-D-2	120	100										
880-4209-28	A-D-3	88	72										
880-4209-29	A-D-4	107	87										
880-4209-30	A-C-2	117	100										
880-4209-31	A-C-3	106	86										
880-4209-32	A-C-4	129	102										
880-4209-33	A-C-5	108	87										
880-4209-34	A-B-2	115	91										
880-4209-35	A-B-3	121	71										
880-4209-36	A-B-4	125	101										
880-4209-37	A-B-5	117	97										
880-4209-38	A-A-3	120	97										
880-4209-39	A-A-4	125	99										
880-4209-40	A-A-5	115	98										
880-4209-41	A-A-6	123	105										
880-4209-42	A-B-1	111	86										
880-4209-43	A-B-6	109	94										
880-4209-44	A-C-1	106	92										
880-4209-45	A-C-6	131 X	104										

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 880-4209-1
Project/Site: Zeus

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-4209-46	A-D-1	120	73
880-4209-47	A-D-5	81	69 X
880-4209-48	A-D-6	128	101
880-4209-49	A-E-1	131 X	100
880-4209-50	A-E-5	126	101
880-4209-51	A-F-1	108	89
880-4209-52	A-F-4	114	86
880-4209-53	A-G-1	107	92
880-4209-54	A-G-2	124	98
880-4209-55	A-G-3	88	83
LCS 880-5457/1-A	Lab Control Sample	100	98
LCS 880-5478/1-A	Lab Control Sample	101	89
LCS 880-5479/1-A	Lab Control Sample	106	109
LCS 880-5515/1-A	Lab Control Sample	117	105
LCSD 880-5457/2-A	Lab Control Sample Dup	92	93
LCSD 880-5478/2-A	Lab Control Sample Dup	103	94
LCSD 880-5479/2-A	Lab Control Sample Dup	111	105
LCSD 880-5515/2-A	Lab Control Sample Dup	112	99
MB 880-5453/5-A	Method Blank	104	93
MB 880-5456/5-A	Method Blank	108	81
MB 880-5457/5-A	Method Blank	112	87
MB 880-5478/5-A	Method Blank	109	93
MB 880-5479/5-A	Method Blank	75	83
MB 880-5515/5-A	Method Blank	81	82

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)
880-4209-1	B E-4	99	102
880-4209-1 MS	B E-4	97	90
880-4209-1 MSD	B E-4	93	86
880-4209-2	B E-5	101	104
880-4209-3	B E-6	96	103
880-4209-4	B D-6	102	110
880-4209-5	B D-7	104	115
880-4209-6	B C-8	104	110
880-4209-7	B C-9	107	113
880-4209-8	B A-10	100	106
880-4209-9	B B-8	100	111
880-4209-10	B B-9	106	114
880-4209-11	B B-10	108	116
880-4209-12	B C-6	100	104
880-4209-13	B C-7	100	107
880-4209-14	B C-10	87	90

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 880-4209-1
Project/Site: Zeus

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)								
880-4209-15	B D-3	99	106								
880-4209-16	B D-4	104	110								
880-4209-17	B D-5	95	100								
880-4209-18	B D-8	111	113								
880-4209-19	B D-9	92	97								
880-4209-20	B E-2	101	109								
880-4209-21	B E-3	86	88								
880-4209-21 MS	B E-3	97	97								
880-4209-21 MSD	B E-3	89	96								
880-4209-22	A F-2	93	100								
880-4209-23	A F-3	96	97								
880-4209-24	A-E-2	100	106								
880-4209-25	A-E-3	98	99								
880-4209-26	A-E-4	87	83								
880-4209-27	A-D-2	102	109								
880-4209-28	A-D-3	113	116								
880-4209-29	A-D-4	104	108								
880-4209-30	A-C-2	108	109								
880-4209-31	A-C-3	100	106								
880-4209-32	A-C-4	97	101								
880-4209-33	A-C-5	96	102								
880-4209-34	A-B-2	91	95								
880-4209-35	A-B-3	110	122								
880-4209-36	A-B-4	113	117								
880-4209-37	A-B-5	90	89								
880-4209-38	A-A-3	102	99								
880-4209-39	A-A-4	89	85								
880-4209-40	A-A-5	97	92								
880-4209-41	A-A-6	90	96								
880-4209-41 MS	A-A-6	78	78								
880-4209-41 MSD	A-A-6	82	79								
880-4209-42	A-B-1	86	91								
880-4209-43	A-B-6	94	100								
880-4209-44	A-C-1	85	88								
880-4209-45	A-C-6	90	95								
880-4209-46	A-D-1	81	84								
880-4209-47	A-D-5	83	87								
880-4209-48	A-D-6	80	82								
880-4209-49	A-E-1	84	89								
880-4209-50	A-E-5	84	85								
880-4209-51	A-F-1	82	85								
880-4209-52	A-F-4	85	88								
880-4209-53	A-G-1	85	88								
880-4209-54	A-G-2	91	101								
880-4209-55	A-G-3	92	103								
LCS 880-5492/2-A	Lab Control Sample	103	101								
LCS 880-5494/2-A	Lab Control Sample	110	119								
LCS 880-5526/2-A	Lab Control Sample	98	106								
LCSD 880-5492/3-A	Lab Control Sample Dup	112	112								
LCSD 880-5494/3-A	Lab Control Sample Dup	114	122								

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 880-4209-1
Project/Site: Zeus

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)								
LCSD 880-5526/3-A	Lab Control Sample Dup	97	104								
MB 880-5492/1-A	Method Blank	94	100								
MB 880-5494/1-A	Method Blank	101	104								
MB 880-5526/1-A	Method Blank	88	99								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5453/5-A
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5453

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:09	07/21/21 13:25	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:09	07/21/21 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/21/21 09:09*	*07/21/21 13:25*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/21/21 09:09*	*07/21/21 13:25*	*1*

Lab Sample ID: MB 880-5456/5-A
Matrix: Solid
Analysis Batch: 5467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5456

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0009875	J	0.00200	0.000385	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
Ethylbenzene	0.0007297	J	0.00200	0.000565	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
o-Xylene	0.0004628	J	0.00200	0.000344	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:24	07/21/21 14:20	1
Total BTEX	0.002180	J	0.00400	0.00101	mg/Kg		07/21/21 09:24	07/21/21 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/21/21 09:24*	*07/21/21 14:20*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*07/21/21 09:24*	*07/21/21 14:20*	*1*

Lab Sample ID: MB 880-5457/5-A
Matrix: Solid
Analysis Batch: 5467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:26	07/22/21 01:19	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 09:26	07/22/21 01:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/21/21 09:26*	*07/22/21 01:19*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/21/21 09:26*	*07/22/21 01:19*	*1*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: LCS 880-5457/1-A
Matrix: Solid
Analysis Batch: 5467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5457

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1033		mg/Kg		103	70 - 130		
Toluene			0.100	0.09678		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.09549		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1973		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09412		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-5457/2-A
Matrix: Solid
Analysis Batch: 5467

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5457

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09932		mg/Kg		99	70 - 130	4	35
Toluene			0.100	0.08715		mg/Kg		87	70 - 130	10	35
Ethylbenzene			0.100	0.08214		mg/Kg		82	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1792		mg/Kg		90	70 - 130	10	35
o-Xylene			0.100	0.08456		mg/Kg		85	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 880-5478/5-A
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5478

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 00:59	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:25	07/22/21 00:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/21/21 13:25*	*07/22/21 00:59*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/21/21 13:25*	*07/22/21 00:59*	*1*

Lab Sample ID: LCS 880-5478/1-A
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5478

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08319		mg/Kg		83	70 - 130		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: LCS 880-5478/1-A
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5478

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Toluene			0.100	0.09652		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1013		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2064		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.09957		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-5478/2-A
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5478

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08954		mg/Kg		90	70 - 130	7	35
Toluene			0.100	0.09732		mg/Kg		97	70 - 130	1	35
Ethylbenzene			0.100	0.1035		mg/Kg		104	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2102		mg/Kg		105	70 - 130	2	35
o-Xylene			0.100	0.1008		mg/Kg		101	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-4209-5 MS
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: B D-7
Prep Type: Total/NA
Prep Batch: 5478

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.000383	U	0.100	0.07565		mg/Kg		76	70 - 130		
Toluene	0.000560	J	0.100	0.07824		mg/Kg		78	70 - 130		
Ethylbenzene	0.000910	J	0.100	0.08335		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	0.00159	J	0.200	0.1701		mg/Kg		84	70 - 130		
o-Xylene	0.000637	J	0.100	0.08138		mg/Kg		81	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 880-4209-5 MSD
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: B D-7
Prep Type: Total/NA
Prep Batch: 5478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.000383	U	0.0998	0.07990		mg/Kg		80	70 - 130	5	35
Toluene	0.000560	J	0.0998	0.08069		mg/Kg		80	70 - 130	3	35
Ethylbenzene	0.000910	J	0.0998	0.08440		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.00159	J	0.200	0.1709		mg/Kg		85	70 - 130	0	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: 880-4209-5 MSD
Matrix: Solid
Analysis Batch: 5454

Client Sample ID: B D-7
Prep Type: Total/NA
Prep Batch: 5478

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
o-Xylene	0.000637	J	0.0998	0.08151		mg/Kg		81	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-5479/5-A
Matrix: Solid
Analysis Batch: 5480

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 18:35	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/21/21 13:29	07/21/21 18:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*07/21/21 13:29*	*07/21/21 18:35*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*07/21/21 13:29*	*07/21/21 18:35*	*1*

Lab Sample ID: LCS 880-5479/1-A
Matrix: Solid
Analysis Batch: 5480

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1089		mg/Kg		109	70 - 130
Toluene	0.100	0.09888		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1091		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2002		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09167		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-5479/2-A
Matrix: Solid
Analysis Batch: 5480

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5479

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	0	35
Toluene	0.100	0.1095		mg/Kg		109	70 - 130	10	35
Ethylbenzene	0.100	0.1196		mg/Kg		120	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130	5	35
o-Xylene	0.100	0.1056		mg/Kg		106	70 - 130	14	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-4209-25 MS — **Client Sample ID: A-E-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5480 — **Prep Batch: 5479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000386	U	0.100	0.1003		mg/Kg		100	70 - 130
Toluene	<0.000457	U	0.100	0.09284		mg/Kg		92	70 - 130
Ethylbenzene	<0.000566	U	0.100	0.1103		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.201	0.1944		mg/Kg		97	70 - 130
o-Xylene	<0.000345	U	0.100	0.09775		mg/Kg		97	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-4209-25 MSD — **Client Sample ID: A-E-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5480 — **Prep Batch: 5479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.000386	U	0.0994	0.09494		mg/Kg		96	70 - 130	5	35
Toluene	<0.000457	U	0.0994	0.08598		mg/Kg		86	70 - 130	8	35
Ethylbenzene	<0.000566	U	0.0994	0.1034		mg/Kg		104	70 - 130	6	35
m-Xylene & p-Xylene	<0.00101	U	0.199	0.1804		mg/Kg		91	70 - 130	7	35
o-Xylene	<0.000345	U	0.0994	0.09078		mg/Kg		91	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: MB 880-5515/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5530 — **Prep Batch: 5515**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 16:08	1
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg		07/22/21 09:30	07/22/21 16:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	07/22/21 09:30	07/22/21 16:08	1
1,4-Difluorobenzene (Surr)	82		70 - 130	07/22/21 09:30	07/22/21 16:08	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: LCS 880-5515/1-A
Matrix: Solid
Analysis Batch: 5530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5515

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1086		mg/Kg		109	70 - 130		
Toluene			0.100	0.09871		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1179		mg/Kg		118	70 - 130		
m-Xylene & p-Xylene			0.200	0.2056		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1026		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-5515/2-A
Matrix: Solid
Analysis Batch: 5530

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5515

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1018		mg/Kg		102	70 - 130	6	35
Toluene			0.100	0.09315		mg/Kg		93	70 - 130	6	35
Ethylbenzene			0.100	0.1110		mg/Kg		111	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1958		mg/Kg		98	70 - 130	5	35
o-Xylene			0.100	0.09852		mg/Kg		99	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-5492/1-A
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5492

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		07/21/21 16:03	07/28/21 10:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 10:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 10:22	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:03	07/28/21 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*07/21/21 16:03*	*07/28/21 10:22*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/21/21 16:03*	*07/28/21 10:22*	*1*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: LCS 880-5492/2-A
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5492

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	841.3		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	761.5		mg/Kg		76	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: LCSD 880-5492/3-A
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5492

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	953.1		mg/Kg		95	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	834.2		mg/Kg		83	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 880-4209-1 MS
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: B E-4
Prep Type: Total/NA
Prep Batch: 5492

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	996	919.0		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	996	912.8		mg/Kg		92	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Lab Sample ID: 880-4209-1 MSD
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: B E-4
Prep Type: Total/NA
Prep Batch: 5492

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	996	921.1		mg/Kg		91	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	881.5		mg/Kg		89	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: 880-4209-1 MSD
Matrix: Solid
Analysis Batch: 5725

Client Sample ID: B E-4
Prep Type: Total/NA
Prep Batch: 5492

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	86		70 - 130

Lab Sample ID: MB 880-5494/1-A
Matrix: Solid
Analysis Batch: 5727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5494

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		07/21/21 16:18	07/28/21 10:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 10:22	1
OIl Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 10:22	1
Total TPH	<50.0	U	50.0		mg/Kg		07/21/21 16:18	07/28/21 10:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	07/21/21 16:18	07/28/21 10:22	1
o-Terphenyl	104		70 - 130	07/21/21 16:18	07/28/21 10:22	1

Lab Sample ID: LCS 880-5494/2-A
Matrix: Solid
Analysis Batch: 5727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	867.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	876.0		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-5494/3-A
Matrix: Solid
Analysis Batch: 5727

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	890.2		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	900.7		mg/Kg		90	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	122		70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: 880-4209-21 MS
Matrix: Solid
Analysis Batch: 5727

Client Sample ID: B E-3
Prep Type: Total/NA
Prep Batch: 5494

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	996	840.8		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	996	837.1		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 880-4209-21 MSD
Matrix: Solid
Analysis Batch: 5727

Client Sample ID: B E-3
Prep Type: Total/NA
Prep Batch: 5494

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	996	839.8		mg/Kg		84	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	846.3		mg/Kg		85	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: MB 880-5526/1-A
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5526

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		07/22/21 09:48	07/28/21 21:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 21:00	1
OIl Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 21:00	1
Total TPH	<50.0	U	50.0		mg/Kg		07/22/21 09:48	07/28/21 21:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*07/22/21 09:48*	*07/28/21 21:00*	*1*
o-Terphenyl	*99*		*70 - 130*	*07/22/21 09:48*	*07/28/21 21:00*	*1*

Lab Sample ID: LCS 880-5526/2-A
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	802.2		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	934.6		mg/Kg		93	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

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

Lab Sample ID: LCS 880-5526/2-A
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5526

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-5526/3-A
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5526

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	784.1		mg/Kg		78	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	918.1		mg/Kg		92	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 880-4209-41 MS
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: A-A-6
Prep Type: Total/NA
Prep Batch: 5526

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	996	784.4		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	996	923.2		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 880-4209-41 MSD
Matrix: Solid
Analysis Batch: 5739

Client Sample ID: A-A-6
Prep Type: Total/NA
Prep Batch: 5526

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	996	805.7		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	947.9		mg/Kg		95	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	79		70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5535/1-A
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858	mg/Kg			07/25/21 06:21	1

Lab Sample ID: LCS 880-5535/2-A
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	255.5		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-5535/3-A
Matrix: Solid
Analysis Batch: 5621

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	255.4		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-4209-1 MS
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: B E-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	110		252	353.6		mg/Kg		97	90 - 110		

Lab Sample ID: 880-4209-1 MSD
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: B E-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	110		252	352.0		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-4209-11 MS
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: B B-10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	31.0		249	271.2		mg/Kg		96	90 - 110		

Lab Sample ID: 880-4209-11 MSD
Matrix: Solid
Analysis Batch: 5621

Client Sample ID: B B-10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	31.0		249	271.8		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-5536/1-A
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858	mg/Kg			07/25/21 23:33	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-5536/2-A
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	245.2		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-5536/3-A
Matrix: Solid
Analysis Batch: 5622

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	245.7		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-4209-21 MS
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: B E-3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	86.1		250	330.9		mg/Kg		98	90 - 110		

Lab Sample ID: 880-4209-21 MSD
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: B E-3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	86.1		250	330.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-4209-31 MS
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: A-C-3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	854		248	1065	N1	mg/Kg		86	90 - 110		

Lab Sample ID: 880-4209-31 MSD
Matrix: Solid
Analysis Batch: 5622

Client Sample ID: A-C-3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	854		248	1066	N1	mg/Kg		86	90 - 110	0	20

Lab Sample ID: MB 880-5543/1-A
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858	mg/Kg			07/26/21 02:42	1

Lab Sample ID: LCS 880-5543/2-A
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	249.4		mg/Kg		100	90 - 110		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-5543/3-A
Matrix: Solid
Analysis Batch: 5623

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	249.6		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-4209-41 MS
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: A-A-6
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.2		250	281.0		mg/Kg		100	90 - 110

Lab Sample ID: 880-4209-41 MSD
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: A-A-6
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.2		250	281.4		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-4209-51 MS
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: A-F-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	32.2		249	281.2		mg/Kg		100	90 - 110

Lab Sample ID: 880-4209-51 MSD
Matrix: Solid
Analysis Batch: 5623

Client Sample ID: A-F-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	32.2		249	281.5		mg/Kg		100	90 - 110	0	20

Lab Sample ID: MB 880-5544/1-A
Matrix: Solid
Analysis Batch: 5624

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858	mg/Kg			07/25/21 22:43	1

Lab Sample ID: LCS 880-5544/2-A
Matrix: Solid
Analysis Batch: 5624

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	262.5		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-5544/3-A
Matrix: Solid
Analysis Batch: 5624

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	262.1		mg/Kg		105	90 - 110	0	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-4209-53 MS
Matrix: Solid
Analysis Batch: 5624

Client Sample ID: A-G-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	1.58	J	251	258.0		mg/Kg		102	90 - 110		

Lab Sample ID: 880-4209-53 MSD
Matrix: Solid
Analysis Batch: 5624

Client Sample ID: A-G-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.58	J	251	258.1		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists Job ID: 880-4209-1
Project/Site: Zeus

GC VOA

Prep Batch: 5453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5453/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 5454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-5	B D-7	Total/NA	Solid	8021B	5478
880-4209-6	B C-8	Total/NA	Solid	8021B	5478
880-4209-7	B C-9	Total/NA	Solid	8021B	5478
880-4209-8	B A-10	Total/NA	Solid	8021B	5478
880-4209-9	B B-8	Total/NA	Solid	8021B	5478
880-4209-10	B B-9	Total/NA	Solid	8021B	5478
880-4209-11	B B-10	Total/NA	Solid	8021B	5478
880-4209-12	B C-6	Total/NA	Solid	8021B	5478
880-4209-13	B C-7	Total/NA	Solid	8021B	5478
880-4209-14	B C-10	Total/NA	Solid	8021B	5478
880-4209-15	B D-3	Total/NA	Solid	8021B	5478
880-4209-16	B D-4	Total/NA	Solid	8021B	5478
880-4209-17	B D-5	Total/NA	Solid	8021B	5478
880-4209-18	B D-8	Total/NA	Solid	8021B	5478
880-4209-19	B D-9	Total/NA	Solid	8021B	5478
880-4209-20	B E-2	Total/NA	Solid	8021B	5478
880-4209-21	B E-3	Total/NA	Solid	8021B	5478
880-4209-22	A F-2	Total/NA	Solid	8021B	5478
880-4209-23	A F-3	Total/NA	Solid	8021B	5478
880-4209-24	A-E-2	Total/NA	Solid	8021B	5478
MB 880-5453/5-A	Method Blank	Total/NA	Solid	8021B	5453
MB 880-5478/5-A	Method Blank	Total/NA	Solid	8021B	5478
LCS 880-5478/1-A	Lab Control Sample	Total/NA	Solid	8021B	5478
LCSD 880-5478/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5478
880-4209-5 MS	B D-7	Total/NA	Solid	8021B	5478
880-4209-5 MSD	B D-7	Total/NA	Solid	8021B	5478

Prep Batch: 5456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5456/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 5457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Total/NA	Solid	5035	
880-4209-2	B E-5	Total/NA	Solid	5035	
880-4209-3	B E-6	Total/NA	Solid	5035	
880-4209-4	B D-6	Total/NA	Solid	5035	
MB 880-5457/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5457/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5457/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Total/NA	Solid	8021B	5457
880-4209-2	B E-5	Total/NA	Solid	8021B	5457
880-4209-3	B E-6	Total/NA	Solid	8021B	5457
880-4209-4	B D-6	Total/NA	Solid	8021B	5457

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC VOA (Continued)

Analysis Batch: 5467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5456/5-A	Method Blank	Total/NA	Solid	8021B	5456
MB 880-5457/5-A	Method Blank	Total/NA	Solid	8021B	5457
LCS 880-5457/1-A	Lab Control Sample	Total/NA	Solid	8021B	5457
LCSD 880-5457/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5457

Prep Batch: 5478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-5	B D-7	Total/NA	Solid	5035	
880-4209-6	B C-8	Total/NA	Solid	5035	
880-4209-7	B C-9	Total/NA	Solid	5035	
880-4209-8	B A-10	Total/NA	Solid	5035	
880-4209-9	B B-8	Total/NA	Solid	5035	
880-4209-10	B B-9	Total/NA	Solid	5035	
880-4209-11	B B-10	Total/NA	Solid	5035	
880-4209-12	B C-6	Total/NA	Solid	5035	
880-4209-13	B C-7	Total/NA	Solid	5035	
880-4209-14	B C-10	Total/NA	Solid	5035	
880-4209-15	B D-3	Total/NA	Solid	5035	
880-4209-16	B D-4	Total/NA	Solid	5035	
880-4209-17	B D-5	Total/NA	Solid	5035	
880-4209-18	B D-8	Total/NA	Solid	5035	
880-4209-19	B D-9	Total/NA	Solid	5035	
880-4209-20	B E-2	Total/NA	Solid	5035	
880-4209-21	B E-3	Total/NA	Solid	5035	
880-4209-22	A F-2	Total/NA	Solid	5035	
880-4209-23	A F-3	Total/NA	Solid	5035	
880-4209-24	A-E-2	Total/NA	Solid	5035	
MB 880-5478/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5478/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5478/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4209-5 MS	B D-7	Total/NA	Solid	5035	
880-4209-5 MSD	B D-7	Total/NA	Solid	5035	

Prep Batch: 5479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-25	A-E-3	Total/NA	Solid	5035	
880-4209-26	A-E-4	Total/NA	Solid	5035	
880-4209-27	A-D-2	Total/NA	Solid	5035	
880-4209-28	A-D-3	Total/NA	Solid	5035	
880-4209-29	A-D-4	Total/NA	Solid	5035	
880-4209-30	A-C-2	Total/NA	Solid	5035	
880-4209-31	A-C-3	Total/NA	Solid	5035	
880-4209-32	A-C-4	Total/NA	Solid	5035	
880-4209-33	A-C-5	Total/NA	Solid	5035	
880-4209-34	A-B-2	Total/NA	Solid	5035	
880-4209-35	A-B-3	Total/NA	Solid	5035	
880-4209-36	A-B-4	Total/NA	Solid	5035	
880-4209-37	A-B-5	Total/NA	Solid	5035	
880-4209-38	A-A-3	Total/NA	Solid	5035	
880-4209-39	A-A-4	Total/NA	Solid	5035	
880-4209-40	A-A-5	Total/NA	Solid	5035	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC VOA (Continued)

Prep Batch: 5479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-41	A-A-6	Total/NA	Solid	5035	
880-4209-42	A-B-1	Total/NA	Solid	5035	
880-4209-43	A-B-6	Total/NA	Solid	5035	
880-4209-44	A-C-1	Total/NA	Solid	5035	
MB 880-5479/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5479/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5479/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-4209-25 MS	A-E-3	Total/NA	Solid	5035	
880-4209-25 MSD	A-E-3	Total/NA	Solid	5035	

Analysis Batch: 5480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-25	A-E-3	Total/NA	Solid	8021B	5479
880-4209-26	A-E-4	Total/NA	Solid	8021B	5479
880-4209-27	A-D-2	Total/NA	Solid	8021B	5479
880-4209-28	A-D-3	Total/NA	Solid	8021B	5479
880-4209-29	A-D-4	Total/NA	Solid	8021B	5479
880-4209-30	A-C-2	Total/NA	Solid	8021B	5479
880-4209-31	A-C-3	Total/NA	Solid	8021B	5479
880-4209-32	A-C-4	Total/NA	Solid	8021B	5479
880-4209-33	A-C-5	Total/NA	Solid	8021B	5479
880-4209-34	A-B-2	Total/NA	Solid	8021B	5479
880-4209-35	A-B-3	Total/NA	Solid	8021B	5479
880-4209-36	A-B-4	Total/NA	Solid	8021B	5479
880-4209-37	A-B-5	Total/NA	Solid	8021B	5479
880-4209-38	A-A-3	Total/NA	Solid	8021B	5479
880-4209-39	A-A-4	Total/NA	Solid	8021B	5479
880-4209-40	A-A-5	Total/NA	Solid	8021B	5479
880-4209-41	A-A-6	Total/NA	Solid	8021B	5479
880-4209-42	A-B-1	Total/NA	Solid	8021B	5479
880-4209-43	A-B-6	Total/NA	Solid	8021B	5479
880-4209-44	A-C-1	Total/NA	Solid	8021B	5479
MB 880-5479/5-A	Method Blank	Total/NA	Solid	8021B	5479
LCS 880-5479/1-A	Lab Control Sample	Total/NA	Solid	8021B	5479
LCSD 880-5479/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5479
880-4209-25 MS	A-E-3	Total/NA	Solid	8021B	5479
880-4209-25 MSD	A-E-3	Total/NA	Solid	8021B	5479

Prep Batch: 5515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-45	A-C-6	Total/NA	Solid	5035	
880-4209-46	A-D-1	Total/NA	Solid	5035	
880-4209-47	A-D-5	Total/NA	Solid	5035	
880-4209-48	A-D-6	Total/NA	Solid	5035	
880-4209-49	A-E-1	Total/NA	Solid	5035	
880-4209-50	A-E-5	Total/NA	Solid	5035	
880-4209-51	A-F-1	Total/NA	Solid	5035	
880-4209-52	A-F-4	Total/NA	Solid	5035	
880-4209-53	A-G-1	Total/NA	Solid	5035	
880-4209-54	A-G-2	Total/NA	Solid	5035	
880-4209-55	A-G-3	Total/NA	Solid	5035	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC VOA (Continued)

Prep Batch: 5515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5515/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5515/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5515/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-45	A-C-6	Total/NA	Solid	8021B	5515
880-4209-46	A-D-1	Total/NA	Solid	8021B	5515
880-4209-47	A-D-5	Total/NA	Solid	8021B	5515
880-4209-48	A-D-6	Total/NA	Solid	8021B	5515
880-4209-49	A-E-1	Total/NA	Solid	8021B	5515
880-4209-50	A-E-5	Total/NA	Solid	8021B	5515
880-4209-51	A-F-1	Total/NA	Solid	8021B	5515
880-4209-52	A-F-4	Total/NA	Solid	8021B	5515
880-4209-53	A-G-1	Total/NA	Solid	8021B	5515
880-4209-54	A-G-2	Total/NA	Solid	8021B	5515
880-4209-55	A-G-3	Total/NA	Solid	8021B	5515
MB 880-5515/5-A	Method Blank	Total/NA	Solid	8021B	5515
LCS 880-5515/1-A	Lab Control Sample	Total/NA	Solid	8021B	5515
LCSD 880-5515/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5515

GC Semi VOA

Prep Batch: 5492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Total/NA	Solid	8015NM Prep	
880-4209-2	B E-5	Total/NA	Solid	8015NM Prep	
880-4209-3	B E-6	Total/NA	Solid	8015NM Prep	
880-4209-4	B D-6	Total/NA	Solid	8015NM Prep	
880-4209-5	B D-7	Total/NA	Solid	8015NM Prep	
880-4209-6	B C-8	Total/NA	Solid	8015NM Prep	
880-4209-7	B C-9	Total/NA	Solid	8015NM Prep	
880-4209-8	B A-10	Total/NA	Solid	8015NM Prep	
880-4209-9	B B-8	Total/NA	Solid	8015NM Prep	
880-4209-10	B B-9	Total/NA	Solid	8015NM Prep	
880-4209-11	B B-10	Total/NA	Solid	8015NM Prep	
880-4209-12	B C-6	Total/NA	Solid	8015NM Prep	
880-4209-13	B C-7	Total/NA	Solid	8015NM Prep	
880-4209-14	B C-10	Total/NA	Solid	8015NM Prep	
880-4209-15	B D-3	Total/NA	Solid	8015NM Prep	
880-4209-16	B D-4	Total/NA	Solid	8015NM Prep	
880-4209-17	B D-5	Total/NA	Solid	8015NM Prep	
880-4209-18	B D-8	Total/NA	Solid	8015NM Prep	
880-4209-19	B D-9	Total/NA	Solid	8015NM Prep	
880-4209-20	B E-2	Total/NA	Solid	8015NM Prep	
MB 880-5492/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5492/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5492/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4209-1 MS	B E-4	Total/NA	Solid	8015NM Prep	
880-4209-1 MSD	B E-4	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC Semi VOA

Prep Batch: 5494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-21	B E-3	Total/NA	Solid	8015NM Prep	
880-4209-22	A F-2	Total/NA	Solid	8015NM Prep	
880-4209-23	A F-3	Total/NA	Solid	8015NM Prep	
880-4209-24	A-E-2	Total/NA	Solid	8015NM Prep	
880-4209-25	A-E-3	Total/NA	Solid	8015NM Prep	
880-4209-26	A-E-4	Total/NA	Solid	8015NM Prep	
880-4209-27	A-D-2	Total/NA	Solid	8015NM Prep	
880-4209-28	A-D-3	Total/NA	Solid	8015NM Prep	
880-4209-29	A-D-4	Total/NA	Solid	8015NM Prep	
880-4209-30	A-C-2	Total/NA	Solid	8015NM Prep	
880-4209-31	A-C-3	Total/NA	Solid	8015NM Prep	
880-4209-32	A-C-4	Total/NA	Solid	8015NM Prep	
880-4209-33	A-C-5	Total/NA	Solid	8015NM Prep	
880-4209-34	A-B-2	Total/NA	Solid	8015NM Prep	
880-4209-35	A-B-3	Total/NA	Solid	8015NM Prep	
880-4209-36	A-B-4	Total/NA	Solid	8015NM Prep	
880-4209-37	A-B-5	Total/NA	Solid	8015NM Prep	
880-4209-38	A-A-3	Total/NA	Solid	8015NM Prep	
880-4209-39	A-A-4	Total/NA	Solid	8015NM Prep	
880-4209-40	A-A-5	Total/NA	Solid	8015NM Prep	
MB 880-5494/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5494/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4209-21 MS	B E-3	Total/NA	Solid	8015NM Prep	
880-4209-21 MSD	B E-3	Total/NA	Solid	8015NM Prep	

Prep Batch: 5526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-41	A-A-6	Total/NA	Solid	8015NM Prep	
880-4209-42	A-B-1	Total/NA	Solid	8015NM Prep	
880-4209-43	A-B-6	Total/NA	Solid	8015NM Prep	
880-4209-44	A-C-1	Total/NA	Solid	8015NM Prep	
880-4209-45	A-C-6	Total/NA	Solid	8015NM Prep	
880-4209-46	A-D-1	Total/NA	Solid	8015NM Prep	
880-4209-47	A-D-5	Total/NA	Solid	8015NM Prep	
880-4209-48	A-D-6	Total/NA	Solid	8015NM Prep	
880-4209-49	A-E-1	Total/NA	Solid	8015NM Prep	
880-4209-50	A-E-5	Total/NA	Solid	8015NM Prep	
880-4209-51	A-F-1	Total/NA	Solid	8015NM Prep	
880-4209-52	A-F-4	Total/NA	Solid	8015NM Prep	
880-4209-53	A-G-1	Total/NA	Solid	8015NM Prep	
880-4209-54	A-G-2	Total/NA	Solid	8015NM Prep	
880-4209-55	A-G-3	Total/NA	Solid	8015NM Prep	
MB 880-5526/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5526/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-4209-41 MS	A-A-6	Total/NA	Solid	8015NM Prep	
880-4209-41 MSD	A-A-6	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC Semi VOA

Analysis Batch: 5725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Total/NA	Solid	8015B NM	5492
880-4209-2	B E-5	Total/NA	Solid	8015B NM	5492
880-4209-3	B E-6	Total/NA	Solid	8015B NM	5492
880-4209-4	B D-6	Total/NA	Solid	8015B NM	5492
880-4209-5	B D-7	Total/NA	Solid	8015B NM	5492
880-4209-6	B C-8	Total/NA	Solid	8015B NM	5492
880-4209-7	B C-9	Total/NA	Solid	8015B NM	5492
880-4209-8	B A-10	Total/NA	Solid	8015B NM	5492
880-4209-9	B B-8	Total/NA	Solid	8015B NM	5492
880-4209-10	B B-9	Total/NA	Solid	8015B NM	5492
880-4209-11	B B-10	Total/NA	Solid	8015B NM	5492
880-4209-12	B C-6	Total/NA	Solid	8015B NM	5492
880-4209-13	B C-7	Total/NA	Solid	8015B NM	5492
880-4209-14	B C-10	Total/NA	Solid	8015B NM	5492
880-4209-15	B D-3	Total/NA	Solid	8015B NM	5492
880-4209-16	B D-4	Total/NA	Solid	8015B NM	5492
880-4209-17	B D-5	Total/NA	Solid	8015B NM	5492
880-4209-18	B D-8	Total/NA	Solid	8015B NM	5492
880-4209-19	B D-9	Total/NA	Solid	8015B NM	5492
880-4209-20	B E-2	Total/NA	Solid	8015B NM	5492
MB 880-5492/1-A	Method Blank	Total/NA	Solid	8015B NM	5492
LCS 880-5492/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5492
LCSD 880-5492/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5492
880-4209-1 MS	B E-4	Total/NA	Solid	8015B NM	5492
880-4209-1 MSD	B E-4	Total/NA	Solid	8015B NM	5492

Analysis Batch: 5727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-21	B E-3	Total/NA	Solid	8015B NM	5494
880-4209-22	A F-2	Total/NA	Solid	8015B NM	5494
880-4209-23	A F-3	Total/NA	Solid	8015B NM	5494
880-4209-24	A-E-2	Total/NA	Solid	8015B NM	5494
880-4209-25	A-E-3	Total/NA	Solid	8015B NM	5494
880-4209-26	A-E-4	Total/NA	Solid	8015B NM	5494
880-4209-27	A-D-2	Total/NA	Solid	8015B NM	5494
880-4209-28	A-D-3	Total/NA	Solid	8015B NM	5494
880-4209-29	A-D-4	Total/NA	Solid	8015B NM	5494
880-4209-30	A-C-2	Total/NA	Solid	8015B NM	5494
880-4209-31	A-C-3	Total/NA	Solid	8015B NM	5494
880-4209-32	A-C-4	Total/NA	Solid	8015B NM	5494
880-4209-33	A-C-5	Total/NA	Solid	8015B NM	5494
880-4209-34	A-B-2	Total/NA	Solid	8015B NM	5494
880-4209-35	A-B-3	Total/NA	Solid	8015B NM	5494
880-4209-36	A-B-4	Total/NA	Solid	8015B NM	5494
880-4209-37	A-B-5	Total/NA	Solid	8015B NM	5494
880-4209-38	A-A-3	Total/NA	Solid	8015B NM	5494
880-4209-39	A-A-4	Total/NA	Solid	8015B NM	5494
880-4209-40	A-A-5	Total/NA	Solid	8015B NM	5494
MB 880-5494/1-A	Method Blank	Total/NA	Solid	8015B NM	5494
LCS 880-5494/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5494
LCSD 880-5494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5494

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

GC Semi VOA (Continued)

Analysis Batch: 5727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-21 MS	B E-3	Total/NA	Solid	8015B NM	5494
880-4209-21 MSD	B E-3	Total/NA	Solid	8015B NM	5494

Analysis Batch: 5739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-41	A-A-6	Total/NA	Solid	8015B NM	5526
880-4209-42	A-B-1	Total/NA	Solid	8015B NM	5526
880-4209-43	A-B-6	Total/NA	Solid	8015B NM	5526
880-4209-44	A-C-1	Total/NA	Solid	8015B NM	5526
880-4209-45	A-C-6	Total/NA	Solid	8015B NM	5526
880-4209-46	A-D-1	Total/NA	Solid	8015B NM	5526
880-4209-47	A-D-5	Total/NA	Solid	8015B NM	5526
880-4209-48	A-D-6	Total/NA	Solid	8015B NM	5526
880-4209-49	A-E-1	Total/NA	Solid	8015B NM	5526
880-4209-50	A-E-5	Total/NA	Solid	8015B NM	5526
880-4209-51	A-F-1	Total/NA	Solid	8015B NM	5526
880-4209-52	A-F-4	Total/NA	Solid	8015B NM	5526
880-4209-53	A-G-1	Total/NA	Solid	8015B NM	5526
880-4209-54	A-G-2	Total/NA	Solid	8015B NM	5526
880-4209-55	A-G-3	Total/NA	Solid	8015B NM	5526
MB 880-5526/1-A	Method Blank	Total/NA	Solid	8015B NM	5526
LCS 880-5526/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5526
LCSD 880-5526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5526
880-4209-41 MS	A-A-6	Total/NA	Solid	8015B NM	5526
880-4209-41 MSD	A-A-6	Total/NA	Solid	8015B NM	5526

HPLC/IC

Leach Batch: 5535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Soluble	Solid	DI Leach	
880-4209-2	B E-5	Soluble	Solid	DI Leach	
880-4209-3	B E-6	Soluble	Solid	DI Leach	
880-4209-4	B D-6	Soluble	Solid	DI Leach	
880-4209-5	B D-7	Soluble	Solid	DI Leach	
880-4209-6	B C-8	Soluble	Solid	DI Leach	
880-4209-7	B C-9	Soluble	Solid	DI Leach	
880-4209-8	B A-10	Soluble	Solid	DI Leach	
880-4209-9	B B-8	Soluble	Solid	DI Leach	
880-4209-10	B B-9	Soluble	Solid	DI Leach	
880-4209-11	B B-10	Soluble	Solid	DI Leach	
880-4209-12	B C-6	Soluble	Solid	DI Leach	
880-4209-13	B C-7	Soluble	Solid	DI Leach	
880-4209-14	B C-10	Soluble	Solid	DI Leach	
880-4209-15	B D-3	Soluble	Solid	DI Leach	
880-4209-16	B D-4	Soluble	Solid	DI Leach	
880-4209-17	B D-5	Soluble	Solid	DI Leach	
880-4209-18	B D-8	Soluble	Solid	DI Leach	
880-4209-19	B D-9	Soluble	Solid	DI Leach	
880-4209-20	B E-2	Soluble	Solid	DI Leach	
MB 880-5535/1-A	Method Blank	Soluble	Solid	DI Leach	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

HPLC/IC (Continued)

Leach Batch: 5535 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-5535/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5535/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4209-1 MS	B E-4	Soluble	Solid	DI Leach	
880-4209-1 MSD	B E-4	Soluble	Solid	DI Leach	
880-4209-11 MS	B B-10	Soluble	Solid	DI Leach	
880-4209-11 MSD	B B-10	Soluble	Solid	DI Leach	

Leach Batch: 5536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-21	B E-3	Soluble	Solid	DI Leach	
880-4209-22	A F-2	Soluble	Solid	DI Leach	
880-4209-23	A F-3	Soluble	Solid	DI Leach	
880-4209-24	A-E-2	Soluble	Solid	DI Leach	
880-4209-25	A-E-3	Soluble	Solid	DI Leach	
880-4209-26	A-E-4	Soluble	Solid	DI Leach	
880-4209-27	A-D-2	Soluble	Solid	DI Leach	
880-4209-28	A-D-3	Soluble	Solid	DI Leach	
880-4209-29	A-D-4	Soluble	Solid	DI Leach	
880-4209-30	A-C-2	Soluble	Solid	DI Leach	
880-4209-31	A-C-3	Soluble	Solid	DI Leach	
880-4209-32	A-C-4	Soluble	Solid	DI Leach	
880-4209-33	A-C-5	Soluble	Solid	DI Leach	
880-4209-34	A-B-2	Soluble	Solid	DI Leach	
880-4209-35	A-B-3	Soluble	Solid	DI Leach	
880-4209-36	A-B-4	Soluble	Solid	DI Leach	
880-4209-37	A-B-5	Soluble	Solid	DI Leach	
880-4209-38	A-A-3	Soluble	Solid	DI Leach	
880-4209-39	A-A-4	Soluble	Solid	DI Leach	
880-4209-40	A-A-5	Soluble	Solid	DI Leach	
MB 880-5536/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5536/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5536/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4209-21 MS	B E-3	Soluble	Solid	DI Leach	
880-4209-21 MSD	B E-3	Soluble	Solid	DI Leach	
880-4209-31 MS	A-C-3	Soluble	Solid	DI Leach	
880-4209-31 MSD	A-C-3	Soluble	Solid	DI Leach	

Leach Batch: 5543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-41	A-A-6	Soluble	Solid	DI Leach	
880-4209-42	A-B-1	Soluble	Solid	DI Leach	
880-4209-43	A-B-6	Soluble	Solid	DI Leach	
880-4209-44	A-C-1	Soluble	Solid	DI Leach	
880-4209-45	A-C-6	Soluble	Solid	DI Leach	
880-4209-46	A-D-1	Soluble	Solid	DI Leach	
880-4209-47	A-D-5	Soluble	Solid	DI Leach	
880-4209-48	A-D-6	Soluble	Solid	DI Leach	
880-4209-49	A-E-1	Soluble	Solid	DI Leach	
880-4209-50	A-E-5	Soluble	Solid	DI Leach	
880-4209-51	A-F-1	Soluble	Solid	DI Leach	
880-4209-52	A-F-4	Soluble	Solid	DI Leach	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

HPLC/IC (Continued)

Leach Batch: 5543 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5543/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5543/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5543/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4209-41 MS	A-A-6	Soluble	Solid	DI Leach	
880-4209-41 MSD	A-A-6	Soluble	Solid	DI Leach	
880-4209-51 MS	A-F-1	Soluble	Solid	DI Leach	
880-4209-51 MSD	A-F-1	Soluble	Solid	DI Leach	

Leach Batch: 5544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-53	A-G-1	Soluble	Solid	DI Leach	
880-4209-54	A-G-2	Soluble	Solid	DI Leach	
880-4209-55	A-G-3	Soluble	Solid	DI Leach	
MB 880-5544/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5544/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5544/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-4209-53 MS	A-G-1	Soluble	Solid	DI Leach	
880-4209-53 MSD	A-G-1	Soluble	Solid	DI Leach	

Analysis Batch: 5621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-1	B E-4	Soluble	Solid	300.0	5535
880-4209-2	B E-5	Soluble	Solid	300.0	5535
880-4209-3	B E-6	Soluble	Solid	300.0	5535
880-4209-4	B D-6	Soluble	Solid	300.0	5535
880-4209-5	B D-7	Soluble	Solid	300.0	5535
880-4209-6	B C-8	Soluble	Solid	300.0	5535
880-4209-7	B C-9	Soluble	Solid	300.0	5535
880-4209-8	B A-10	Soluble	Solid	300.0	5535
880-4209-9	B B-8	Soluble	Solid	300.0	5535
880-4209-10	B B-9	Soluble	Solid	300.0	5535
880-4209-11	B B-10	Soluble	Solid	300.0	5535
880-4209-12	B C-6	Soluble	Solid	300.0	5535
880-4209-13	B C-7	Soluble	Solid	300.0	5535
880-4209-14	B C-10	Soluble	Solid	300.0	5535
880-4209-15	B D-3	Soluble	Solid	300.0	5535
880-4209-16	B D-4	Soluble	Solid	300.0	5535
880-4209-17	B D-5	Soluble	Solid	300.0	5535
880-4209-18	B D-8	Soluble	Solid	300.0	5535
880-4209-19	B D-9	Soluble	Solid	300.0	5535
880-4209-20	B E-2	Soluble	Solid	300.0	5535
MB 880-5535/1-A	Method Blank	Soluble	Solid	300.0	5535
LCS 880-5535/2-A	Lab Control Sample	Soluble	Solid	300.0	5535
LCSD 880-5535/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5535
880-4209-1 MS	B E-4	Soluble	Solid	300.0	5535
880-4209-1 MSD	B E-4	Soluble	Solid	300.0	5535
880-4209-11 MS	B B-10	Soluble	Solid	300.0	5535
880-4209-11 MSD	B B-10	Soluble	Solid	300.0	5535

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

HPLC/IC

Analysis Batch: 5622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-21	B E-3	Soluble	Solid	300.0	5536
880-4209-22	A F-2	Soluble	Solid	300.0	5536
880-4209-23	A F-3	Soluble	Solid	300.0	5536
880-4209-24	A-E-2	Soluble	Solid	300.0	5536
880-4209-25	A-E-3	Soluble	Solid	300.0	5536
880-4209-26	A-E-4	Soluble	Solid	300.0	5536
880-4209-27	A-D-2	Soluble	Solid	300.0	5536
880-4209-28	A-D-3	Soluble	Solid	300.0	5536
880-4209-29	A-D-4	Soluble	Solid	300.0	5536
880-4209-30	A-C-2	Soluble	Solid	300.0	5536
880-4209-31	A-C-3	Soluble	Solid	300.0	5536
880-4209-32	A-C-4	Soluble	Solid	300.0	5536
880-4209-33	A-C-5	Soluble	Solid	300.0	5536
880-4209-34	A-B-2	Soluble	Solid	300.0	5536
880-4209-35	A-B-3	Soluble	Solid	300.0	5536
880-4209-36	A-B-4	Soluble	Solid	300.0	5536
880-4209-37	A-B-5	Soluble	Solid	300.0	5536
880-4209-38	A-A-3	Soluble	Solid	300.0	5536
880-4209-39	A-A-4	Soluble	Solid	300.0	5536
880-4209-40	A-A-5	Soluble	Solid	300.0	5536
MB 880-5536/1-A	Method Blank	Soluble	Solid	300.0	5536
LCS 880-5536/2-A	Lab Control Sample	Soluble	Solid	300.0	5536
LCSD 880-5536/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5536
880-4209-21 MS	B E-3	Soluble	Solid	300.0	5536
880-4209-21 MSD	B E-3	Soluble	Solid	300.0	5536
880-4209-31 MS	A-C-3	Soluble	Solid	300.0	5536
880-4209-31 MSD	A-C-3	Soluble	Solid	300.0	5536

Analysis Batch: 5623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-41	A-A-6	Soluble	Solid	300.0	5543
880-4209-42	A-B-1	Soluble	Solid	300.0	5543
880-4209-43	A-B-6	Soluble	Solid	300.0	5543
880-4209-44	A-C-1	Soluble	Solid	300.0	5543
880-4209-45	A-C-6	Soluble	Solid	300.0	5543
880-4209-46	A-D-1	Soluble	Solid	300.0	5543
880-4209-47	A-D-5	Soluble	Solid	300.0	5543
880-4209-48	A-D-6	Soluble	Solid	300.0	5543
880-4209-49	A-E-1	Soluble	Solid	300.0	5543
880-4209-50	A-E-5	Soluble	Solid	300.0	5543
880-4209-51	A-F-1	Soluble	Solid	300.0	5543
880-4209-52	A-F-4	Soluble	Solid	300.0	5543
MB 880-5543/1-A	Method Blank	Soluble	Solid	300.0	5543
LCS 880-5543/2-A	Lab Control Sample	Soluble	Solid	300.0	5543
LCSD 880-5543/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5543
880-4209-41 MS	A-A-6	Soluble	Solid	300.0	5543
880-4209-41 MSD	A-A-6	Soluble	Solid	300.0	5543
880-4209-51 MS	A-F-1	Soluble	Solid	300.0	5543
880-4209-51 MSD	A-F-1	Soluble	Solid	300.0	5543

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

HPLC/IC

Analysis Batch: 5624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-4209-53	A-G-1	Soluble	Solid	300.0	5544
880-4209-54	A-G-2	Soluble	Solid	300.0	5544
880-4209-55	A-G-3	Soluble	Solid	300.0	5544
MB 880-5544/1-A	Method Blank	Soluble	Solid	300.0	5544
LCS 880-5544/2-A	Lab Control Sample	Soluble	Solid	300.0	5544
LCSD 880-5544/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5544
880-4209-53 MS	A-G-1	Soluble	Solid	300.0	5544
880-4209-53 MSD	A-G-1	Soluble	Solid	300.0	5544

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B E-4

Lab Sample ID: 880-4209-1

Date Collected: 07/19/21 10:00
Matrix: Solid
Date Received: 07/21/21 12:19

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	5457	07/21/21 13:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5467	07/22/21 08:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 12:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 06:37	SC	XEN MID

Client Sample ID: B E-5

Lab Sample ID: 880-4209-2

Date Collected: 07/19/21 10:05
Matrix: Solid
Date Received: 07/21/21 12:19

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	5457	07/21/21 13:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5467	07/22/21 08:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 13:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 06:53	SC	XEN MID

Client Sample ID: B E-6

Lab Sample ID: 880-4209-3

Date Collected: 07/19/21 10:10
Matrix: Solid
Date Received: 07/21/21 12:19

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	5457	07/21/21 13:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5467	07/22/21 08:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 13:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 06:59	SC	XEN MID

Client Sample ID: B D-6

Lab Sample ID: 880-4209-4

Date Collected: 07/19/21 10:15
Matrix: Solid
Date Received: 07/21/21 12:19

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	5457	07/21/21 13:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5467	07/22/21 09:15	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 14:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:04	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B D-7
Date Collected: 07/19/21 10:20
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-5
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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 01:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 14:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:09	SC	XEN MID

Client Sample ID: B C-8
Date Collected: 07/19/21 10:25
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-6
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			5.01 g	5 mL	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 01:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 14:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:26	SC	XEN MID

Client Sample ID: B C-9
Date Collected: 07/19/21 10:30
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-7
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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 02:09	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 15:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:31	SC	XEN MID

Client Sample ID: B A-10
Date Collected: 07/19/21 10:35
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-8
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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 02:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 15:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:36	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B B-8
Date Collected: 07/19/21 10:40
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-9
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			5.03 g	5 mL	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 02:50	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 15:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:42	SC	XEN MID

Client Sample ID: B B-9
Date Collected: 07/19/21 10:45
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-10
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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 03:10	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 16:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:47	SC	XEN MID

Client Sample ID: B B-10
Date Collected: 07/19/21 10:50
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-11
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			5.04 g	5 mL	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 03:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 16:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 07:53	SC	XEN MID

Client Sample ID: B C-6
Date Collected: 07/19/21 10:55
Date Received: 07/21/21 12:19

Lab Sample ID: 880-4209-12
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			5.02 g	5 mL	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 03:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 17:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:09	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B C-7

Lab Sample ID: 880-4209-13

Date Collected: 07/19/21 11:00

Matrix: Solid

Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 04:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 17:24	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:14	SC	XEN MID

Client Sample ID: B C-10

Lab Sample ID: 880-4209-14

Date Collected: 07/19/21 11:05

Matrix: Solid

Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 04:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 17:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:30	SC	XEN MID

Client Sample ID: B D-3

Lab Sample ID: 880-4209-15

Date Collected: 07/19/21 11:10

Matrix: Solid

Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 06:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 18:05	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:36	SC	XEN MID

Client Sample ID: B D-4

Lab Sample ID: 880-4209-16

Date Collected: 07/19/21 11:15

Matrix: Solid

Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 06:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 18:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:41	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B D-5

Lab Sample ID: 880-4209-17

Date Collected: 07/19/21 11:20
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 07:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 18:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:46	SC	XEN MID

Client Sample ID: B D-8

Lab Sample ID: 880-4209-18

Date Collected: 07/19/21 11:25
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 07:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:52	SC	XEN MID

Client Sample ID: B D-9

Lab Sample ID: 880-4209-19

Date Collected: 07/19/21 11:30
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 07:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 08:57	SC	XEN MID

Client Sample ID: B E-2

Lab Sample ID: 880-4209-20

Date Collected: 07/19/21 11:35
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 08:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5492	07/21/21 16:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5725	07/28/21 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5535	07/22/21 11:46	CH	XEN MID
Soluble	Analysis	300.0		1			5621	07/25/21 09:03	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: B E-3
Lab Sample ID: 880-4209-21
Date Collected: 07/19/21 11:40
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 08:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 12:23	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/25/21 23:50	SC	XEN MID

Client Sample ID: A F-2
Lab Sample ID: 880-4209-22
Date Collected: 07/19/21 11:45
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 08:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 13:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		10			5622	07/26/21 00:06	SC	XEN MID

Client Sample ID: A F-3
Lab Sample ID: 880-4209-23
Date Collected: 07/19/21 11:50
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 09:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 13:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 00:11	SC	XEN MID

Client Sample ID: A-E-2
Lab Sample ID: 880-4209-24
Date Collected: 07/19/21 11:55
Matrix: Solid
Date Received: 07/21/21 12:19

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	5478	07/21/21 13:25	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5454	07/22/21 09:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 14:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		5			5622	07/26/21 00:16	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-E-3

Lab Sample ID: 880-4209-25

Date Collected: 07/19/21 12:00
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 19:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 14:23	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 00:22	SC	XEN MID

Client Sample ID: A-E-4

Lab Sample ID: 880-4209-26

Date Collected: 07/19/21 12:05
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 19:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 14:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 00:38	SC	XEN MID

Client Sample ID: A-D-2

Lab Sample ID: 880-4209-27

Date Collected: 07/19/21 12:10
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 19:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 15:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		10			5622	07/26/21 00:43	SC	XEN MID

Client Sample ID: A-D-3

Lab Sample ID: 880-4209-28

Date Collected: 07/19/21 12:15
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 20:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 15:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 00:49	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-D-4

Lab Sample ID: 880-4209-29

Date Collected: 07/19/21 12:20
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 20:42	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 15:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		5			5622	07/26/21 00:54	SC	XEN MID

Client Sample ID: A-C-2

Lab Sample ID: 880-4209-30

Date Collected: 07/19/21 12:25
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 21:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 16:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 00:59	SC	XEN MID

Client Sample ID: A-C-3

Lab Sample ID: 880-4209-31

Date Collected: 07/19/21 12:30
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 21:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 16:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:05	SC	XEN MID

Client Sample ID: A-C-4

Lab Sample ID: 880-4209-32

Date Collected: 07/19/21 12:35
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 21:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 17:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:21	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-C-5
Lab Sample ID: 880-4209-33
Date Collected: 07/19/21 12:40
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 22:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 17:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:26	SC	XEN MID

Client Sample ID: A-B-2
Lab Sample ID: 880-4209-34
Date Collected: 07/19/21 12:45
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/21/21 22:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 17:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:43	SC	XEN MID

Client Sample ID: A-B-3
Lab Sample ID: 880-4209-35
Date Collected: 07/19/21 12:50
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 00:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 18:05	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:48	SC	XEN MID

Client Sample ID: A-B-4
Lab Sample ID: 880-4209-36
Date Collected: 07/19/21 12:55
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 00:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 18:25	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		5			5622	07/26/21 01:53	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-B-5
Lab Sample ID: 880-4209-37
Date Collected: 07/19/21 13:00
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 01:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 18:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 01:59	SC	XEN MID

Client Sample ID: A-A-3
Lab Sample ID: 880-4209-38
Date Collected: 07/19/21 13:05
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 01:48	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 19:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 02:04	SC	XEN MID

Client Sample ID: A-A-4
Lab Sample ID: 880-4209-39
Date Collected: 07/19/21 13:10
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 02:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 02:09	SC	XEN MID

Client Sample ID: A-A-5
Lab Sample ID: 880-4209-40
Date Collected: 07/19/21 13:15
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 02:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5494	07/21/21 16:18	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5727	07/28/21 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5536	07/22/21 11:48	CH	XEN MID
Soluble	Analysis	300.0		1			5622	07/26/21 02:15	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-A-6

Lab Sample ID: 880-4209-41

Date Collected: 07/19/21 13:20
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 03:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/28/21 22:04	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 02:58	SC	XEN MID

Client Sample ID: A-B-1

Lab Sample ID: 880-4209-42

Date Collected: 07/19/21 13:25
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 03:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/28/21 23:08	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:14	SC	XEN MID

Client Sample ID: A-B-6

Lab Sample ID: 880-4209-43

Date Collected: 07/19/21 13:30
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 03:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/28/21 23:29	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:20	SC	XEN MID

Client Sample ID: A-C-1

Lab Sample ID: 880-4209-44

Date Collected: 07/19/21 13:35
Matrix: Solid
Date Received: 07/21/21 12:19

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	5479	07/21/21 13:29	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5480	07/22/21 04:19	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/28/21 23:49	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:25	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-C-6

Lab Sample ID: 880-4209-45

Date Collected: 07/19/21 13:40

Matrix: Solid

Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 20:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 00:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:30	SC	XEN MID

Client Sample ID: A-D-1

Lab Sample ID: 880-4209-46

Date Collected: 07/19/21 13:45

Matrix: Solid

Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 22:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 00:31	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:47	SC	XEN MID

Client Sample ID: A-D-5

Lab Sample ID: 880-4209-47

Date Collected: 07/19/21 13:50

Matrix: Solid

Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 22:29	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 00:52	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:52	SC	XEN MID

Client Sample ID: A-D-6

Lab Sample ID: 880-4209-48

Date Collected: 07/19/21 13:55

Matrix: Solid

Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 22:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 01:12	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 03:57	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Job ID: 880-4209-1
Project/Site: Zeus

Client Sample ID: A-E-1
Lab Sample ID: 880-4209-49
Date Collected: 07/19/21 14:00
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 23:20	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 01:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.00 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 04:03	SC	XEN MID

Client Sample ID: A-E-5
Lab Sample ID: 880-4209-50
Date Collected: 07/19/21 14:05
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/22/21 23:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 01:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 04:08	SC	XEN MID

Client Sample ID: A-F-1
Lab Sample ID: 880-4209-51
Date Collected: 07/19/21 14:10
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/23/21 00:10	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 02:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 04:13	SC	XEN MID

Client Sample ID: A-F-4
Lab Sample ID: 880-4209-52
Date Collected: 07/19/21 14:15
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/23/21 00:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 02:56	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	5543	07/22/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1			5623	07/26/21 04:30	SC	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Client Sample ID: A-G-1

Lab Sample ID: 880-4209-53

Date Collected: 07/19/21 14:20
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/23/21 01:01	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 03:17	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	5544	07/22/21 12:23	CH	XEN MID
Soluble	Analysis	300.0		1			5624	07/25/21 22:59	SC	XEN MID

Client Sample ID: A-G-2

Lab Sample ID: 880-4209-54

Date Collected: 07/19/21 14:25
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/23/21 01:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 03:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	5544	07/22/21 12:23	CH	XEN MID
Soluble	Analysis	300.0		1			5624	07/25/21 23:16	SC	XEN MID

Client Sample ID: A-G-3

Lab Sample ID: 880-4209-55

Date Collected: 07/19/21 14:30
Matrix: Solid
Date Received: 07/21/21 12:19

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	5515	07/22/21 09:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	5530	07/23/21 01:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	5526	07/22/21 09:48	DM	XEN MID
Total/NA	Analysis	8015B NM		1			5739	07/29/21 03:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	5544	07/22/21 12:23	CH	XEN MID
Soluble	Analysis	300.0		1			5624	07/25/21 23:21	SC	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: 880-4209-1
Project/Site: Zeus

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	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

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: Zeus

Job ID: 880-4209-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-4209-1	B E-4	Solid	07/19/21 10:00	07/21/21 12:19	4 - 4.5'
880-4209-2	B E-5	Solid	07/19/21 10:05	07/21/21 12:19	4 - 4.5'
880-4209-3	B E-6	Solid	07/19/21 10:10	07/21/21 12:19	4 - 4.5'
880-4209-4	B D-6	Solid	07/19/21 10:15	07/21/21 12:19	4 - 4.5'
880-4209-5	B D-7	Solid	07/19/21 10:20	07/21/21 12:19	4 - 4.5'
880-4209-6	B C-8	Solid	07/19/21 10:25	07/21/21 12:19	4 - 4.5'
880-4209-7	B C-9	Solid	07/19/21 10:30	07/21/21 12:19	4 - 4.5'
880-4209-8	B A-10	Solid	07/19/21 10:35	07/21/21 12:19	1.5' - 2
880-4209-9	B B-8	Solid	07/19/21 10:40	07/21/21 12:19	1.5' - 2
880-4209-10	B B-9	Solid	07/19/21 10:45	07/21/21 12:19	1.5' - 2
880-4209-11	B B-10	Solid	07/19/21 10:50	07/21/21 12:19	1.5' - 2
880-4209-12	B C-6	Solid	07/19/21 10:55	07/21/21 12:19	1.5' - 2
880-4209-13	B C-7	Solid	07/19/21 11:00	07/21/21 12:19	1.5' - 2
880-4209-14	B C-10	Solid	07/19/21 11:05	07/21/21 12:19	1.5' - 2
880-4209-15	B D-3	Solid	07/19/21 11:10	07/21/21 12:19	1.5' - 2
880-4209-16	B D-4	Solid	07/19/21 11:15	07/21/21 12:19	1.5' - 2
880-4209-17	B D-5	Solid	07/19/21 11:20	07/21/21 12:19	1.5' - 2
880-4209-18	B D-8	Solid	07/19/21 11:25	07/21/21 12:19	1.5' - 2
880-4209-19	B D-9	Solid	07/19/21 11:30	07/21/21 12:19	1.5' - 2
880-4209-20	B E-2	Solid	07/19/21 11:35	07/21/21 12:19	1.5' - 2
880-4209-21	B E-3	Solid	07/19/21 11:40	07/21/21 12:19	4 - 4.5'
880-4209-22	A F-2	Solid	07/19/21 11:45	07/21/21 12:19	4 - 4.5'
880-4209-23	A F-3	Solid	07/19/21 11:50	07/21/21 12:19	4 - 4.5'
880-4209-24	A-E-2	Solid	07/19/21 11:55	07/21/21 12:19	4 - 4.5'
880-4209-25	A-E-3	Solid	07/19/21 12:00	07/21/21 12:19	4 - 4.5'
880-4209-26	A-E-4	Solid	07/19/21 12:05	07/21/21 12:19	4 - 4.5'
880-4209-27	A-D-2	Solid	07/19/21 12:10	07/21/21 12:19	4 - 4.5'
880-4209-28	A-D-3	Solid	07/19/21 12:15	07/21/21 12:19	4 - 4.5'
880-4209-29	A-D-4	Solid	07/19/21 12:20	07/21/21 12:19	4 - 4.5'
880-4209-30	A-C-2	Solid	07/19/21 12:25	07/21/21 12:19	4 - 4.5'
880-4209-31	A-C-3	Solid	07/19/21 12:30	07/21/21 12:19	4 - 4.5'
880-4209-32	A-C-4	Solid	07/19/21 12:35	07/21/21 12:19	4 - 4.5'
880-4209-33	A-C-5	Solid	07/19/21 12:40	07/21/21 12:19	4 - 4.5'
880-4209-34	A-B-2	Solid	07/19/21 12:45	07/21/21 12:19	4 - 4.5'
880-4209-35	A-B-3	Solid	07/19/21 12:50	07/21/21 12:19	4 - 4.5'
880-4209-36	A-B-4	Solid	07/19/21 12:55	07/21/21 12:19	4 - 4.5'
880-4209-37	A-B-5	Solid	07/19/21 13:00	07/21/21 12:19	4 - 4.5'
880-4209-38	A-A-3	Solid	07/19/21 13:05	07/21/21 12:19	1.5' - 2'
880-4209-39	A-A-4	Solid	07/19/21 13:10	07/21/21 12:19	1.5' - 2'
880-4209-40	A-A-5	Solid	07/19/21 13:15	07/21/21 12:19	1.5' - 2'
880-4209-41	A-A-6	Solid	07/19/21 13:20	07/21/21 12:19	1.5' - 2'
880-4209-42	A-B-1	Solid	07/19/21 13:25	07/21/21 12:19	1.5' - 2'
880-4209-43	A-B-6	Solid	07/19/21 13:30	07/21/21 12:19	1.5' - 2'
880-4209-44	A-C-1	Solid	07/19/21 13:35	07/21/21 12:19	1.5' - 2'
880-4209-45	A-C-6	Solid	07/19/21 13:40	07/21/21 12:19	1.5' - 2'
880-4209-46	A-D-1	Solid	07/19/21 13:45	07/21/21 12:19	1.5' - 2'
880-4209-47	A-D-5	Solid	07/19/21 13:50	07/21/21 12:19	1.5' - 2'
880-4209-48	A-D-6	Solid	07/19/21 13:55	07/21/21 12:19	1.5' - 2'
880-4209-49	A-E-1	Solid	07/19/21 14:00	07/21/21 12:19	1.5' - 2'
880-4209-50	A-E-5	Solid	07/19/21 14:05	07/21/21 12:19	1.5' - 2'
880-4209-51	A-F-1	Solid	07/19/21 14:10	07/21/21 12:19	1.5' - 2'
880-4209-52	A-F-4	Solid	07/19/21 14:15	07/21/21 12:19	1.5' - 2'
880-4209-53	A-G-1	Solid	07/19/21 14:20	07/21/21 12:19	1.5' - 2'
880-4209-54	A-G-2	Solid	07/19/21 14:25	07/21/21 12:19	1.5' - 2'

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 880-4209-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-4209-55	A-G-3	Solid	07/19/21 14:30	07/21/21 12:19	1.5' - 2'

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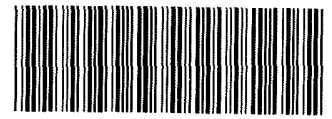

880-4209 Chain of Custody

7/29/2021

CHAIN OF CUSTODY RECORD

Terracon

Office Location	Lubbock	Laboratory	Xenco
Project Manager	J Guesnier	Address	6701 Aberdeen, Lubbock, Texas 79424
Sampler's Name	J Guesnier	Phone Contact	J Guesnier 806-544-9276
		SRS #	
		Sampler's Signature	

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C) 11.20/11.16 CF-0.04
Page 1 of 3

Project Number: AR197210
Project Name: Zeus

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	7/19/2021	10:00	X		B E-4	4	4.5	X				X	X	X	
S	7/19/2020	10:05	X		B E-5	4	4.5'	X				X	X	X	
S	7/19/2020	10:10	X		B E-6	4	4.5	X				X	X	X	
S	7/19/2019	10:15	X		B D-6	4	4.5	X				X	X	X	
S	7/19/2019	10:20	X		B D-7	4	4.5	X				X	X	X	
S	7/19/2018	10:25	X		B C-8	4	4.5	X				X	X	X	
S	7/19/2018	10:30	X		B C-9	4	4.5	X				X	X	X	
S	7/19/2017	10:35	X		B A-10	1.5	2	X				X	X	X	
S	7/19/2017	10:40	X		B B-8	1.5	2	X				X	X	X	
S	7/19/2016	10:45	X		B B-9	1.5	2	X				X	X	X	
S	7/19/2016	10:50	X		B B-10	1.5	2	X				X	X	X	
S	7/19/2015	10:55	X		B C-6	1.5	2	X				X	X	X	
S	7/19/2015	11:00	X		B C-7	1.5	2	X				X	X	X	
S	7/19/2014	11:05	X		B C-10	1.5	2	X				X	X	X	
S	7/19/2014	11.10	X		B D-3	1.5	2	X				X	X	X	
S	7/19/2013	11:15	X		B D-4	1.5	2	X				X	X	X	
S	7/19/2013	11:20	X		B D-5	1.5	2	X				X	X	X	
S	7/19/2012	11.25	X		B D-8	1.5	2	X				X	X	X	
S	7/19/2012	11.30	X		B D-9	1.5'	2	X				X	X	X	
S	7/19/2011	11:35	X		B E-2	1.5	2	X				X	X	X	
S	7/19/2011	11:40	X		B E-3	1.5	2	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
	7-21-21	10:20am	Demetrio Hernandez	7/21/21	11:20
Teddy Randell Lee	7/21/21	1215	Bill Rhoman	7/21/21	12:15
Bill Rhoman	7/21/21	14:49		7/21/21	14:49

NOTES. Client: Solaris Water Midstream

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

Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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4209

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen, Lubbock, Texas 79424

Office Location: Lubbock
Project Manager: J Guesnier
Sampler's Name: J Guesnier
Phone:
Contact: J Guesnier 806-544-9276
SRS #:
Sampler's Signature

Project Number: AR197210
Project Name: Zeus

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE.

TEMP OF COOLER WHEN RECEIVED (°C): 11.20/11.16 CF: -0.04

Page 2 of 3

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	7/19/2021	11:45	X		A F-2	4	4.5	X				X	X	X	
S	7/19/2020	11.50	X		A F-3	4	4.5	X				X	X	X	
S	7/19/2020	11:55	X		A E-2	4	4.5	X				X	X	X	
S	7/19/2019	12:00	X		A E-3	4	4.5	X				X	X	X	
S	7/19/2019	12:05	X		A E-4	4	4.5	X				X	X	X	
S	7/19/2018	12 10	X		A D-2	4	4.5	X				X	X	X	
S	7/19/2018	12 15	X		A D-3	4	4.5	X				X	X	X	
S	7/19/2017	12:20	X		A D-4	4	4.5	X				X	X	X	
S	7/19/2017	12:25	X		A C-2	4	4.5	X				X	X	X	
S	7/19/2016	12:30	X		A C-3	4	4.5	X				X	X	X	
S	7/19/2016	12.35	X		A C-4	4	4.5	X				X	X	X	
S	7/19/2015	12:40	X		A C-5	4	4.5'	X				X	X	X	
S	7/19/2015	12:45	X		A B-2	4	4.5	X				X	X	X	
S	7/19/2014	12:50	X		A B-3	4	4.5	X				X	X	X	
S	7/19/2014	12:55	X		A B-4	4	4.5'	X				X	X	X	
S	7/19/2013	13:00	X		A B-5	4	4.5	X				X	X	X	
S	7/19/2013	13:05	X		A A-3	1.5	2	X				X	X	X	
S	7/19/2012	13·10	X		A A-4	1 5	2'	X				X	X	X	
S	7/19/2012	13 15	X		A A-5	1.5	2	X				X	X	X	
S	7/19/2011	13:20	X		A A-6	1.5	2	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:
[signature]	7-21-21	11:20 am	Demetria Hyeardy	7/21/21	11:20
Teddy Randall Lee	7/21/21	1215	[signature]	7-21-21	12:15
[signature]	7/21/21	14:45	[signature]	7/21/21	1449

NOTES Client: Solaris Water Midstream

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 Al 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 _____

Received by OCD: 2/16/2022 9:49:04 AM
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7/29/2021
Released to Imaging: 3/21/2022 8:15:26 AM

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists Job Number: 880-4209-1

Login Number: 4209 **List Source: Eurofins Xenco, Midland**
List Number: 1
Creator: Teel, Brianna

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

Laboratory Job ID: 820-1521-1
Laboratory Sample Delivery Group: Solaris Water Midstream
Client Project/Site: Zeus

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

Attn: Erin Lloyd

JKramer

Authorized for release by:
8/9/2021 4:13:15 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
8/9/2021 4:13:15 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Laboratory Job ID: 820-1521-1
SDG: Solaris Water Midstream

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Job ID: 820-1521-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative
820-1521-1

Receipt
The samples were received on 8/3/2021 2:53 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 -3.1°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: G2 (820-1521-5), G3 (820-1521-6), G4 (820-1521-7) and I5 (820-1521-16). 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.

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: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F3

Date Collected: 08/02/21 10:00
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-1

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		08/04/21 11:26	08/05/21 01:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:15	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:15*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:15*	*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		08/04/21 15:50	08/04/21 21:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0		mg/Kg		08/04/21 15:50	08/04/21 21:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/04/21 21:33	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/04/21 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/04/21 15:50*	*08/04/21 21:33*	*1*
o-Terphenyl	*107*		*70 - 130*	*08/04/21 15:50*	*08/04/21 21:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**67.2**	**F1**	5.00		mg/Kg			08/09/21 12:11	1

Client Sample ID: F4

Date Collected: 08/02/21 10:02
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-2

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		08/04/21 11:26	08/05/21 01:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 01:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:35	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:35*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:35*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F4

Date Collected: 08/02/21 10:02
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-2
Matrix: Solid

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		08/04/21 15:50	08/04/21 22:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 22:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 22:35	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*08/04/21 15:50*	*08/04/21 22:35*	*1*
o-Terphenyl	*99*		*70 - 130*	*08/04/21 15:50*	*08/04/21 22:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.0**		4.98		mg/Kg			08/09/21 12:26	1

Client Sample ID: F5

Date Collected: 08/02/21 10:04
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-3
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		08/04/21 11:26	08/05/21 01:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 01:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 01:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 01:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 01:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 01:56	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:56*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/04/21 11:26*	*08/05/21 01:56*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 22:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 22:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 22:56	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/04/21 15:50*	*08/04/21 22:56*	*1*
o-Terphenyl	*101*		*70 - 130*	*08/04/21 15:50*	*08/04/21 22:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**153**		4.97		mg/Kg			08/09/21 12:31	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F6

Lab Sample ID: 820-1521-4
Matrix: Solid
Date Collected: 08/02/21 10:06
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 02:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 02:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 02:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 02:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 02:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 02:16	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:16*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:16*	*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	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:17	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:17*	*1*
o-Terphenyl	*99*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.1**		4.95		mg/Kg			08/09/21 12:35	1

Client Sample ID: G2

Lab Sample ID: 820-1521-5
Matrix: Solid
Date Collected: 08/02/21 10:08
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 02:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 02:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 02:36	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 02:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 02:36	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 02:36	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:36*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:36*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: G2

Date Collected: 08/02/21 10:08
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-5
Matrix: Solid

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		08/04/21 15:50	08/04/21 23:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 23:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 23:38	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/04/21 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:38*	*1*
o-Terphenyl	*103*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.6**		5.04		mg/Kg			08/09/21 12:40	1

Client Sample ID: G3

Date Collected: 08/02/21 10:10
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-6
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		08/04/21 11:26	08/05/21 02:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 02:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 02:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 02:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 02:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 02:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:57*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*08/04/21 11:26*	*08/05/21 02:57*	*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		08/04/21 15:50	08/04/21 23:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:59	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/04/21 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:59*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/04/21 15:50*	*08/04/21 23:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57.9**		4.98		mg/Kg			08/09/21 12:55	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: G4

Date Collected: 08/02/21 10:12
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-7

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		08/04/21 11:26	08/05/21 03:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:17	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:17*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:17*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 06:56	1
Diesel Range Organics (Over C10-C28)	**61.4**		49.8		mg/Kg		08/04/21 15:50	08/05/21 06:56	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 06:56	1
Total TPH	**61.4**		49.8		mg/Kg		08/04/21 15:50	08/05/21 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/04/21 15:50*	*08/05/21 06:56*	*1*
o-Terphenyl	*100*		*70 - 130*	*08/04/21 15:50*	*08/05/21 06:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**272**		4.99		mg/Kg			08/09/21 13:00	1

Client Sample ID: G5

Date Collected: 08/02/21 10:14
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-8

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		08/04/21 11:26	08/05/21 03:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 03:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:38	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 11:26	08/05/21 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:38*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:38*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: G5

Date Collected: 08/02/21 10:14
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-8
Matrix: Solid

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		08/04/21 15:50	08/05/21 07:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:16	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:16*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.7**		4.99		mg/Kg			08/09/21 13:05	1

Client Sample ID: H2

Date Collected: 08/02/21 10:16
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-9
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		08/04/21 11:26	08/05/21 03:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 03:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 03:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 03:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 03:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 03:58	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:58*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*08/04/21 11:26*	*08/05/21 03:58*	*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	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:37	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 07:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:37*	*1*
o-Terphenyl	*118*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.3**		5.02		mg/Kg			08/09/21 13:10	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: H3

Lab Sample ID: 820-1521-10
Matrix: Solid
Date Collected: 08/02/21 10:18
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 04:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 04:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 04:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 04:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 04:18	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 04:18	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 04:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*08/04/21 11:26*	*08/05/21 04:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*08/04/21 11:26*	*08/05/21 04:18*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 07:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 07:58	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 07:58	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 07:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:58*	*1*
o-Terphenyl	*117*		*70 - 130*	*08/04/21 15:50*	*08/05/21 07:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.4**		4.96		mg/Kg			08/09/21 13:15	1

Client Sample ID: H4

Lab Sample ID: 820-1521-11
Matrix: Solid
Date Collected: 08/02/21 10:20
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 05:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 05:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 05:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 05:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 05:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 05:40	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*08/04/21 11:26*	*08/05/21 05:40*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/04/21 11:26*	*08/05/21 05:40*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: H4

Lab Sample ID: 820-1521-11
Matrix: Solid
Date Collected: 08/02/21 10:20
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 15:50	08/05/21 08:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 08:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 08:39	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/04/21 15:50*	*08/05/21 08:39*	*1*
o-Terphenyl	*105*		*70 - 130*	*08/04/21 15:50*	*08/05/21 08:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**77.9**	**F1**	4.95		mg/Kg			08/09/21 13:20	1

Client Sample ID: H5

Lab Sample ID: 820-1521-12
Matrix: Solid
Date Collected: 08/02/21 10:22
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 06:00	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 06:00	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 06:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/04/21 11:26	08/05/21 06:00	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 06:00	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/04/21 11:26	08/05/21 06:00	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		08/04/21 11:26	08/05/21 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:00*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:00*	*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		08/04/21 15:50	08/05/21 09:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 09:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 09:00	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:00*	*1*
o-Terphenyl	*102*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**74.1**		5.04		mg/Kg			08/09/21 13:35	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I2

Lab Sample ID: 820-1521-13
Matrix: Solid
Date Collected: 08/02/21 10:24
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 06:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 06:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 06:21	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 06:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:21*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:21*	*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		08/04/21 15:50	08/05/21 09:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:21	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:21*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**154**		4.97		mg/Kg			08/09/21 13:40	1

Client Sample ID: I3

Lab Sample ID: 820-1521-14
Matrix: Solid
Date Collected: 08/02/21 10:26
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:26	08/05/21 06:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 06:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 06:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 06:41	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/04/21 11:26	08/05/21 06:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:41*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/04/21 11:26*	*08/05/21 06:41*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I3

Date Collected: 08/02/21 10:26
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-14

Matrix: Solid

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		08/04/21 15:50	08/05/21 09:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:42	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:42*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/04/21 15:50*	*08/05/21 09:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47.0**		4.98		mg/Kg			08/09/21 13:55	1

Client Sample ID: I4

Date Collected: 08/02/21 10:28
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-15

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		08/04/21 11:26	08/05/21 07:02	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 07:02	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 07:02	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/04/21 11:26	08/05/21 07:02	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/04/21 11:26	08/05/21 07:02	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/04/21 11:26	08/05/21 07:02	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		08/04/21 11:26	08/05/21 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:02*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:02*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 10:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 10:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 10:03	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 10:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:03*	*1*
o-Terphenyl	*114*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.4**		5.00		mg/Kg			08/09/21 14:00	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I5

Date Collected: 08/02/21 10:30
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-16

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		08/04/21 11:26	08/05/21 07:22	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 07:22	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 07:22	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 07:22	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:26	08/05/21 07:22	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 07:22	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		08/04/21 11:26	08/05/21 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:22*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:22*	*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		08/04/21 15:50	08/05/21 10:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 10:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 10:23	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:50	08/05/21 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:23*	*1*
o-Terphenyl	*100*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**111**		5.00		mg/Kg			08/09/21 14:05	1

Client Sample ID: J2

Date Collected: 08/02/21 10:32
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-17

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		08/04/21 11:26	08/05/21 07:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 07:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 07:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 07:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 07:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 07:42	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:42*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/04/21 11:26*	*08/05/21 07:42*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J2

Date Collected: 08/02/21 10:32
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-17
Matrix: Solid

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		08/04/21 15:50	08/05/21 10:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 10:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 10:44	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:44*	*1*
o-Terphenyl	*117*		*70 - 130*	*08/04/21 15:50*	*08/05/21 10:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.9**		5.01		mg/Kg			08/09/21 14:10	1

Client Sample ID: J3

Date Collected: 08/02/21 10:34
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-18
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		08/04/21 11:26	08/05/21 08:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:03	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*08/04/21 11:26*	*08/05/21 08:03*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*08/04/21 11:26*	*08/05/21 08:03*	*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		08/04/21 15:50	08/05/21 11:05	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 11:05	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 11:05	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:50	08/05/21 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/04/21 15:50*	*08/05/21 11:05*	*1*
o-Terphenyl	*106*		*70 - 130*	*08/04/21 15:50*	*08/05/21 11:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.8**		4.98		mg/Kg			08/09/21 14:15	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J4

Date Collected: 08/02/21 10:36
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-19

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		08/04/21 11:26	08/05/21 08:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:26	08/05/21 08:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:23	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:26	08/05/21 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/04/21 11:26*	*08/05/21 08:23*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/04/21 11:26*	*08/05/21 08:23*	*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	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:26	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*08/04/21 15:50*	*08/05/21 11:26*	*1*
o-Terphenyl	*90*		*70 - 130*	*08/04/21 15:50*	*08/05/21 11:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.3**		4.96		mg/Kg			08/09/21 14:19	1

Client Sample ID: J5

Date Collected: 08/02/21 10:38
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-20

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00000000000201	U	0.0000000000201		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
Toluene	<0.00000000000201	U	0.0000000000201		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
Ethylbenzene	<0.00000000000201	U	0.0000000000201		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
m-Xylene & p-Xylene	<0.00000000000402	U	0.0000000000402		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
o-Xylene	<0.00000000000201	U	0.0000000000201		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
Xylenes, Total	<0.00000000000402	U	0.0000000000402		mg/Kg		08/04/21 11:26	08/05/21 08:44	1
Total BTEX	<0.00000000000402	U	0.0000000000402		mg/Kg		08/04/21 11:26	08/05/21 08:44	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J5

Date Collected: 08/02/21 10:38
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-20

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	08/04/21 11:26	08/05/21 08:44	1
1,4-Difluorobenzene (Surr)	91		70 - 130	08/04/21 11:26	08/05/21 08:44	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	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:47	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/05/21 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	08/04/21 15:50	08/05/21 11:47	1
o-Terphenyl	105		70 - 130	08/04/21 15:50	08/05/21 11:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.1		4.95		mg/Kg			08/09/21 14:24	1

Client Sample ID: K2

Date Collected: 08/02/21 10:40
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-21

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		08/04/21 11:31	08/05/21 23:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/05/21 23:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/05/21 23:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/05/21 23:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/05/21 23:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/05/21 23:24	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/05/21 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	08/04/21 11:31	08/05/21 23:24	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/04/21 11:31	08/05/21 23:24	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		08/04/21 15:54	08/04/21 21:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U F1	50.0		mg/Kg		08/04/21 15:54	08/04/21 21:33	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/04/21 21:33	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/04/21 21:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	08/04/21 15:54	08/04/21 21:33	1
o-Terphenyl	102		70 - 130	08/04/21 15:54	08/04/21 21:33	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: K2

Lab Sample ID: 820-1521-21
Matrix: Solid
Date Collected: 08/02/21 10:40
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.6		5.05		mg/Kg			08/08/21 09:46	1

Client Sample ID: K3

Lab Sample ID: 820-1521-22
Matrix: Solid
Date Collected: 08/02/21 10:42
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/05/21 23:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/05/21 23:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/05/21 23:45	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/05/21 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*08/04/21 11:31*	*08/05/21 23:45*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/04/21 11:31*	*08/05/21 23:45*	*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		08/04/21 15:54	08/04/21 22:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 22:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 22:35	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/04/21 15:54*	*08/04/21 22:35*	*1*
o-Terphenyl	*100*		*70 - 130*	*08/04/21 15:54*	*08/04/21 22:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.4		4.98		mg/Kg			08/08/21 10:03	1

Client Sample ID: K4

Lab Sample ID: 820-1521-23
Matrix: Solid
Date Collected: 08/02/21 10:44
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 00:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 00:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 00:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 00:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 00:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 00:05	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: K4

Lab Sample ID: 820-1521-23
Matrix: Solid
Date Collected: 08/02/21 10:44
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*08/04/21 11:31*	*08/06/21 00:05*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*08/04/21 11:31*	*08/06/21 00:05*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 22:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 22:56	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 22:56	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*08/04/21 15:54*	*08/04/21 22:56*	*1*
o-Terphenyl	*90*		*70 - 130*	*08/04/21 15:54*	*08/04/21 22:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**157**		4.97		mg/Kg			08/08/21 10:08	1

Client Sample ID: K5

Lab Sample ID: 820-1521-24
Matrix: Solid
Date Collected: 08/02/21 10:46
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 00:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 00:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 00:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 00:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 00:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 00:26	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*08/04/21 11:31*	*08/06/21 00:26*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:31*	*08/06/21 00:26*	*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		08/04/21 15:54	08/04/21 23:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:17	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:17	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: K5

Lab Sample ID: 820-1521-24
Matrix: Solid
Date Collected: 08/02/21 10:46
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	08/04/21 15:54	08/04/21 23:17	1
o-Terphenyl	97		70 - 130	08/04/21 15:54	08/04/21 23:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.9		4.95		mg/Kg			08/08/21 10:14	1

Client Sample ID: L2

Lab Sample ID: 820-1521-25
Matrix: Solid
Date Collected: 08/02/21 10:48
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 00:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 00:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 00:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 00:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 00:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 00:46	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	08/04/21 11:31	08/06/21 00:46	1
1,4-Difluorobenzene (Surr)	95		70 - 130	08/04/21 11:31	08/06/21 00:46	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		08/04/21 15:54	08/04/21 23:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 23:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 23:38	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/04/21 23:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	08/04/21 15:54	08/04/21 23:38	1
o-Terphenyl	116		70 - 130	08/04/21 15:54	08/04/21 23:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.9		4.95		mg/Kg			08/08/21 10:19	1

Client Sample ID: L3

Lab Sample ID: 820-1521-26
Matrix: Solid
Date Collected: 08/02/21 10:50
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 01:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:06	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L3

Date Collected: 08/02/21 10:50
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-26

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:06	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:06	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:06*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:06*	*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		08/04/21 15:54	08/04/21 23:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:59	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:59	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/04/21 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*08/04/21 15:54*	*08/04/21 23:59*	*1*
o-Terphenyl	*104*		*70 - 130*	*08/04/21 15:54*	*08/04/21 23:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.2**		5.04		mg/Kg			08/08/21 10:36	1

Client Sample ID: L4

Date Collected: 08/02/21 10:52
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-27

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		08/04/21 11:31	08/06/21 01:27	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:27	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/04/21 11:31	08/06/21 01:27	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:27	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/04/21 11:31	08/06/21 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:27*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:27*	*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		08/04/21 15:54	08/05/21 06:56	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L4

Lab Sample ID: 820-1521-27
Matrix: Solid
Date Collected: 08/02/21 10:52
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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)	191		49.8		mg/Kg		08/04/21 15:54	08/05/21 06:56	1
Oil Range Organics (Over C28-C36)	59.6		49.8		mg/Kg		08/04/21 15:54	08/05/21 06:56	1
Total TPH	251		49.8		mg/Kg		08/04/21 15:54	08/05/21 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*08/04/21 15:54*	*08/05/21 06:56*	*1*
o-Terphenyl	*118*		*70 - 130*	*08/04/21 15:54*	*08/05/21 06:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.4		5.00		mg/Kg			08/08/21 10:41	1

Client Sample ID: L5

Lab Sample ID: 820-1521-28
Matrix: Solid
Date Collected: 08/02/21 10:54
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 01:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 01:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 01:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 01:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 01:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 01:47	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:47*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:31*	*08/06/21 01:47*	*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	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:16	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:16*	*1*
o-Terphenyl	*92*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.6		5.00		mg/Kg			08/08/21 10:47	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: M2

Date Collected: 08/02/21 10:56
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-29

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		08/04/21 11:31	08/06/21 02:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 02:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 02:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 02:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 02:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 02:08	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*08/04/21 11:31*	*08/06/21 02:08*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*08/04/21 11:31*	*08/06/21 02:08*	*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		08/04/21 15:54	08/05/21 07:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:37	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 07:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:37*	*1*
o-Terphenyl	*93*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.6**		5.00		mg/Kg			08/08/21 10:52	1

Client Sample ID: M3

Date Collected: 08/02/21 10:58
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-30

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		08/04/21 11:31	08/06/21 02:28	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 02:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 02:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 02:28	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 02:28	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 02:28	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		08/04/21 11:31	08/06/21 02:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/04/21 11:31*	*08/06/21 02:28*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 02:28*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: M3

Lab Sample ID: 820-1521-30
Matrix: Solid
Date Collected: 08/02/21 10:58
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 15:54	08/05/21 07:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 07:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 07:58	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 07:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:58*	*1*
o-Terphenyl	*112*		*70 - 130*	*08/04/21 15:54*	*08/05/21 07:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47.6**		5.02		mg/Kg			08/08/21 10:58	1

Client Sample ID: M4

Lab Sample ID: 820-1521-31
Matrix: Solid
Date Collected: 08/02/21 11:00
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 03:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 03:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 03:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 03:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 03:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 03:51	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*08/04/21 11:31*	*08/06/21 03:51*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*08/04/21 11:31*	*08/06/21 03:51*	*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	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 08:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 08:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 08:39	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/04/21 15:54*	*08/05/21 08:39*	*1*
o-Terphenyl	*87*		*70 - 130*	*08/04/21 15:54*	*08/05/21 08:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**81.3**		4.98		mg/Kg			08/08/21 11:03	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F2

Lab Sample ID: 820-1521-32
Matrix: Solid
Date Collected: 08/02/21 11:02
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 04:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 04:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 04:10	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/06/21 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:10*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:10*	*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		08/04/21 15:54	08/05/21 09:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 09:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 09:00	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:00*	*1*
o-Terphenyl	*95*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.6**		5.04		mg/Kg			08/08/21 11:20	1

Client Sample ID: F7

Lab Sample ID: 820-1521-33
Matrix: Solid
Date Collected: 08/02/21 11:04
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 04:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 04:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 04:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 04:31	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/04/21 11:31	08/06/21 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:31*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:31*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F7

Lab Sample ID: 820-1521-33
Matrix: Solid
Date Collected: 08/02/21 11:04
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 15:54	08/05/21 09:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:21	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:21*	*1*
o-Terphenyl	*110*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			08/08/21 11:25	1

Client Sample ID: G1

Lab Sample ID: 820-1521-34
Matrix: Solid
Date Collected: 08/02/21 11:06
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 04:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 04:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 04:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 04:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 04:51	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 04:51	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:51*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*08/04/21 11:31*	*08/06/21 04:51*	*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		08/04/21 15:54	08/05/21 09:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:42	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:42*	*1*
o-Terphenyl	*87*		*70 - 130*	*08/04/21 15:54*	*08/05/21 09:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.2**		4.95		mg/Kg			08/08/21 11:41	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: G6

Lab Sample ID: 820-1521-35
Matrix: Solid
Date Collected: 08/02/21 11:08
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 05:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:12	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:12*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:12*	*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	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 10:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 10:03	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 10:03	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 10:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:03*	*1*
o-Terphenyl	*89*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/08/21 11:47	1

Client Sample ID: H1

Lab Sample ID: 820-1521-36
Matrix: Solid
Date Collected: 08/02/21 11:10
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 05:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 05:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 05:32	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/06/21 05:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/06/21 05:32	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/06/21 05:32	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 11:31	08/06/21 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:32*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:32*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: H1

Lab Sample ID: 820-1521-36
Matrix: Solid
Date Collected: 08/02/21 11:10
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 15:54	08/05/21 10:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 10:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 10:23	1
Total TPH	<49.9	U	49.9		mg/Kg		08/04/21 15:54	08/05/21 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:23*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			08/08/21 11:52	1

Client Sample ID: H6

Lab Sample ID: 820-1521-37
Matrix: Solid
Date Collected: 08/02/21 11:12
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 05:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 05:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:51	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:51*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/04/21 11:31*	*08/06/21 05:51*	*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	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 10:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 10:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 10:44	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:44*	*1*
o-Terphenyl	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 10:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/08/21 11:58	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I1

Lab Sample ID: 820-1521-38
Matrix: Solid
Date Collected: 08/02/21 11:14
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 06:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:11	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:11*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:11*	*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		08/04/21 15:54	08/05/21 11:05	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 11:05	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 11:05	1
Total TPH	<49.8	U	49.8		mg/Kg		08/04/21 15:54	08/05/21 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:05*	*1*
o-Terphenyl	*89*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			08/08/21 12:03	1

Client Sample ID: I6

Lab Sample ID: 820-1521-39
Matrix: Solid
Date Collected: 08/02/21 11:16
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 06:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 11:31	08/06/21 06:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:31	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 11:31	08/06/21 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:31*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:31*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I6

Lab Sample ID: 820-1521-39
Matrix: Solid
Date Collected: 08/02/21 11:16
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 15:54	08/05/21 11:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:26	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:26*	*1*
o-Terphenyl	*90*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			08/08/21 12:09	1

Client Sample ID: J1

Lab Sample ID: 820-1521-40
Matrix: Solid
Date Collected: 08/02/21 11:18
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 11:31	08/06/21 06:55	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 06:55	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 06:55	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 06:55	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 11:31	08/06/21 06:55	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 06:55	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		08/04/21 11:31	08/06/21 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:55*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/04/21 11:31*	*08/06/21 06:55*	*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		08/04/21 15:54	08/05/21 11:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:47	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/05/21 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:47*	*1*
o-Terphenyl	*114*		*70 - 130*	*08/04/21 15:54*	*08/05/21 11:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25.4**		4.99		mg/Kg			08/08/21 12:14	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J6

Lab Sample ID: 820-1521-41
Matrix: Solid
Date Collected: 08/02/21 11:20
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 19:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 19:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 19:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 19:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 19:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 19:54	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 17:00*	*08/05/21 19:54*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*08/04/21 17:00*	*08/05/21 19:54*	*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 F1 F2	50.0		mg/Kg		08/05/21 08:40	08/05/21 13:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 13:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 13:51	1
Total TPH	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*08/05/21 08:40*	*08/05/21 13:51*	*1*
o-Terphenyl	*83*		*70 - 130*	*08/05/21 08:40*	*08/05/21 13:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U F1	5.05		mg/Kg			08/08/21 16:10	1

Client Sample ID: K1

Lab Sample ID: 820-1521-42
Matrix: Solid
Date Collected: 08/02/21 11:22
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 20:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 20:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 20:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 20:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/04/21 17:00	08/05/21 20:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 20:15	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		08/04/21 17:00	08/05/21 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:15*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:15*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: K1

Lab Sample ID: 820-1521-42
Matrix: Solid
Date Collected: 08/02/21 11:22
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/05/21 08:40	08/05/21 15:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 15:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 15:33	1
Total TPH	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*08/05/21 08:40*	*08/05/21 15:33*	*1*
o-Terphenyl	*87*		*70 - 130*	*08/05/21 08:40*	*08/05/21 15:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			08/08/21 16:26	1

Client Sample ID: K6

Lab Sample ID: 820-1521-43
Matrix: Solid
Date Collected: 08/02/21 11:24
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 20:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:35	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/04/21 17:00	08/05/21 20:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:35	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/04/21 17:00	08/05/21 20:35	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		08/04/21 17:00	08/05/21 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:35*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:35*	*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		08/05/21 08:40	08/05/21 16:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:04	1
Total TPH	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:04*	*1*
o-Terphenyl	*84*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:04*	*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			08/08/21 16:32	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L1

Lab Sample ID: 820-1521-44
Matrix: Solid
Date Collected: 08/02/21 11:26
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 20:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 20:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 20:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 20:56	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:56*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*08/04/21 17:00*	*08/05/21 20:56*	*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		08/05/21 08:40	08/05/21 16:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 16:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 16:24	1
Total TPH	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:24*	*1*
o-Terphenyl	*109*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.75**		5.03		mg/Kg			08/08/21 16:37	1

Client Sample ID: L6

Lab Sample ID: 820-1521-45
Matrix: Solid
Date Collected: 08/02/21 11:28
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 21:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 21:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 21:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 21:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 21:16	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 21:16	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:16*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:16*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L6

Lab Sample ID: 820-1521-45
Matrix: Solid
Date Collected: 08/02/21 11:28
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/05/21 08:40	08/05/21 16:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:44	1
Total TPH	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:44*	*1*
o-Terphenyl	*88*		*70 - 130*	*08/05/21 08:40*	*08/05/21 16:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			08/08/21 16:43	1

Client Sample ID: M1

Lab Sample ID: 820-1521-46
Matrix: Solid
Date Collected: 08/02/21 11:30
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 21:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/04/21 17:00	08/05/21 21:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/04/21 17:00	08/05/21 21:36	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/04/21 17:00	08/05/21 21:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/04/21 17:00	08/05/21 21:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/04/21 17:00	08/05/21 21:36	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		08/04/21 17:00	08/05/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:36*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:36*	*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		08/05/21 08:40	08/05/21 17:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:04	1
Total TPH	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:04*	*1*
o-Terphenyl	*95*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			08/08/21 16:59	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: M5

Lab Sample ID: 820-1521-47
Matrix: Solid
Date Collected: 08/02/21 11:32
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 21:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/04/21 17:00	08/05/21 21:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/04/21 17:00	08/05/21 21:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/04/21 17:00	08/05/21 21:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/04/21 17:00	08/05/21 21:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/04/21 17:00	08/05/21 21:57	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		08/04/21 17:00	08/05/21 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:57*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*08/04/21 17:00*	*08/05/21 21:57*	*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		08/05/21 08:40	08/05/21 17:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 17:24	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 17:24	1
Total TPH	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:24*	*1*
o-Terphenyl	*82*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.87**		5.01		mg/Kg			08/08/21 17:05	1

Client Sample ID: N2

Lab Sample ID: 820-1521-48
Matrix: Solid
Date Collected: 08/02/21 11:34
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/04/21 17:00	08/05/21 22:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:17	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*08/04/21 17:00*	*08/05/21 22:17*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*08/04/21 17:00*	*08/05/21 22:17*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: N2

Date Collected: 08/02/21 11:34
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-48
Matrix: Solid

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		08/05/21 08:40	08/05/21 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:44	1
Total TPH	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:44*	*1*
o-Terphenyl	*98*		*70 - 130*	*08/05/21 08:40*	*08/05/21 17:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.18**		5.02		mg/Kg			08/08/21 17:10	1

Client Sample ID: N3

Date Collected: 08/02/21 11:36
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-49
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		08/04/21 17:00	08/05/21 22:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 22:38	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:38	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/04/21 17:00	08/05/21 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*08/04/21 17:00*	*08/05/21 22:38*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*08/04/21 17:00*	*08/05/21 22:38*	*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		08/05/21 08:40	08/05/21 18:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 18:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 18:25	1
Total TPH	<49.9	U	49.9		mg/Kg		08/05/21 08:40	08/05/21 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*08/05/21 08:40*	*08/05/21 18:25*	*1*
o-Terphenyl	*92*		*70 - 130*	*08/05/21 08:40*	*08/05/21 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01		mg/Kg			08/08/21 17:16	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: N4

Lab Sample ID: 820-1521-50
Matrix: Solid
Date Collected: 08/02/21 11:38
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

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		08/05/21 09:00	08/05/21 16:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 16:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 16:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/05/21 09:00	08/05/21 16:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 16:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/05/21 09:00	08/05/21 16:59	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		08/05/21 09:00	08/05/21 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*08/05/21 09:00*	*08/05/21 16:59*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*08/05/21 09:00*	*08/05/21 16:59*	*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	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 18:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 18:45	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 18:45	1
Total TPH	<49.8	U	49.8		mg/Kg		08/05/21 08:40	08/05/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*08/05/21 08:40*	*08/05/21 18:45*	*1*
o-Terphenyl	*95*		*70 - 130*	*08/05/21 08:40*	*08/05/21 18:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.75**		4.99		mg/Kg			08/08/21 17:21	1

Client Sample ID: N5

Lab Sample ID: 820-1521-51
Matrix: Solid
Date Collected: 08/02/21 11:40
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00281**		0.00199		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		08/04/21 09:57	08/04/21 13:38	1
Total BTEX	<0.00398	U F1	0.00398		mg/Kg		08/04/21 09:57	08/04/21 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*08/04/21 09:57*	*08/04/21 13:38*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*08/04/21 09:57*	*08/04/21 13:38*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: N5
Date Collected: 08/02/21 11:40
Date Received: 08/03/21 14:53
Sample Depth: 4' - 4.5

Lab Sample ID: 820-1521-51
Matrix: Solid

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		08/05/21 08:40	08/05/21 19:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 19:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 19:05	1
Total TPH	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/05/21 08:40*	*08/05/21 19:05*	*1*
o-Terphenyl	*91*		*70 - 130*	*08/05/21 08:40*	*08/05/21 19:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.3**	**F1**	4.97		mg/Kg			08/08/21 17:27	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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)										
820-1521-1	F3	123	93										
820-1521-1 MS	F3	109	106										
820-1521-1 MSD	F3	113	104										
820-1521-2	F4	111	94										
820-1521-3	F5	115	90										
820-1521-4	F6	118	89										
820-1521-5	G2	93	82										
820-1521-6	G3	104	85										
820-1521-7	G4	122	85										
820-1521-8	G5	102	89										
820-1521-9	H2	123	91										
820-1521-10	H3	112	88										
820-1521-11	H4	109	90										
820-1521-12	H5	129	94										
820-1521-13	I2	117	92										
820-1521-14	I3	122	90										
820-1521-15	I4	115	89										
820-1521-16	I5	119	86										
820-1521-17	J2	109	90										
820-1521-18	J3	128	89										
820-1521-19	J4	115	90										
820-1521-20	J5	119	91										
820-1521-21	K2	123	98										
820-1521-21 MS	K2	109	104										
820-1521-21 MSD	K2	109	102										
820-1521-22	K3	128	97										
820-1521-23	K4	121	98										
820-1521-24	K5	118	93										
820-1521-25	L2	117	95										
820-1521-26	L3	122	94										
820-1521-27	L4	124	94										
820-1521-28	L5	117	93										
820-1521-29	M2	124	95										
820-1521-30	M3	116	94										
820-1521-31	M4	114	96										
820-1521-32	F2	113	96										
820-1521-33	F7	110	94										
820-1521-34	G1	122	98										
820-1521-35	G6	128	100										
820-1521-36	H1	116	94										
820-1521-37	H6	122	97										
820-1521-38	I1	117	93										
820-1521-39	I6	115	94										
820-1521-40	J1	120	97										
820-1521-41	J6	117	114										
820-1521-42	K1	126	113										
820-1521-43	K6	118	113										
820-1521-44	L1	117	112										
820-1521-45	L6	118	105										

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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)
820-1521-46	M1	117	109
820-1521-47	M5	121	109
820-1521-48	N2	117	110
820-1521-49	N3	112	108
820-1521-50	N4	116	108
820-1521-51	N5	128	76
820-1521-51 MS	N5	174 S1+	82
820-1521-51 MSD	N5	195 S1+	104
890-1039-A-2-D MS	Matrix Spike	51 S1-	78
890-1039-A-2-E MSD	Matrix Spike Duplicate	106	97
LCS 880-6047/1-A	Lab Control Sample	114	116
LCS 880-6048/1-A	Lab Control Sample	115	102
LCS 880-6060/1-A	Lab Control Sample	102	106
LCS 880-6061/1-A	Lab Control Sample	106	106
LCS 880-6063/1-A	Lab Control Sample	105	98
LCSD 880-6047/2-A	Lab Control Sample Dup	100	86
LCSD 880-6048/2-A	Lab Control Sample Dup	118	104
LCSD 880-6060/2-A	Lab Control Sample Dup	103	107
LCSD 880-6061/2-A	Lab Control Sample Dup	113	105
LCSD 880-6063/2-A	Lab Control Sample Dup	105	105
MB 880-6041/5-A	Method Blank	121	92
MB 880-6047/5-A	Method Blank	153 S1+	93
MB 880-6048/5-A	Method Blank	76	93
MB 880-6060/5-A	Method Blank	91	93
MB 880-6061/5-A	Method Blank	121	94
MB 880-6063/5-A	Method Blank	127	100

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)
820-1521-1	F3	98	107
820-1521-1 MS	F3	94	97
820-1521-1 MSD	F3	95	93
820-1521-2	F4	95	99
820-1521-3	F5	96	101
820-1521-4	F6	94	99
820-1521-5	G2	96	103
820-1521-6	G3	105	115
820-1521-7	G4	96	100
820-1521-8	G5	96	98
820-1521-9	H2	107	118
820-1521-10	H3	104	117
820-1521-11	H4	97	105
820-1521-12	H5	97	102

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1521-1
Project/Site: Zeus
SDG: Solaris Water Midstream

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)								
820-1521-13	I2	97	111								
820-1521-14	I3	98	111								
820-1521-15	I4	103	114								
820-1521-16	I5	94	100								
820-1521-17	J2	104	117								
820-1521-18	J3	97	106								
820-1521-19	J4	85	90								
820-1521-20	J5	97	105								
820-1521-21	K2	100	102								
820-1521-21 MS	K2	99	92								
820-1521-21 MSD	K2	97	89								
820-1521-22	K3	94	100								
820-1521-23	K4	86	90								
820-1521-24	K5	95	97								
820-1521-25	L2	113	116								
820-1521-26	L3	101	104								
820-1521-27	L4	110	118								
820-1521-28	L5	91	92								
820-1521-29	M2	91	93								
820-1521-30	M3	111	112								
820-1521-31	M4	89	87								
820-1521-32	F2	97	95								
820-1521-33	F7	107	110								
820-1521-34	G1	91	87								
820-1521-35	G6	90	89								
820-1521-36	H1	100	98								
820-1521-37	H6	94	91								
820-1521-38	I1	91	89								
820-1521-39	I6	91	90								
820-1521-40	J1	110	114								
820-1521-41	J6	78	83								
820-1521-41 MS	J6	87	82								
820-1521-41 MSD	J6	77	71								
820-1521-42	K1	83	87								
820-1521-43	K6	81	84								
820-1521-44	L1	99	109								
820-1521-45	L6	83	88								
820-1521-46	M1	89	95								
820-1521-47	M5	80	82								
820-1521-48	N2	91	98								
820-1521-49	N3	88	92								
820-1521-50	N4	90	95								
820-1521-51	N5	89	91								
LCS 880-6083/2-A	Lab Control Sample	102	110								
LCS 880-6084/2-A	Lab Control Sample	102	104								
LCS 880-6092/2-A	Lab Control Sample	91	89								
LCSD 880-6083/3-A	Lab Control Sample Dup	95	98								
LCSD 880-6084/3-A	Lab Control Sample Dup	100	103								
LCSD 880-6092/3-A	Lab Control Sample Dup	95	96								
MB 880-6083/1-A	Method Blank	93	103								

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1521-1
Project/Site: Zeus
SDG: Solaris Water Midstream

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)								
MB 880-6084/1-A	Method Blank	96	103								
MB 880-6092/1-A	Method Blank	88	97								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-6041/5-A
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 09:26	08/04/21 14:03	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 09:26	08/04/21 14:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*08/04/21 09:26*	*08/04/21 14:03*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/04/21 09:26*	*08/04/21 14:03*	*1*

Lab Sample ID: MB 880-6047/5-A
Matrix: Solid
Analysis Batch: 6051

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 09:57	08/04/21 13:16	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 09:57	08/04/21 13:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*08/04/21 09:57*	*08/04/21 13:16*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 09:57*	*08/04/21 13:16*	*1*

Lab Sample ID: LCS 880-6047/1-A
Matrix: Solid
Analysis Batch: 6051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6047

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07658		mg/Kg		77	70 - 130		
Toluene			0.100	0.08422		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.1104		mg/Kg		110	70 - 130		
m-Xylene & p-Xylene			0.200	0.2431		mg/Kg		122	70 - 130		
o-Xylene			0.100	0.1128		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: LCSD 880-6047/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6051 — **Prep Batch: 6047**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07016		mg/Kg		70	70 - 130	9	35
Toluene			0.100	0.08092		mg/Kg		81	70 - 130	4	35
Ethylbenzene			0.100	0.09645		mg/Kg		96	70 - 130	13	35
m-Xylene & p-Xylene			0.200	0.2229		mg/Kg		111	70 - 130	9	35
o-Xylene			0.100	0.1067		mg/Kg		107	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 820-1521-51 MS — **Client Sample ID: N5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6051 — **Prep Batch: 6047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00281		0.100	0.1041		mg/Kg		101	70 - 130
Toluene	<0.00199	U F1	0.100	0.1344	F1	mg/Kg		134	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.1560	F1	mg/Kg		156	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.3615	F1	mg/Kg		180	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.1690	F1	mg/Kg		169	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*174*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 820-1521-51 MSD — **Client Sample ID: N5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6051 — **Prep Batch: 6047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00281		0.0996	0.1149		mg/Kg		113	70 - 130	10	35
Toluene	<0.00199	U F1	0.0996	0.1501	F1	mg/Kg		151	70 - 130	11	35
Ethylbenzene	<0.00199	U F1	0.0996	0.1693	F1	mg/Kg		170	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.4015	F1	mg/Kg		202	70 - 130	10	35
o-Xylene	<0.00199	U F1	0.0996	0.1892	F1	mg/Kg		190	70 - 130	11	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*195*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-6048/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6095 — **Prep Batch: 6048**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 12:12	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: MB 880-6048/5-A
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/21 09:00	08/05/21 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/21 09:00	08/05/21 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/21 09:00	08/05/21 12:12	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/05/21 09:00	08/05/21 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*08/05/21 09:00*	*08/05/21 12:12*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/05/21 09:00*	*08/05/21 12:12*	*1*

Lab Sample ID: LCS 880-6048/1-A
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09471		mg/Kg		95	70 - 130
Toluene	0.100	0.09022		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09327		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1935		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09658		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-6048/2-A
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6048

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09386		mg/Kg		94	70 - 130	1	35
Toluene	0.100	0.08938		mg/Kg		89	70 - 130	1	35
Ethylbenzene	0.100	0.09279		mg/Kg		93	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1932		mg/Kg		97	70 - 130	0	35
o-Xylene	0.100	0.09682		mg/Kg		97	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-6060/5-A
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 00:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 00:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 00:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 00:53	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: MB 880-6060/5-A
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:26	08/05/21 00:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 00:53	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:26	08/05/21 00:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*08/04/21 11:26*	*08/05/21 00:53*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*08/04/21 11:26*	*08/05/21 00:53*	*1*

Lab Sample ID: LCS 880-6060/1-A
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6060

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09827		mg/Kg		98	70 - 130		
Toluene			0.100	0.09069		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.08800		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1776		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.08941		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-6060/2-A
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6060

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09781		mg/Kg		98	70 - 130	0	35
Toluene			0.100	0.09064		mg/Kg		91	70 - 130	0	35
Ethylbenzene			0.100	0.08880		mg/Kg		89	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1803		mg/Kg		90	70 - 130	2	35
o-Xylene			0.100	0.09056		mg/Kg		91	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 820-1521-1 MS
Matrix: Solid
Analysis Batch: 6043

Client Sample ID: F3
Prep Type: Total/NA
Prep Batch: 6060

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.0996	0.08751		mg/Kg		87	70 - 130		
Toluene	<0.00199	U	0.0996	0.07975		mg/Kg		80	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.07736		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1559		mg/Kg		78	70 - 130		
o-Xylene	<0.00199	U	0.0996	0.07918		mg/Kg		79	70 - 130		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 820-1521-1 MSD — **Client Sample ID: F3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6043 — **Prep Batch: 6060**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.09196		mg/Kg		92	70 - 130	5	35
Toluene	<0.00199	U	0.0998	0.08686		mg/Kg		87	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.0998	0.08447		mg/Kg		85	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1718		mg/Kg		86	70 - 130	10	35
o-Xylene	<0.00199	U	0.0998	0.08687		mg/Kg		87	70 - 130	9	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-6061/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6095 — **Prep Batch: 6061**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/05/21 23:03	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 11:31	08/05/21 23:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	08/04/21 11:31	08/05/21 23:03	1
1,4-Difluorobenzene (Surr)	94		70 - 130	08/04/21 11:31	08/05/21 23:03	1

Lab Sample ID: LCS 880-6061/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 6095 — **Prep Batch: 6061**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1022		mg/Kg		102	70 - 130
Toluene	0.100	0.09377		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09042		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.200	0.1823		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09221		mg/Kg		92	70 - 130

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

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: LCSD 880-6061/2-A
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6061

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1050		mg/Kg		105	70 - 130	3	35
Toluene			0.100	0.09569		mg/Kg		96	70 - 130	2	35
Ethylbenzene			0.100	0.09409		mg/Kg		94	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1902		mg/Kg		95	70 - 130	4	35
o-Xylene			0.100	0.09644		mg/Kg		96	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 820-1521-21 MS
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: K2
Prep Type: Total/NA
Prep Batch: 6061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.101	0.09269		mg/Kg		92	70 - 130		
Toluene	<0.00199	U	0.101	0.08409		mg/Kg		83	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.07910		mg/Kg		78	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1593		mg/Kg		79	70 - 130		
o-Xylene	<0.00199	U	0.101	0.08122		mg/Kg		80	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 820-1521-21 MSD
Matrix: Solid
Analysis Batch: 6095

Client Sample ID: K2
Prep Type: Total/NA
Prep Batch: 6061

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	0.08522		mg/Kg		86	70 - 130	8	35
Toluene	<0.00199	U	0.0996	0.07775		mg/Kg		78	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0996	0.07429		mg/Kg		75	70 - 130	6	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1496		mg/Kg		75	70 - 130	6	35
o-Xylene	<0.00199	U	0.0996	0.07621		mg/Kg		77	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: MB 880-6063/5-A
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 14:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 14:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 14:11	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: MB 880-6063/5-A
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 14:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/04/21 17:00	08/05/21 14:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 14:11	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/04/21 17:00	08/05/21 14:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*08/04/21 17:00*	*08/05/21 14:11*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/04/21 17:00*	*08/05/21 14:11*	*1*

Lab Sample ID: LCS 880-6063/1-A
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08898		mg/Kg		89	70 - 130
Toluene	0.100	0.09085		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09491		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09850		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-6063/2-A
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6063

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09886		mg/Kg		99	70 - 130	11	35
Toluene	0.100	0.09081		mg/Kg		91	70 - 130	0	35
Ethylbenzene	0.100	0.09474		mg/Kg		95	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1940		mg/Kg		97	70 - 130	1	35
o-Xylene	0.100	0.09668		mg/Kg		97	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-1039-A-2-D MS
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 6063

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.07135		mg/Kg		70	70 - 130
Toluene	<0.00200	U F2 F1	0.100	0.05384	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00200	U F2 F1	0.100	0.04964	F1	mg/Kg		48	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.201	0.08843	F1	mg/Kg		42	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: 890-1039-A-2-D MS
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 6063

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	<0.00200	U F2 F1	0.100	0.04844	F1	mg/Kg		47	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*51*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*

Lab Sample ID: 890-1039-A-2-E MSD
Matrix: Solid
Analysis Batch: 6093

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 6063

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.08732		mg/Kg		86	70 - 130	20	35
Toluene	<0.00200	U F2 F1	0.0994	0.08149	F2	mg/Kg		82	70 - 130	41	35
Ethylbenzene	<0.00200	U F2 F1	0.0994	0.08140	F2	mg/Kg		80	70 - 130	48	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.1679	F2	mg/Kg		83	70 - 130	62	35
o-Xylene	<0.00200	U F2 F1	0.0994	0.08570	F2	mg/Kg		85	70 - 130	56	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-6083/1-A
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6083

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		08/04/21 15:50	08/04/21 20:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/04/21 20:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/04/21 20:30	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:50	08/04/21 20:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*08/04/21 15:50*	*08/04/21 20:30*	*1*
o-Terphenyl	*103*		*70 - 130*	*08/04/21 15:50*	*08/04/21 20:30*	*1*

Lab Sample ID: LCS 880-6083/2-A
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	842.1		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1037		mg/Kg		104	70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: LCS 880-6083/2-A
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6083

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-6083/3-A
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6083

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	919.1		mg/Kg		92	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1051		mg/Kg		105	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 820-1521-1 MS
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: F3
Prep Type: Total/NA
Prep Batch: 6083

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	995	1149		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	995	1398	F1	mg/Kg		140	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 820-1521-1 MSD
Matrix: Solid
Analysis Batch: 6037

Client Sample ID: F3
Prep Type: Total/NA
Prep Batch: 6083

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	998	1161		mg/Kg		116	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	1365	F1	mg/Kg		137	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	93		70 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: MB 880-6084/1-A
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6084

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		08/04/21 15:54	08/04/21 20:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/04/21 20:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/04/21 20:30	1
Total TPH	<50.0	U	50.0		mg/Kg		08/04/21 15:54	08/04/21 20:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/04/21 15:54*	*08/04/21 20:30*	*1*
o-Terphenyl	*103*		*70 - 130*	*08/04/21 15:54*	*08/04/21 20:30*	*1*

Lab Sample ID: LCS 880-6084/2-A
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6084

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	817.9		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1006		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: LCSD 880-6084/3-A
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6084

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	781.2		mg/Kg		78	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	984.6		mg/Kg		98	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: 820-1521-21 MS
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: K2
Prep Type: Total/NA
Prep Batch: 6084

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	995	1183		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U F1	995	1395	F1	mg/Kg		138	70 - 130		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: 820-1521-21 MS
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: K2
Prep Type: Total/NA
Prep Batch: 6084

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: 820-1521-21 MSD
Matrix: Solid
Analysis Batch: 6039

Client Sample ID: K2
Prep Type: Total/NA
Prep Batch: 6084

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	998	1133		mg/Kg		110	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	998	1358	F1	mg/Kg		134	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Lab Sample ID: MB 880-6092/1-A
Matrix: Solid
Analysis Batch: 6104

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 6092

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		08/05/21 08:40	08/05/21 12:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 12:50	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 12:50	1
Total TPH	<50.0	U	50.0		mg/Kg		08/05/21 08:40	08/05/21 12:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*08/05/21 08:40*	*08/05/21 12:50*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/05/21 08:40*	*08/05/21 12:50*	*1*

Lab Sample ID: LCS 880-6092/2-A
Matrix: Solid
Analysis Batch: 6104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 6092

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	918.4		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	870.4		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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

Lab Sample ID: LCSD 880-6092/3-A
Matrix: Solid
Analysis Batch: 6104

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 6092

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	869.5		mg/Kg		87	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	931.5		mg/Kg		93	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 820-1521-41 MS
Matrix: Solid
Analysis Batch: 6104

Client Sample ID: J6
Prep Type: Total/NA
Prep Batch: 6092

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 F1 F2	995	906.6		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	995	869.0		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: 820-1521-41 MSD
Matrix: Solid
Analysis Batch: 6104

Client Sample ID: J6
Prep Type: Total/NA
Prep Batch: 6092

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 F1 F2	998	682.3	F1 F2	mg/Kg		66	70 - 130	28	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	765.6		mg/Kg		77	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*77*		*70 - 130*
o-Terphenyl	*71*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-6118/1-A
Matrix: Solid
Analysis Batch: 6207

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			08/09/21 11:56	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-6118/2-A
Matrix: Solid
Analysis Batch: 6207

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	270.5		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-6118/3-A
Matrix: Solid
Analysis Batch: 6207

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	266.0		mg/Kg		106	90 - 110	2	20

Lab Sample ID: 820-1521-1 MS
Matrix: Solid
Analysis Batch: 6207

Client Sample ID: F3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	67.2	F1	250	354.8	F1	mg/Kg		115	90 - 110		

Lab Sample ID: 820-1521-1 MSD
Matrix: Solid
Analysis Batch: 6207

Client Sample ID: F3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	67.2	F1	250	365.7	F1	mg/Kg		119	90 - 110	3	20

Lab Sample ID: 820-1521-11 MS
Matrix: Solid
Analysis Batch: 6207

Client Sample ID: H4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	77.9	F1	248	346.2		mg/Kg		108	90 - 110		

Lab Sample ID: 820-1521-11 MSD
Matrix: Solid
Analysis Batch: 6207

Client Sample ID: H4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	77.9	F1	248	383.0	F1	mg/Kg		123	90 - 110	10	20

Lab Sample ID: MB 880-6119/1-A
Matrix: Solid
Analysis Batch: 6209

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			08/08/21 09:30	1

Lab Sample ID: LCS 880-6119/2-A
Matrix: Solid
Analysis Batch: 6209

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	258.1		mg/Kg		103	90 - 110		

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-6119/3-A
Matrix: Solid
Analysis Batch: 6209

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	257.7		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 820-1521-21 MS
Matrix: Solid
Analysis Batch: 6209

Client Sample ID: K2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.6		253	287.4		mg/Kg		107	90 - 110

Lab Sample ID: 820-1521-21 MSD
Matrix: Solid
Analysis Batch: 6209

Client Sample ID: K2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16.6		253	278.3		mg/Kg		104	90 - 110	3	20

Lab Sample ID: 820-1521-31 MS
Matrix: Solid
Analysis Batch: 6209

Client Sample ID: M4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	81.3		249	352.3		mg/Kg		109	90 - 110

Lab Sample ID: 820-1521-31 MSD
Matrix: Solid
Analysis Batch: 6209

Client Sample ID: M4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	81.3		249	341.8		mg/Kg		105	90 - 110	3	20

Lab Sample ID: MB 880-6120/1-A
Matrix: Solid
Analysis Batch: 6212

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			08/08/21 15:53	1

Lab Sample ID: LCS 880-6120/2-A
Matrix: Solid
Analysis Batch: 6212

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	263.3		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-6120/3-A
Matrix: Solid
Analysis Batch: 6212

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	261.7		mg/Kg		105	90 - 110	1	20

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 820-1521-41 MS
Matrix: Solid
Analysis Batch: 6212

Client Sample ID: J6
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<5.05	U F1	253	286.9	F1	mg/Kg		113	90 - 110

Lab Sample ID: 820-1521-41 MSD
Matrix: Solid
Analysis Batch: 6212

Client Sample ID: J6
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<5.05	U F1	253	278.2		mg/Kg		110	90 - 110	3	20

Lab Sample ID: 820-1521-51 MS
Matrix: Solid
Analysis Batch: 6212

Client Sample ID: N5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	37.3	F1	249	317.8	F1	mg/Kg		113	90 - 110

Lab Sample ID: 820-1521-51 MSD
Matrix: Solid
Analysis Batch: 6212

Client Sample ID: N5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	37.3	F1	249	315.0	F1	mg/Kg		112	90 - 110	1	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC VOA

Prep Batch: 6041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-6041/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 6043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Total/NA	Solid	8021B	6060
820-1521-2	F4	Total/NA	Solid	8021B	6060
820-1521-3	F5	Total/NA	Solid	8021B	6060
820-1521-4	F6	Total/NA	Solid	8021B	6060
820-1521-5	G2	Total/NA	Solid	8021B	6060
820-1521-6	G3	Total/NA	Solid	8021B	6060
820-1521-7	G4	Total/NA	Solid	8021B	6060
820-1521-8	G5	Total/NA	Solid	8021B	6060
820-1521-9	H2	Total/NA	Solid	8021B	6060
820-1521-10	H3	Total/NA	Solid	8021B	6060
820-1521-11	H4	Total/NA	Solid	8021B	6060
820-1521-12	H5	Total/NA	Solid	8021B	6060
820-1521-13	I2	Total/NA	Solid	8021B	6060
820-1521-14	I3	Total/NA	Solid	8021B	6060
820-1521-15	I4	Total/NA	Solid	8021B	6060
820-1521-16	I5	Total/NA	Solid	8021B	6060
820-1521-17	J2	Total/NA	Solid	8021B	6060
820-1521-18	J3	Total/NA	Solid	8021B	6060
820-1521-19	J4	Total/NA	Solid	8021B	6060
820-1521-20	J5	Total/NA	Solid	8021B	6060
MB 880-6041/5-A	Method Blank	Total/NA	Solid	8021B	6041
MB 880-6060/5-A	Method Blank	Total/NA	Solid	8021B	6060
LCS 880-6060/1-A	Lab Control Sample	Total/NA	Solid	8021B	6060
LCSD 880-6060/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6060
820-1521-1 MS	F3	Total/NA	Solid	8021B	6060
820-1521-1 MSD	F3	Total/NA	Solid	8021B	6060

Prep Batch: 6047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-51	N5	Total/NA	Solid	5035	
MB 880-6047/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6047/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6047/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-1521-51 MS	N5	Total/NA	Solid	5035	
820-1521-51 MSD	N5	Total/NA	Solid	5035	

Prep Batch: 6048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-50	N4	Total/NA	Solid	5035	
MB 880-6048/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6048/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6048/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 6051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-51	N5	Total/NA	Solid	8021B	6047
MB 880-6047/5-A	Method Blank	Total/NA	Solid	8021B	6047

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC VOA (Continued)

Analysis Batch: 6051 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-6047/1-A	Lab Control Sample	Total/NA	Solid	8021B	6047
LCSD 880-6047/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6047
820-1521-51 MS	N5	Total/NA	Solid	8021B	6047
820-1521-51 MSD	N5	Total/NA	Solid	8021B	6047

Prep Batch: 6060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Total/NA	Solid	5035	
820-1521-2	F4	Total/NA	Solid	5035	
820-1521-3	F5	Total/NA	Solid	5035	
820-1521-4	F6	Total/NA	Solid	5035	
820-1521-5	G2	Total/NA	Solid	5035	
820-1521-6	G3	Total/NA	Solid	5035	
820-1521-7	G4	Total/NA	Solid	5035	
820-1521-8	G5	Total/NA	Solid	5035	
820-1521-9	H2	Total/NA	Solid	5035	
820-1521-10	H3	Total/NA	Solid	5035	
820-1521-11	H4	Total/NA	Solid	5035	
820-1521-12	H5	Total/NA	Solid	5035	
820-1521-13	I2	Total/NA	Solid	5035	
820-1521-14	I3	Total/NA	Solid	5035	
820-1521-15	I4	Total/NA	Solid	5035	
820-1521-16	I5	Total/NA	Solid	5035	
820-1521-17	J2	Total/NA	Solid	5035	
820-1521-18	J3	Total/NA	Solid	5035	
820-1521-19	J4	Total/NA	Solid	5035	
820-1521-20	J5	Total/NA	Solid	5035	
MB 880-6060/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6060/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6060/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-1521-1 MS	F3	Total/NA	Solid	5035	
820-1521-1 MSD	F3	Total/NA	Solid	5035	

Prep Batch: 6061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Total/NA	Solid	5035	
820-1521-22	K3	Total/NA	Solid	5035	
820-1521-23	K4	Total/NA	Solid	5035	
820-1521-24	K5	Total/NA	Solid	5035	
820-1521-25	L2	Total/NA	Solid	5035	
820-1521-26	L3	Total/NA	Solid	5035	
820-1521-27	L4	Total/NA	Solid	5035	
820-1521-28	L5	Total/NA	Solid	5035	
820-1521-29	M2	Total/NA	Solid	5035	
820-1521-30	M3	Total/NA	Solid	5035	
820-1521-31	M4	Total/NA	Solid	5035	
820-1521-32	F2	Total/NA	Solid	5035	
820-1521-33	F7	Total/NA	Solid	5035	
820-1521-34	G1	Total/NA	Solid	5035	
820-1521-35	G6	Total/NA	Solid	5035	
820-1521-36	H1	Total/NA	Solid	5035	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC VOA (Continued)

Prep Batch: 6061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-37	H6	Total/NA	Solid	5035	
820-1521-38	I1	Total/NA	Solid	5035	
820-1521-39	I6	Total/NA	Solid	5035	
820-1521-40	J1	Total/NA	Solid	5035	
MB 880-6061/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6061/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6061/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-1521-21 MS	K2	Total/NA	Solid	5035	
820-1521-21 MSD	K2	Total/NA	Solid	5035	

Prep Batch: 6063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Total/NA	Solid	5035	
820-1521-42	K1	Total/NA	Solid	5035	
820-1521-43	K6	Total/NA	Solid	5035	
820-1521-44	L1	Total/NA	Solid	5035	
820-1521-45	L6	Total/NA	Solid	5035	
820-1521-46	M1	Total/NA	Solid	5035	
820-1521-47	M5	Total/NA	Solid	5035	
820-1521-48	N2	Total/NA	Solid	5035	
820-1521-49	N3	Total/NA	Solid	5035	
MB 880-6063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-6063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-6063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1039-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
890-1039-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 6093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Total/NA	Solid	8021B	6063
820-1521-42	K1	Total/NA	Solid	8021B	6063
820-1521-43	K6	Total/NA	Solid	8021B	6063
820-1521-44	L1	Total/NA	Solid	8021B	6063
820-1521-45	L6	Total/NA	Solid	8021B	6063
820-1521-46	M1	Total/NA	Solid	8021B	6063
820-1521-47	M5	Total/NA	Solid	8021B	6063
820-1521-48	N2	Total/NA	Solid	8021B	6063
820-1521-49	N3	Total/NA	Solid	8021B	6063
MB 880-6063/5-A	Method Blank	Total/NA	Solid	8021B	6063
LCS 880-6063/1-A	Lab Control Sample	Total/NA	Solid	8021B	6063
LCSD 880-6063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6063
890-1039-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	6063
890-1039-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	6063

Analysis Batch: 6095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Total/NA	Solid	8021B	6061
820-1521-22	K3	Total/NA	Solid	8021B	6061
820-1521-23	K4	Total/NA	Solid	8021B	6061
820-1521-24	K5	Total/NA	Solid	8021B	6061
820-1521-25	L2	Total/NA	Solid	8021B	6061

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC VOA (Continued)

Analysis Batch: 6095 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-26	L3	Total/NA	Solid	8021B	6061
820-1521-27	L4	Total/NA	Solid	8021B	6061
820-1521-28	L5	Total/NA	Solid	8021B	6061
820-1521-29	M2	Total/NA	Solid	8021B	6061
820-1521-30	M3	Total/NA	Solid	8021B	6061
820-1521-31	M4	Total/NA	Solid	8021B	6061
820-1521-32	F2	Total/NA	Solid	8021B	6061
820-1521-33	F7	Total/NA	Solid	8021B	6061
820-1521-34	G1	Total/NA	Solid	8021B	6061
820-1521-35	G6	Total/NA	Solid	8021B	6061
820-1521-36	H1	Total/NA	Solid	8021B	6061
820-1521-37	H6	Total/NA	Solid	8021B	6061
820-1521-38	I1	Total/NA	Solid	8021B	6061
820-1521-39	I6	Total/NA	Solid	8021B	6061
820-1521-40	J1	Total/NA	Solid	8021B	6061
820-1521-50	N4	Total/NA	Solid	8021B	6048
MB 880-6048/5-A	Method Blank	Total/NA	Solid	8021B	6048
MB 880-6061/5-A	Method Blank	Total/NA	Solid	8021B	6061
LCS 880-6048/1-A	Lab Control Sample	Total/NA	Solid	8021B	6048
LCS 880-6061/1-A	Lab Control Sample	Total/NA	Solid	8021B	6061
LCSD 880-6048/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6048
LCSD 880-6061/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	6061
820-1521-21 MS	K2	Total/NA	Solid	8021B	6061
820-1521-21 MSD	K2	Total/NA	Solid	8021B	6061

GC Semi VOA

Analysis Batch: 6037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Total/NA	Solid	8015B NM	6083
820-1521-2	F4	Total/NA	Solid	8015B NM	6083
820-1521-3	F5	Total/NA	Solid	8015B NM	6083
820-1521-4	F6	Total/NA	Solid	8015B NM	6083
820-1521-5	G2	Total/NA	Solid	8015B NM	6083
820-1521-6	G3	Total/NA	Solid	8015B NM	6083
820-1521-7	G4	Total/NA	Solid	8015B NM	6083
820-1521-8	G5	Total/NA	Solid	8015B NM	6083
820-1521-9	H2	Total/NA	Solid	8015B NM	6083
820-1521-10	H3	Total/NA	Solid	8015B NM	6083
820-1521-11	H4	Total/NA	Solid	8015B NM	6083
820-1521-12	H5	Total/NA	Solid	8015B NM	6083
820-1521-13	I2	Total/NA	Solid	8015B NM	6083
820-1521-14	I3	Total/NA	Solid	8015B NM	6083
820-1521-15	I4	Total/NA	Solid	8015B NM	6083
820-1521-16	I5	Total/NA	Solid	8015B NM	6083
820-1521-17	J2	Total/NA	Solid	8015B NM	6083
820-1521-18	J3	Total/NA	Solid	8015B NM	6083
820-1521-19	J4	Total/NA	Solid	8015B NM	6083
820-1521-20	J5	Total/NA	Solid	8015B NM	6083
MB 880-6083/1-A	Method Blank	Total/NA	Solid	8015B NM	6083
LCS 880-6083/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6083

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC Semi VOA (Continued)

Analysis Batch: 6037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-6083/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6083
820-1521-1 MS	F3	Total/NA	Solid	8015B NM	6083
820-1521-1 MSD	F3	Total/NA	Solid	8015B NM	6083

Analysis Batch: 6039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Total/NA	Solid	8015B NM	6084
820-1521-22	K3	Total/NA	Solid	8015B NM	6084
820-1521-23	K4	Total/NA	Solid	8015B NM	6084
820-1521-24	K5	Total/NA	Solid	8015B NM	6084
820-1521-25	L2	Total/NA	Solid	8015B NM	6084
820-1521-26	L3	Total/NA	Solid	8015B NM	6084
820-1521-27	L4	Total/NA	Solid	8015B NM	6084
820-1521-28	L5	Total/NA	Solid	8015B NM	6084
820-1521-29	M2	Total/NA	Solid	8015B NM	6084
820-1521-30	M3	Total/NA	Solid	8015B NM	6084
820-1521-31	M4	Total/NA	Solid	8015B NM	6084
820-1521-32	F2	Total/NA	Solid	8015B NM	6084
820-1521-33	F7	Total/NA	Solid	8015B NM	6084
820-1521-34	G1	Total/NA	Solid	8015B NM	6084
820-1521-35	G6	Total/NA	Solid	8015B NM	6084
820-1521-36	H1	Total/NA	Solid	8015B NM	6084
820-1521-37	H6	Total/NA	Solid	8015B NM	6084
820-1521-38	I1	Total/NA	Solid	8015B NM	6084
820-1521-39	I6	Total/NA	Solid	8015B NM	6084
820-1521-40	J1	Total/NA	Solid	8015B NM	6084
MB 880-6084/1-A	Method Blank	Total/NA	Solid	8015B NM	6084
LCS 880-6084/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6084
LCSD 880-6084/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6084
820-1521-21 MS	K2	Total/NA	Solid	8015B NM	6084
820-1521-21 MSD	K2	Total/NA	Solid	8015B NM	6084

Prep Batch: 6083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Total/NA	Solid	8015NM Prep	
820-1521-2	F4	Total/NA	Solid	8015NM Prep	
820-1521-3	F5	Total/NA	Solid	8015NM Prep	
820-1521-4	F6	Total/NA	Solid	8015NM Prep	
820-1521-5	G2	Total/NA	Solid	8015NM Prep	
820-1521-6	G3	Total/NA	Solid	8015NM Prep	
820-1521-7	G4	Total/NA	Solid	8015NM Prep	
820-1521-8	G5	Total/NA	Solid	8015NM Prep	
820-1521-9	H2	Total/NA	Solid	8015NM Prep	
820-1521-10	H3	Total/NA	Solid	8015NM Prep	
820-1521-11	H4	Total/NA	Solid	8015NM Prep	
820-1521-12	H5	Total/NA	Solid	8015NM Prep	
820-1521-13	I2	Total/NA	Solid	8015NM Prep	
820-1521-14	I3	Total/NA	Solid	8015NM Prep	
820-1521-15	I4	Total/NA	Solid	8015NM Prep	
820-1521-16	I5	Total/NA	Solid	8015NM Prep	
820-1521-17	J2	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC Semi VOA (Continued)

Prep Batch: 6083 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-18	J3	Total/NA	Solid	8015NM Prep	
820-1521-19	J4	Total/NA	Solid	8015NM Prep	
820-1521-20	J5	Total/NA	Solid	8015NM Prep	
MB 880-6083/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6083/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6083/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1521-1 MS	F3	Total/NA	Solid	8015NM Prep	
820-1521-1 MSD	F3	Total/NA	Solid	8015NM Prep	

Prep Batch: 6084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Total/NA	Solid	8015NM Prep	
820-1521-22	K3	Total/NA	Solid	8015NM Prep	
820-1521-23	K4	Total/NA	Solid	8015NM Prep	
820-1521-24	K5	Total/NA	Solid	8015NM Prep	
820-1521-25	L2	Total/NA	Solid	8015NM Prep	
820-1521-26	L3	Total/NA	Solid	8015NM Prep	
820-1521-27	L4	Total/NA	Solid	8015NM Prep	
820-1521-28	L5	Total/NA	Solid	8015NM Prep	
820-1521-29	M2	Total/NA	Solid	8015NM Prep	
820-1521-30	M3	Total/NA	Solid	8015NM Prep	
820-1521-31	M4	Total/NA	Solid	8015NM Prep	
820-1521-32	F2	Total/NA	Solid	8015NM Prep	
820-1521-33	F7	Total/NA	Solid	8015NM Prep	
820-1521-34	G1	Total/NA	Solid	8015NM Prep	
820-1521-35	G6	Total/NA	Solid	8015NM Prep	
820-1521-36	H1	Total/NA	Solid	8015NM Prep	
820-1521-37	H6	Total/NA	Solid	8015NM Prep	
820-1521-38	I1	Total/NA	Solid	8015NM Prep	
820-1521-39	I6	Total/NA	Solid	8015NM Prep	
820-1521-40	J1	Total/NA	Solid	8015NM Prep	
MB 880-6084/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-6084/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6084/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1521-21 MS	K2	Total/NA	Solid	8015NM Prep	
820-1521-21 MSD	K2	Total/NA	Solid	8015NM Prep	

Prep Batch: 6092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Total/NA	Solid	8015NM Prep	
820-1521-42	K1	Total/NA	Solid	8015NM Prep	
820-1521-43	K6	Total/NA	Solid	8015NM Prep	
820-1521-44	L1	Total/NA	Solid	8015NM Prep	
820-1521-45	L6	Total/NA	Solid	8015NM Prep	
820-1521-46	M1	Total/NA	Solid	8015NM Prep	
820-1521-47	M5	Total/NA	Solid	8015NM Prep	
820-1521-48	N2	Total/NA	Solid	8015NM Prep	
820-1521-49	N3	Total/NA	Solid	8015NM Prep	
820-1521-50	N4	Total/NA	Solid	8015NM Prep	
820-1521-51	N5	Total/NA	Solid	8015NM Prep	
MB 880-6092/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

GC Semi VOA (Continued)

Prep Batch: 6092 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-6092/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-6092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1521-41 MS	J6	Total/NA	Solid	8015NM Prep	
820-1521-41 MSD	J6	Total/NA	Solid	8015NM Prep	

Analysis Batch: 6104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Total/NA	Solid	8015B NM	6092
820-1521-42	K1	Total/NA	Solid	8015B NM	6092
820-1521-43	K6	Total/NA	Solid	8015B NM	6092
820-1521-44	L1	Total/NA	Solid	8015B NM	6092
820-1521-45	L6	Total/NA	Solid	8015B NM	6092
820-1521-46	M1	Total/NA	Solid	8015B NM	6092
820-1521-47	M5	Total/NA	Solid	8015B NM	6092
820-1521-48	N2	Total/NA	Solid	8015B NM	6092
820-1521-49	N3	Total/NA	Solid	8015B NM	6092
820-1521-50	N4	Total/NA	Solid	8015B NM	6092
820-1521-51	N5	Total/NA	Solid	8015B NM	6092
MB 880-6092/1-A	Method Blank	Total/NA	Solid	8015B NM	6092
LCS 880-6092/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	6092
LCSD 880-6092/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	6092
820-1521-41 MS	J6	Total/NA	Solid	8015B NM	6092
820-1521-41 MSD	J6	Total/NA	Solid	8015B NM	6092

HPLC/IC

Leach Batch: 6118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Soluble	Solid	DI Leach	
820-1521-2	F4	Soluble	Solid	DI Leach	
820-1521-3	F5	Soluble	Solid	DI Leach	
820-1521-4	F6	Soluble	Solid	DI Leach	
820-1521-5	G2	Soluble	Solid	DI Leach	
820-1521-6	G3	Soluble	Solid	DI Leach	
820-1521-7	G4	Soluble	Solid	DI Leach	
820-1521-8	G5	Soluble	Solid	DI Leach	
820-1521-9	H2	Soluble	Solid	DI Leach	
820-1521-10	H3	Soluble	Solid	DI Leach	
820-1521-11	H4	Soluble	Solid	DI Leach	
820-1521-12	H5	Soluble	Solid	DI Leach	
820-1521-13	I2	Soluble	Solid	DI Leach	
820-1521-14	I3	Soluble	Solid	DI Leach	
820-1521-15	I4	Soluble	Solid	DI Leach	
820-1521-16	I5	Soluble	Solid	DI Leach	
820-1521-17	J2	Soluble	Solid	DI Leach	
820-1521-18	J3	Soluble	Solid	DI Leach	
820-1521-19	J4	Soluble	Solid	DI Leach	
820-1521-20	J5	Soluble	Solid	DI Leach	
MB 880-6118/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6118/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6118/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

HPLC/IC (Continued)

Leach Batch: 6118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1 MS	F3	Soluble	Solid	DI Leach	
820-1521-1 MSD	F3	Soluble	Solid	DI Leach	
820-1521-11 MS	H4	Soluble	Solid	DI Leach	
820-1521-11 MSD	H4	Soluble	Solid	DI Leach	

Leach Batch: 6119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Soluble	Solid	DI Leach	
820-1521-22	K3	Soluble	Solid	DI Leach	
820-1521-23	K4	Soluble	Solid	DI Leach	
820-1521-24	K5	Soluble	Solid	DI Leach	
820-1521-25	L2	Soluble	Solid	DI Leach	
820-1521-26	L3	Soluble	Solid	DI Leach	
820-1521-27	L4	Soluble	Solid	DI Leach	
820-1521-28	L5	Soluble	Solid	DI Leach	
820-1521-29	M2	Soluble	Solid	DI Leach	
820-1521-30	M3	Soluble	Solid	DI Leach	
820-1521-31	M4	Soluble	Solid	DI Leach	
820-1521-32	F2	Soluble	Solid	DI Leach	
820-1521-33	F7	Soluble	Solid	DI Leach	
820-1521-34	G1	Soluble	Solid	DI Leach	
820-1521-35	G6	Soluble	Solid	DI Leach	
820-1521-36	H1	Soluble	Solid	DI Leach	
820-1521-37	H6	Soluble	Solid	DI Leach	
820-1521-38	I1	Soluble	Solid	DI Leach	
820-1521-39	I6	Soluble	Solid	DI Leach	
820-1521-40	J1	Soluble	Solid	DI Leach	
MB 880-6119/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6119/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6119/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-1521-21 MS	K2	Soluble	Solid	DI Leach	
820-1521-21 MSD	K2	Soluble	Solid	DI Leach	
820-1521-31 MS	M4	Soluble	Solid	DI Leach	
820-1521-31 MSD	M4	Soluble	Solid	DI Leach	

Leach Batch: 6120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Soluble	Solid	DI Leach	
820-1521-42	K1	Soluble	Solid	DI Leach	
820-1521-43	K6	Soluble	Solid	DI Leach	
820-1521-44	L1	Soluble	Solid	DI Leach	
820-1521-45	L6	Soluble	Solid	DI Leach	
820-1521-46	M1	Soluble	Solid	DI Leach	
820-1521-47	M5	Soluble	Solid	DI Leach	
820-1521-48	N2	Soluble	Solid	DI Leach	
820-1521-49	N3	Soluble	Solid	DI Leach	
820-1521-50	N4	Soluble	Solid	DI Leach	
820-1521-51	N5	Soluble	Solid	DI Leach	
MB 880-6120/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-6120/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-6120/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

HPLC/IC (Continued)

Leach Batch: 6120 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41 MS	J6	Soluble	Solid	DI Leach	
820-1521-41 MSD	J6	Soluble	Solid	DI Leach	
820-1521-51 MS	N5	Soluble	Solid	DI Leach	
820-1521-51 MSD	N5	Soluble	Solid	DI Leach	

Analysis Batch: 6207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-1	F3	Soluble	Solid	300.0	6118
820-1521-2	F4	Soluble	Solid	300.0	6118
820-1521-3	F5	Soluble	Solid	300.0	6118
820-1521-4	F6	Soluble	Solid	300.0	6118
820-1521-5	G2	Soluble	Solid	300.0	6118
820-1521-6	G3	Soluble	Solid	300.0	6118
820-1521-7	G4	Soluble	Solid	300.0	6118
820-1521-8	G5	Soluble	Solid	300.0	6118
820-1521-9	H2	Soluble	Solid	300.0	6118
820-1521-10	H3	Soluble	Solid	300.0	6118
820-1521-11	H4	Soluble	Solid	300.0	6118
820-1521-12	H5	Soluble	Solid	300.0	6118
820-1521-13	I2	Soluble	Solid	300.0	6118
820-1521-14	I3	Soluble	Solid	300.0	6118
820-1521-15	I4	Soluble	Solid	300.0	6118
820-1521-16	I5	Soluble	Solid	300.0	6118
820-1521-17	J2	Soluble	Solid	300.0	6118
820-1521-18	J3	Soluble	Solid	300.0	6118
820-1521-19	J4	Soluble	Solid	300.0	6118
820-1521-20	J5	Soluble	Solid	300.0	6118
MB 880-6118/1-A	Method Blank	Soluble	Solid	300.0	6118
LCS 880-6118/2-A	Lab Control Sample	Soluble	Solid	300.0	6118
LCSD 880-6118/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6118
820-1521-1 MS	F3	Soluble	Solid	300.0	6118
820-1521-1 MSD	F3	Soluble	Solid	300.0	6118
820-1521-11 MS	H4	Soluble	Solid	300.0	6118
820-1521-11 MSD	H4	Soluble	Solid	300.0	6118

Analysis Batch: 6209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-21	K2	Soluble	Solid	300.0	6119
820-1521-22	K3	Soluble	Solid	300.0	6119
820-1521-23	K4	Soluble	Solid	300.0	6119
820-1521-24	K5	Soluble	Solid	300.0	6119
820-1521-25	L2	Soluble	Solid	300.0	6119
820-1521-26	L3	Soluble	Solid	300.0	6119
820-1521-27	L4	Soluble	Solid	300.0	6119
820-1521-28	L5	Soluble	Solid	300.0	6119
820-1521-29	M2	Soluble	Solid	300.0	6119
820-1521-30	M3	Soluble	Solid	300.0	6119
820-1521-31	M4	Soluble	Solid	300.0	6119
820-1521-32	F2	Soluble	Solid	300.0	6119
820-1521-33	F7	Soluble	Solid	300.0	6119
820-1521-34	G1	Soluble	Solid	300.0	6119

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

HPLC/IC (Continued)

Analysis Batch: 6209 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-35	G6	Soluble	Solid	300.0	6119
820-1521-36	H1	Soluble	Solid	300.0	6119
820-1521-37	H6	Soluble	Solid	300.0	6119
820-1521-38	I1	Soluble	Solid	300.0	6119
820-1521-39	I6	Soluble	Solid	300.0	6119
820-1521-40	J1	Soluble	Solid	300.0	6119
MB 880-6119/1-A	Method Blank	Soluble	Solid	300.0	6119
LCS 880-6119/2-A	Lab Control Sample	Soluble	Solid	300.0	6119
LCSD 880-6119/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6119
820-1521-21 MS	K2	Soluble	Solid	300.0	6119
820-1521-21 MSD	K2	Soluble	Solid	300.0	6119
820-1521-31 MS	M4	Soluble	Solid	300.0	6119
820-1521-31 MSD	M4	Soluble	Solid	300.0	6119

Analysis Batch: 6212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1521-41	J6	Soluble	Solid	300.0	6120
820-1521-42	K1	Soluble	Solid	300.0	6120
820-1521-43	K6	Soluble	Solid	300.0	6120
820-1521-44	L1	Soluble	Solid	300.0	6120
820-1521-45	L6	Soluble	Solid	300.0	6120
820-1521-46	M1	Soluble	Solid	300.0	6120
820-1521-47	M5	Soluble	Solid	300.0	6120
820-1521-48	N2	Soluble	Solid	300.0	6120
820-1521-49	N3	Soluble	Solid	300.0	6120
820-1521-50	N4	Soluble	Solid	300.0	6120
820-1521-51	N5	Soluble	Solid	300.0	6120
MB 880-6120/1-A	Method Blank	Soluble	Solid	300.0	6120
LCS 880-6120/2-A	Lab Control Sample	Soluble	Solid	300.0	6120
LCSD 880-6120/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	6120
820-1521-41 MS	J6	Soluble	Solid	300.0	6120
820-1521-41 MSD	J6	Soluble	Solid	300.0	6120
820-1521-51 MS	N5	Soluble	Solid	300.0	6120
820-1521-51 MSD	N5	Soluble	Solid	300.0	6120

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F3

Lab Sample ID: 820-1521-1
Matrix: Solid
Date Collected: 08/02/21 10:00
Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 01:15	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 21:33	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:11	CH	XEN MID

Client Sample ID: F4

Lab Sample ID: 820-1521-2
Matrix: Solid
Date Collected: 08/02/21 10:02
Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 01:35	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 22:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:26	CH	XEN MID

Client Sample ID: F5

Lab Sample ID: 820-1521-3
Matrix: Solid
Date Collected: 08/02/21 10:04
Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 01:56	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 22:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:31	CH	XEN MID

Client Sample ID: F6

Lab Sample ID: 820-1521-4
Matrix: Solid
Date Collected: 08/02/21 10:06
Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 02:16	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 23:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:35	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: G2
Date Collected: 08/02/21 10:08
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-5
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			4.95 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 02:36	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 23:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:40	CH	XEN MID

Client Sample ID: G3
Date Collected: 08/02/21 10:10
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-6
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			5.02 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 02:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/04/21 23:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 12:55	CH	XEN MID

Client Sample ID: G4
Date Collected: 08/02/21 10:12
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-7
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			4.99 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 03:17	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 06:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:00	CH	XEN MID

Client Sample ID: G5
Date Collected: 08/02/21 10:14
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-8
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			4.99 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 03:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 07:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:05	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: H2

Lab Sample ID: 820-1521-9

Date Collected: 08/02/21 10:16

Matrix: Solid

Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 03:58	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 07:37	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:10	CH	XEN MID

Client Sample ID: H3

Lab Sample ID: 820-1521-10

Date Collected: 08/02/21 10:18

Matrix: Solid

Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 04:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 07:58	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:15	CH	XEN MID

Client Sample ID: H4

Lab Sample ID: 820-1521-11

Date Collected: 08/02/21 10:20

Matrix: Solid

Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 05:40	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 08:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:20	CH	XEN MID

Client Sample ID: H5

Lab Sample ID: 820-1521-12

Date Collected: 08/02/21 10:22

Matrix: Solid

Date Received: 08/03/21 14:53

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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 06:00	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 09:00	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:35	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: I2
Date Collected: 08/02/21 10:24
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-13
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			5.00 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 06:21	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 09:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:40	CH	XEN MID

Client Sample ID: I3
Date Collected: 08/02/21 10:26
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-14
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			5.01 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 06:41	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 09:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 13:55	CH	XEN MID

Client Sample ID: I4
Date Collected: 08/02/21 10:28
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-15
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			5.04 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 07:02	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 10:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:00	CH	XEN MID

Client Sample ID: I5
Date Collected: 08/02/21 10:30
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-16
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			4.95 g	5 mL	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 07:22	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 10:23	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:05	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J2
Date Collected: 08/02/21 10:32
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-17
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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 07:42	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 10:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:10	CH	XEN MID

Client Sample ID: J3
Date Collected: 08/02/21 10:34
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-18
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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 08:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:15	CH	XEN MID

Client Sample ID: J4
Date Collected: 08/02/21 10:36
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-19
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	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 08:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 11:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:19	CH	XEN MID

Client Sample ID: J5
Date Collected: 08/02/21 10:38
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-20
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 ng	6060	08/04/21 11:26	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6043	08/05/21 08:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6083	08/04/21 15:50	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6037	08/05/21 11:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6118	08/05/21 11:37	CH	XEN MID
Soluble	Analysis	300.0		1			6207	08/09/21 14:24	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: K2
Date Collected: 08/02/21 10:40
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-21
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/05/21 23:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 21:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 09:46	CH	XEN MID

Client Sample ID: K3
Date Collected: 08/02/21 10:42
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-22
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/05/21 23:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 22:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:03	CH	XEN MID

Client Sample ID: K4
Date Collected: 08/02/21 10:44
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-23
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 00:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 22:56	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:08	CH	XEN MID

Client Sample ID: K5
Date Collected: 08/02/21 10:46
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-24
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 00:26	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 23:17	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:14	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L2
Date Collected: 08/02/21 10:48
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-25
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 00:46	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 23:38	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:19	CH	XEN MID

Client Sample ID: L3
Date Collected: 08/02/21 10:50
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-26
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 01:06	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/04/21 23:59	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:36	CH	XEN MID

Client Sample ID: L4
Date Collected: 08/02/21 10:52
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-27
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	5035			4.97 g	5 mL	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 01:27	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 06:56	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:41	CH	XEN MID

Client Sample ID: L5
Date Collected: 08/02/21 10:54
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-28
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			5.02 g	5 mL	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 01:47	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 07:16	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:47	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: M2
Date Collected: 08/02/21 10:56
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-29
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			5.00 g	5 mL	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 02:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 07:37	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:52	CH	XEN MID

Client Sample ID: M3
Date Collected: 08/02/21 10:58
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-30
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			4.96 g	5 mL	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 02:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 07:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 10:58	CH	XEN MID

Client Sample ID: M4
Date Collected: 08/02/21 11:00
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-31
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 03:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 08:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:03	CH	XEN MID

Client Sample ID: F2
Date Collected: 08/02/21 11:02
Date Received: 08/03/21 14:53

Lab Sample ID: 820-1521-32
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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 04:10	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 09:00	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:20	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: F7

Lab Sample ID: 820-1521-33
Matrix: Solid
Date Collected: 08/02/21 11:04
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 04:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 09:21	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:25	CH	XEN MID

Client Sample ID: G1

Lab Sample ID: 820-1521-34
Matrix: Solid
Date Collected: 08/02/21 11:06
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 04:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 09:42	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:41	CH	XEN MID

Client Sample ID: G6

Lab Sample ID: 820-1521-35
Matrix: Solid
Date Collected: 08/02/21 11:08
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 05:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 10:03	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:47	CH	XEN MID

Client Sample ID: H1

Lab Sample ID: 820-1521-36
Matrix: Solid
Date Collected: 08/02/21 11:10
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 05:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 10:23	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:52	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: H6

Lab Sample ID: 820-1521-37

Date Collected: 08/02/21 11:12
Matrix: Solid
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 05:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 10:44	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 11:58	CH	XEN MID

Client Sample ID: I1

Lab Sample ID: 820-1521-38

Date Collected: 08/02/21 11:14
Matrix: Solid
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 06:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 11:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 12:03	CH	XEN MID

Client Sample ID: I6

Lab Sample ID: 820-1521-39

Date Collected: 08/02/21 11:16
Matrix: Solid
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 06:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 11:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 12:09	CH	XEN MID

Client Sample ID: J1

Lab Sample ID: 820-1521-40

Date Collected: 08/02/21 11:18
Matrix: Solid
Date Received: 08/03/21 14:53

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	6061	08/04/21 11:31	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/06/21 06:55	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	6084	08/04/21 15:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1			6039	08/05/21 11:47	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6119	08/05/21 11:39	CH	XEN MID
Soluble	Analysis	300.0		1			6209	08/08/21 12:14	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: J6

Lab Sample ID: 820-1521-41
Matrix: Solid
Date Collected: 08/02/21 11:20
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 19:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 13:51	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:10	CH	XEN MID

Client Sample ID: K1

Lab Sample ID: 820-1521-42
Matrix: Solid
Date Collected: 08/02/21 11:22
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 20:15	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 15:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:26	CH	XEN MID

Client Sample ID: K6

Lab Sample ID: 820-1521-43
Matrix: Solid
Date Collected: 08/02/21 11:24
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 20:35	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 16:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:32	CH	XEN MID

Client Sample ID: L1

Lab Sample ID: 820-1521-44
Matrix: Solid
Date Collected: 08/02/21 11:26
Date Received: 08/03/21 14:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.000 g	5 mL	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 20:56	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:37	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: L6

Lab Sample ID: 820-1521-45
Matrix: Solid
Date Collected: 08/02/21 11:28
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 21:16	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 16:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:43	CH	XEN MID

Client Sample ID: M1

Lab Sample ID: 820-1521-46
Matrix: Solid
Date Collected: 08/02/21 11:30
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 21:36	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 17:04	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 16:59	CH	XEN MID

Client Sample ID: M5

Lab Sample ID: 820-1521-47
Matrix: Solid
Date Collected: 08/02/21 11:32
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 21:57	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 17:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 17:05	CH	XEN MID

Client Sample ID: N2

Lab Sample ID: 820-1521-48
Matrix: Solid
Date Collected: 08/02/21 11:34
Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 22:17	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 17:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 17:10	CH	XEN MID

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Client Sample ID: N3

Lab Sample ID: 820-1521-49

Date Collected: 08/02/21 11:36

Matrix: Solid

Date Received: 08/03/21 14:53

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	6063	08/04/21 17:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6093	08/05/21 22:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 18:25	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 17:16	CH	XEN MID

Client Sample ID: N4

Lab Sample ID: 820-1521-50

Date Collected: 08/02/21 11:38

Matrix: Solid

Date Received: 08/03/21 14:53

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	6048	08/05/21 09:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6095	08/05/21 16:59	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 18:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 17:21	CH	XEN MID

Client Sample ID: N5

Lab Sample ID: 820-1521-51

Date Collected: 08/02/21 11:40

Matrix: Solid

Date Received: 08/03/21 14:53

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	6047	08/04/21 09:57	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	6051	08/04/21 13:38	KL	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	6092	08/05/21 08:40	DM	XEN MID
Total/NA	Analysis	8015B NM		1			6104	08/05/21 19:05	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	6120	08/05/21 11:42	CH	XEN MID
Soluble	Analysis	300.0		1			6212	08/08/21 17:27	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

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	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (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.

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: Zeus

Job ID: 820-1521-1
SDG: Solaris Water Midstream

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-1521-1	F3	Solid	08/02/21 10:00	08/03/21 14:53	4' - 4.5
820-1521-2	F4	Solid	08/02/21 10:02	08/03/21 14:53	4' - 4.5
820-1521-3	F5	Solid	08/02/21 10:04	08/03/21 14:53	4' - 4.5
820-1521-4	F6	Solid	08/02/21 10:06	08/03/21 14:53	4' - 4.5
820-1521-5	G2	Solid	08/02/21 10:08	08/03/21 14:53	4' - 4.5
820-1521-6	G3	Solid	08/02/21 10:10	08/03/21 14:53	4' - 4.5
820-1521-7	G4	Solid	08/02/21 10:12	08/03/21 14:53	4' - 4.5
820-1521-8	G5	Solid	08/02/21 10:14	08/03/21 14:53	4' - 4.5
820-1521-9	H2	Solid	08/02/21 10:16	08/03/21 14:53	4' - 4.5
820-1521-10	H3	Solid	08/02/21 10:18	08/03/21 14:53	4' - 4.5
820-1521-11	H4	Solid	08/02/21 10:20	08/03/21 14:53	4' - 4.5
820-1521-12	H5	Solid	08/02/21 10:22	08/03/21 14:53	4' - 4.5
820-1521-13	I2	Solid	08/02/21 10:24	08/03/21 14:53	4' - 4.5
820-1521-14	I3	Solid	08/02/21 10:26	08/03/21 14:53	4' - 4.5
820-1521-15	I4	Solid	08/02/21 10:28	08/03/21 14:53	4' - 4.5
820-1521-16	I5	Solid	08/02/21 10:30	08/03/21 14:53	4' - 4.5
820-1521-17	J2	Solid	08/02/21 10:32	08/03/21 14:53	4' - 4.5
820-1521-18	J3	Solid	08/02/21 10:34	08/03/21 14:53	4' - 4.5
820-1521-19	J4	Solid	08/02/21 10:36	08/03/21 14:53	4' - 4.5
820-1521-20	J5	Solid	08/02/21 10:38	08/03/21 14:53	4' - 4.5
820-1521-21	K2	Solid	08/02/21 10:40	08/03/21 14:53	4' - 4.5
820-1521-22	K3	Solid	08/02/21 10:42	08/03/21 14:53	4' - 4.5
820-1521-23	K4	Solid	08/02/21 10:44	08/03/21 14:53	4' - 4.5
820-1521-24	K5	Solid	08/02/21 10:46	08/03/21 14:53	4' - 4.5
820-1521-25	L2	Solid	08/02/21 10:48	08/03/21 14:53	4' - 4.5
820-1521-26	L3	Solid	08/02/21 10:50	08/03/21 14:53	4' - 4.5
820-1521-27	L4	Solid	08/02/21 10:52	08/03/21 14:53	4' - 4.5
820-1521-28	L5	Solid	08/02/21 10:54	08/03/21 14:53	4' - 4.5
820-1521-29	M2	Solid	08/02/21 10:56	08/03/21 14:53	4' - 4.5
820-1521-30	M3	Solid	08/02/21 10:58	08/03/21 14:53	4' - 4.5
820-1521-31	M4	Solid	08/02/21 11:00	08/03/21 14:53	4' - 4.5
820-1521-32	F2	Solid	08/02/21 11:02	08/03/21 14:53	4' - 4.5
820-1521-33	F7	Solid	08/02/21 11:04	08/03/21 14:53	4' - 4.5
820-1521-34	G1	Solid	08/02/21 11:06	08/03/21 14:53	4' - 4.5
820-1521-35	G6	Solid	08/02/21 11:08	08/03/21 14:53	4' - 4.5
820-1521-36	H1	Solid	08/02/21 11:10	08/03/21 14:53	4' - 4.5
820-1521-37	H6	Solid	08/02/21 11:12	08/03/21 14:53	4' - 4.5
820-1521-38	I1	Solid	08/02/21 11:14	08/03/21 14:53	4' - 4.5
820-1521-39	I6	Solid	08/02/21 11:16	08/03/21 14:53	4' - 4.5
820-1521-40	J1	Solid	08/02/21 11:18	08/03/21 14:53	4' - 4.5
820-1521-41	J6	Solid	08/02/21 11:20	08/03/21 14:53	4' - 4.5
820-1521-42	K1	Solid	08/02/21 11:22	08/03/21 14:53	4' - 4.5
820-1521-43	K6	Solid	08/02/21 11:24	08/03/21 14:53	4' - 4.5
820-1521-44	L1	Solid	08/02/21 11:26	08/03/21 14:53	4' - 4.5
820-1521-45	L6	Solid	08/02/21 11:28	08/03/21 14:53	4' - 4.5
820-1521-46	M1	Solid	08/02/21 11:30	08/03/21 14:53	4' - 4.5
820-1521-47	M5	Solid	08/02/21 11:32	08/03/21 14:53	4' - 4.5
820-1521-48	N2	Solid	08/02/21 11:34	08/03/21 14:53	4' - 4.5
820-1521-49	N3	Solid	08/02/21 11:36	08/03/21 14:53	4' - 4.5
820-1521-50	N4	Solid	08/02/21 11:38	08/03/21 14:53	4' - 4.5
820-1521-51	N5	Solid	08/02/21 11:40	08/03/21 14:53	4' - 4.5

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Loc: 820
1521

8/9/2021

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

Project Number: AR197210
Project Name: Zeus

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): -3.1/-3.14
IR-4
CF: -0.04

Page 1 of 3

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	8/2/2021	10:00	X		F3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:02	X		F4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:04	X		F5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:06	X		F6	4'	4.5'	X				X	X	X	
S	8/2/2021	10:08	X		G2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:10	X		G3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:12	X		G4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:14	X		G5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:16	X		H2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:18	X		H3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:20	X		H4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:22	X		H5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:24	X		I2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:26	X		I3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:28	X		I4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:30	X		I5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:32	X		J2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:34	X		J3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:36	X		J4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:38	X		J5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:40	X		K2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:42	X		K3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:44	X		K4	4'	4.5'	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
	8-3-21	14:53		8/4/21	1453
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~~ Solaris water midstream
e-mail results to:
erin.loyd@terracon.com
irguesnier@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 _____

Received by OCD: 2/16/2022 9:49:04 AM

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

Office Location: Lubbock
Project Manager: J. Guesnier
Sampler's Name: J. Guesnier
Phone:
Contact: J. Guesnier 806-544-9276
SRS #:
Sampler's Signature

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): -3.1/-3.14 IR-4
CF: -0.04

Page 2 of 3

Project Number: AR197210
Project Name: Zeus

No. Type of Containers

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	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	8/2/2021	10:46	X		K5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:48	X		L2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:50	X		L3	4'	4.5'	X				X	X	X	
S	8/2/2021	10:52	X		L4	4'	4.5'	X				X	X	X	
S	8/2/2021	10:54	X		L5	4'	4.5'	X				X	X	X	
S	8/2/2021	10:56	X		M2	4'	4.5'	X				X	X	X	
S	8/2/2021	10:58	X		M3	4'	4.5'	X				X	X	X	
S	8/2/2021	11:00	X		M4	4'	4.5'	X				X	X	X	
S	8/2/2021	11:02	X		F2	1.5'	2'	X				X	X	X	
S	8/2/2021	11:04	X		F7	1.5'	2'	X				X	X	X	
S	8/2/2021	11:06	X		G1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:08	X		G6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:10	X		H1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:12	X		H6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:14	X		I1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:16	X		I6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:18	X		J1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:20	X		J6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:22	X		K1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:24	X		K6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:26	X		L1	1.5'	2'	X				X	X	X	
S	8/2/2021	11:28	X		L6	1.5'	2'	X				X	X	X	
S	8/2/2021	11:30	X		M1	1.5'	2'	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
	8-3-21	14:53		8/4	1453

NOTES: Client: ~~Spur Energy Partners~~ Solaris Water Midstream
e-mail results to:
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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8/9/2021

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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)

Page 3 of 3

-3.1/-3.14
IK-4
CF: -0.04

Project Number: AR197210
Project Name: Zeus

No. Type of Containers

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	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	8/2/2021	11:32	X		M5	1.5'	2'	X				X	X	X	
S	8/2/2021	11:34	X		N2	1.5'	2'	X				X	X	X	
S	8/2/2021	11:36	X		N3	1.5'	2'	X				X	X	X	
S	8/2/2021	11:38	X		N4	1.5'	2'	X				X	X	X	
S	8/2/2021	11:40	X		N5	1.5'	2'	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
	8-3-21	14:53		8/3/21	1453

NOTES: Client: ~~Spur Energy Partners~~
e-mail results to:

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 _____

Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/9/2021

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-1799 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
F3 (820-1521-1)	8/2/21	10 00 Central		Solid			X	X	X	1	
F4 (820-1521-2)	8/2/21	10 02 Central		Solid			X	X	X	1	
F5 (820-1521-3)	8/2/21	10 04 Central		Solid			X	X	X	1	
F6 (820-1521-4)	8/2/21	10 06 Central		Solid			X	X	X	1	
G2 (820-1521-5)	8/2/21	10 08 Central		Solid			X	X	X	1	
G3 (820-1521-6)	8/2/21	10 10 Central		Solid			X	X	X	1	
G4 (820-1521-7)	8/2/21	10 12 Central		Solid			X	X	X	1	
G5 (820-1521-8)	8/2/21	10 14 Central		Solid			X	X	X	1	
H2 (820-1521-9)	8/2/21	10 16 Central		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: Teddy Randell Lee	Date/Time: 8/3/21 1700	Company	Received by:	Date/Time: 8-4-21 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: | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

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Received by OCD: 2/16/2022 9:49:04 AM

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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

8/9/2021

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1799 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 2 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
Preservation Code:											
H3 (820-1521-10)	8/2/21	10 18 Central		Solid			X	X	X	1	
H4 (820-1521-11)	8/2/21	10 20 Central		Solid			X	X	X	1	
H5 (820-1521-12)	8/2/21	10 22 Central		Solid			X	X	X	1	
I2 (820-1521-13)	8/2/21	10 24 Central		Solid			X	X	X	1	
I3 (820-1521-14)	8/2/21	10 26 Central		Solid			X	X	X	1	
I4 (820-1521-15)	8/2/21	10 28 Central		Solid			X	X	X	1	
I5 (820-1521-16)	8/2/21	10 30 Central		Solid			X	X	X	1	
J2 (820-1521-17)	8/2/21	10 32 Central		Solid			X	X	X	1	
J3 (820-1521-18)	8/2/21	10 34 Central		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: Teddy Randell Lee	Date/Time: 8/7/21 1700	Company	Received by:	Date/Time: 8-11-21 1130 a.m	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No

Cooler Temperature(s) °C and Other Remarks

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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: 820-1799 3
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: Texas	Page: Page 3 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
J4 (820-1521-19)	8/2/21	10 36 Central		Solid			X	X	X	1	
J5 (820-1521-20)	8/2/21	10 38 Central		Solid			X	X	X	1	
K2 (820-1521-21)	8/2/21	10 40 Central		Solid			X	X	X	1	
K3 (820-1521-22)	8/2/21	10 42 Central		Solid			X	X	X	1	
K4 (820-1521-23)	8/2/21	10 44 Central		Solid			X	X	X	1	
K5 (820-1521-24)	8/2/21	10 46 Central		Solid			X	X	X	1	
L2 (820-1521-25)	8/2/21	10 48 Central		Solid			X	X	X	1	
L3 (820-1521-26)	8/2/21	10 50 Central		Solid			X	X	X	1	
L4 (820-1521-27)	8/2/21	10 52 Central		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: Teddy Rundell Lee	Date/Time: 8/3/21 1700	Company	Received by:	Date/Time: 8-4-21 11:30 am	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

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

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Received by OCD: 2/16/2022 9:49:04 AM
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8/9/2021
Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/9/2021

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-1799 4
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 4 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
Preservation Code:											
L5 (820-1521-28)	8/2/21	10:54 Central		Solid			X	X	X	1	
M2 (820-1521-29)	8/2/21	10 56 Central		Solid			X	X	X	1	
M3 (820-1521-30)	8/2/21	10 58 Central		Solid			X	X	X	1	
M4 (820-1521-31)	8/2/21	11 00 Central		Solid			X	X	X	1	
F2 (820-1521-32)	8/2/21	11 02 Central		Solid			X	X	X	1	
F7 (820-1521-33)	8/2/21	11 04 Central		Solid			X	X	X	1	
G1 (820-1521-34)	8/2/21	11 06 Central		Solid			X	X	X	1	
G6 (820-1521-35)	8/2/21	11 08 Central		Solid			X	X	X	1	
H1 (820-1521-36)	8/2/21	11 10 Central		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	Teddy Randell Lee	8/3/21 1700			8-4-21 11:30 AM	
2						
3						

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

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/9/2021

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-1799 5
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 5 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave ,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
H6 (820-1521-37)	8/2/21	11 12 Central		Solid			X	X	X	1	
I1 (820-1521-38)	8/2/21	11 14 Central		Solid			X	X	X	1	
I6 (820-1521-39)	8/2/21	11 16 Central		Solid			X	X	X	1	
J1 (820-1521-40)	8/2/21	11 18 Central		Solid			X	X	X	1	
J6 (820-1521-41)	8/2/21	11 20 Central		Solid			X	X	X	1	
K1 (820-1521-42)	8/2/21	11 22 Central		Solid			X	X	X	1	
K6 (820-1521-43)	8/2/21	11 24 Central		Solid			X	X	X	1	
L1 (820-1521-44)	8/2/21	11 26 Central		Solid			X	X	X	1	
L6 (820-1521-45)	8/2/21	11 28 Central		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: Teddy Randell Lg	Date/Time: 8/3/21 1700	Company	Received by:	Date/Time: 8-4-21 11:30 AM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact:	Custody Seal No		Cooler Temperature(s) °C and Other Remarks:		

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/9/2021

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 820-1799 6
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: Texas	Page: Page 6 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 820-1521-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 8/9/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Zeus	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	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
M1 (820-1521-46)	8/2/21	11 30 Central		Solid			X	X	X	1	
M5 (820-1521-47)	8/2/21	11 32 Central		Solid			X	X	X	1	
N2 (820-1521-48)	8/2/21	11 34 Central		Solid			X	X	X	1	
N3 (820-1521-49)	8/2/21	11 36 Central		Solid			X	X	X	1	
N4 (820-1521-50)	8/2/21	11 38 Central		Solid			X	X	X	1	
N5 (820-1521-51)	8/2/21	11 40 Central		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

Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:
Relinquished by: Teddy Randell Le	Date/Time: 8/3/21 1700	Company	Received by:	Date/Time: 8/4/21 11:30 am	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company

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

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-1521-1
SDG Number: Solaris Water Midstream

Login Number: 1521
List Number: 1
Creator: Teel, Brianna

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: 820-1521-1
SDG Number: Solaris Water Midstream

Login Number: 1521
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 08/04/21 11:21 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: 820-1660-1
Client Project/Site: Zeus SWD
Revision: 1

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

Attn: Joseph Guesnier

JKramer

Authorized for release by:
8/31/2021 5:04:08 PM

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

LINKS

Review your project results through TotalAccess

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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
8/31/2021 5:04:08 PM

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Laboratory Job ID: 820-1660-1

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Definitions/Glossary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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: Zeus SWD

Job ID: 820-1660-1

Job ID: 820-1660-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative
820-1660-1

Comments
No additional comments.

Receipt
The samples were received on 8/18/2021 11:50 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 was 3.6º C.

GC/MS VOA
Method 8260C: The following samples were diluted due to it being sand: C-A-1N (820-1660-1) and (820-1660-A-1-B MS). Elevated reporting limits (RL) are provided.

Method 8260C: The following samples were diluted due to it being sand: C-D-10 (820-1660-26) and (820-1660-A-26-D MS). Elevated reporting limits (RL) are provided.

Method 8260C: The following samples were diluted due to the nature of the sample matrix: C-C-3E (820-1660-9) and (820-1660-A-9-E MS). Elevated reporting limits (RLs) are provided. Sample was analyzed at 1x twice, but failed ISTD recovery both times; thus, sample was re-analyzed at 25x.

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

GC Semi VOA
Method 8015B NM:

Method 8015B NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (820-1660-A-43-D MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8015B NM: Surrogate recovery for the following samples were outside the upper control limit: C-W7 (820-1660-41), C-W9 (820-1660-45) and C-E11 (820-1660-48). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B NM: The surrogate 1-Chlorooctadecane recovery for the Laboratory Control Sample (LCS) associated with preparation batch 860-19960 and analytical batch 860-19853 was outside the upper control limits. Spiked analytes were recovered within method limits, therefore data was accepted.

Method 8015B NM:

Method 8015B NM: The surrogate recovery for the blank and Laboratory Control Sample (LCS) associated with preparation batch 860-19956 and analytical batch 860-19857 was outside the upper control limits. Spike recoveries were within control limits so the samples were reported.

Method 8015B NM: Surrogate recovery for the following samples were outside the upper control limit: C-D-9 (820-1660-24), C-D-10 (820-1660-26), C-D-19 (820-1660-35), C-W6 (820-1660-39) and C-E7 (820-1660-40). This sample did not contain any target analytes; 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.

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

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

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-A-1N

Date Collected: 08/16/21 11:00
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-1
Matrix: Solid

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		08/19/21 12:36	08/21/21 01:08	1
Toluene	<0.00498	U	0.00498		mg/Kg		08/19/21 12:36	08/21/21 01:08	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		08/19/21 12:36	08/21/21 01:08	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 12:36	08/21/21 01:08	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		08/19/21 12:36	08/21/21 01:08	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 12:36	08/21/21 01:08	1
Total BTEX	<0.00498	U	0.00498		mg/Kg		08/19/21 12:36	08/21/21 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*56 - 150*	*08/19/21 12:36*	*08/21/21 00:47*	*25*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*	*08/19/21 12:36*	*08/21/21 01:08*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 12:36*	*08/21/21 00:47*	*25*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/19/21 12:36*	*08/21/21 01:08*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 12:36*	*08/21/21 00:47*	*25*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/21/21 01:08*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 12:36*	*08/21/21 00:47*	*25*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 12:36*	*08/21/21 01:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 11:58	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 11:58	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 11:58	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*65 - 130*	*08/23/21 17:27*	*08/24/21 11:58*	*1*
o-Terphenyl	*113*		*65 - 130*	*08/23/21 17:27*	*08/24/21 11:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**536**		10.0		mg/Kg		08/19/21 16:26	08/19/21 17:28	1

Client Sample ID: C-A-1

Date Collected: 08/16/21 11:02
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-2
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		08/23/21 10:00	08/23/21 13:01	1
Toluene	**0.00617**		0.00503		mg/Kg		08/23/21 10:00	08/23/21 13:01	1
Ethylbenzene	**0.00165**		0.00101		mg/Kg		08/23/21 10:00	08/23/21 13:01	1
m,p-Xylenes	**0.00599**		0.00201		mg/Kg		08/23/21 10:00	08/23/21 13:01	1
o-Xylene	**0.00198**		0.00101		mg/Kg		08/23/21 10:00	08/23/21 13:01	1
Xylenes, Total	**0.00797**		0.00201		mg/Kg		08/23/21 10:00	08/23/21 13:01	1
Total BTEX	**0.0158**		0.00503		mg/Kg		08/23/21 10:00	08/23/21 13:01	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-A-1

Date Collected: 08/16/21 11:02
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-2

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*56 - 150*	*08/23/21 10:00*	*08/23/21 13:01*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/23/21 10:00*	*08/23/21 13:01*	*1*
Dibromofluoromethane (Surr)	*110*		*53 - 142*	*08/23/21 10:00*	*08/23/21 13:01*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/23/21 10:00*	*08/23/21 13:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 12:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 12:22	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 12:22	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*65 - 130*	*08/23/21 17:27*	*08/24/21 12:22*	*1*
o-Terphenyl	*88*		*65 - 130*	*08/23/21 17:27*	*08/24/21 12:22*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**660**		10.0		mg/Kg		08/19/21 16:26	08/19/21 17:56	1

Client Sample ID: C-A-1S

Date Collected: 08/16/21 11:04
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-3

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		08/19/21 12:36	08/20/21 16:58	1
Toluene	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 16:58	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 16:58	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 16:58	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 16:58	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 16:58	1
Total BTEX	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*08/19/21 12:36*	*08/20/21 16:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 12:36*	*08/20/21 16:58*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*	*08/19/21 12:36*	*08/20/21 16:58*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 12:36*	*08/20/21 16:58*	*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	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/23/21 21:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/23/21 21:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/23/21 21:17	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/23/21 21:17	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-A-1S

Date Collected: 08/16/21 11:04
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-3

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		65 - 130	08/23/21 17:27	08/23/21 21:17	1
o-Terphenyl	116		65 - 130	08/23/21 17:27	08/23/21 21:17	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	519		10.1		mg/Kg		08/19/21 16:26	08/19/21 18:25	1

Client Sample ID: C-B-1N

Date Collected: 08/16/21 11:06
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-4

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		08/19/21 12:36	08/20/21 17:18	1
Toluene	<0.00500	U	0.00500		mg/Kg		08/19/21 12:36	08/20/21 17:18	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/20/21 17:18	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 17:18	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/20/21 17:18	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 17:18	1
Total BTEX	<0.00500	U	0.00500		mg/Kg		08/19/21 12:36	08/20/21 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150	08/19/21 12:36	08/20/21 17:18	1
4-Bromofluorobenzene (Surr)	101		68 - 152	08/19/21 12:36	08/20/21 17:18	1
Dibromofluoromethane (Surr)	101		53 - 142	08/19/21 12:36	08/20/21 17:18	1
Toluene-d8 (Surr)	101		70 - 130	08/19/21 12:36	08/20/21 17:18	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	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/23/21 21:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/23/21 21:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/23/21 21:36	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/23/21 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		65 - 130	08/23/21 17:27	08/23/21 21:36	1
o-Terphenyl	101		65 - 130	08/23/21 17:27	08/23/21 21:36	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	520		9.94		mg/Kg		08/19/21 16:26	08/19/21 18:53	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-B-1

Date Collected: 08/16/21 11:08
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-5
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		08/19/21 12:36	08/20/21 17:39	1
Toluene	<0.00505	U	0.00505		mg/Kg		08/19/21 12:36	08/20/21 17:39	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 17:39	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 17:39	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 17:39	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 17:39	1
Total BTEX	<0.00505	U	0.00505		mg/Kg		08/19/21 12:36	08/20/21 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*08/19/21 12:36*	*08/20/21 17:39*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 12:36*	*08/20/21 17:39*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/20/21 17:39*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/19/21 12:36*	*08/20/21 17:39*	*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	<50.1	U	50.1		mg/Kg		08/23/21 17:42	08/23/21 20:01	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:42	08/23/21 20:01	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:42	08/23/21 20:01	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:42	08/23/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*65 - 130*	*08/23/21 17:42*	*08/23/21 20:01*	*1*
o-Terphenyl	*118*		*65 - 130*	*08/23/21 17:42*	*08/23/21 20:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**594**		9.96		mg/Kg		08/19/21 16:26	08/19/21 19:02	1

Client Sample ID: C-B-1S

Date Collected: 08/16/21 11:10
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-6
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		08/19/21 12:36	08/20/21 17:59	1
Toluene	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 17:59	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 17:59	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 17:59	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 17:59	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 17:59	1
Total BTEX	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*	*08/19/21 12:36*	*08/20/21 17:59*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 12:36*	*08/20/21 17:59*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/20/21 17:59*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 12:36*	*08/20/21 17:59*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-B-1S

Lab Sample ID: 820-1660-6
Matrix: Solid
Date Collected: 08/16/21 11:10
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/25/21 01:13	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/25/21 01:13	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/25/21 01:13	1
Total TPH	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/25/21 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*65 - 130*	*08/23/21 17:27*	*08/25/21 01:13*	*1*
o-Terphenyl	*119*		*65 - 130*	*08/23/21 17:27*	*08/25/21 01:13*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**535**		10.1		mg/Kg		08/19/21 16:26	08/19/21 19:12	1

Client Sample ID: C-C-1N

Lab Sample ID: 820-1660-7
Matrix: Solid
Date Collected: 08/16/21 11:12
Date Received: 08/18/21 11:50
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	<0.000998	U	0.000998		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
Toluene	<0.00499	U	0.00499		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 18:19	1
Total BTEX	<0.00499	U	0.00499		mg/Kg		08/19/21 12:36	08/20/21 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*08/19/21 12:36*	*08/20/21 18:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 12:36*	*08/20/21 18:19*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 12:36*	*08/20/21 18:19*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 12:36*	*08/20/21 18:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 12:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 12:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 12:54	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*65 - 130*	*08/23/21 17:27*	*08/24/21 12:54*	*1*
o-Terphenyl	*108*		*65 - 130*	*08/23/21 17:27*	*08/24/21 12:54*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-1N
Date Collected: 08/16/21 11:12
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-7
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	523		10.1		mg/Kg		08/19/21 16:26	08/19/21 19:21	1

Client Sample ID: C-C-1
Date Collected: 08/16/21 11:14
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-8
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		08/19/21 12:36	08/20/21 18:40	1
Toluene	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 18:40	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 18:40	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 18:40	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		08/19/21 12:36	08/20/21 18:40	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		08/19/21 12:36	08/20/21 18:40	1
Total BTEX	<0.00504	U	0.00504		mg/Kg		08/19/21 12:36	08/20/21 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*	*08/19/21 12:36*	*08/20/21 18:40*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 12:36*	*08/20/21 18:40*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/20/21 18:40*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 12:36*	*08/20/21 18:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/23/21 17:27	08/24/21 13:13	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/23/21 17:27	08/24/21 13:13	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/23/21 17:27	08/24/21 13:13	1
Total TPH	<50.3	U	50.3		mg/Kg		08/23/21 17:27	08/24/21 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*65 - 130*	*08/23/21 17:27*	*08/24/21 13:13*	*1*
o-Terphenyl	*109*		*65 - 130*	*08/23/21 17:27*	*08/24/21 13:13*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	576		9.96		mg/Kg		08/19/21 16:26	08/19/21 19:31	1

Client Sample ID: C-C-3E
Date Collected: 08/16/21 11:16
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-9
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0249	U	0.0249		mg/Kg		08/23/21 15:20	08/24/21 12:53	25
Toluene	<0.125	U	0.125		mg/Kg		08/23/21 15:20	08/24/21 12:53	25
Ethylbenzene	<0.0249	U	0.0249		mg/Kg		08/23/21 15:20	08/24/21 12:53	25
m,p-Xylenes	<0.0498	U	0.0498		mg/Kg		08/23/21 15:20	08/24/21 12:53	25

Client Sample Results

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-C-3E
Date Collected: 08/16/21 11:16
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-9
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.0249	U	0.0249		mg/Kg		08/23/21 15:20	08/24/21 12:53	25
Xylenes, Total	<0.0498	U	0.0498		mg/Kg		08/23/21 15:20	08/24/21 12:53	25
Total BTEX	<0.125	U	0.125		mg/Kg		08/23/21 15:20	08/24/21 12:53	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*	*08/23/21 15:20*	*08/24/21 12:53*	*25*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/23/21 15:20*	*08/24/21 12:53*	*25*
Dibromofluoromethane (Surr)	*104*		*53 - 142*	*08/23/21 15:20*	*08/24/21 12:53*	*25*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/23/21 15:20*	*08/24/21 12:53*	*25*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/24/21 13:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/24/21 13:32	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/24/21 13:32	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:27	08/24/21 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*65 - 130*	*08/23/21 17:27*	*08/24/21 13:32*	*1*
o-Terphenyl	*119*		*65 - 130*	*08/23/21 17:27*	*08/24/21 13:32*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**543**		9.98		mg/Kg		08/19/21 16:26	08/19/21 19:40	1

Client Sample ID: C-C-3
Date Collected: 08/16/21 11:18
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-10
Matrix: Solid

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		08/19/21 12:36	08/20/21 19:21	1
Toluene	<0.00496	U	0.00496		mg/Kg		08/19/21 12:36	08/20/21 19:21	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 12:36	08/20/21 19:21	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 19:21	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 12:36	08/20/21 19:21	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 19:21	1
Total BTEX	<0.00496	U	0.00496		mg/Kg		08/19/21 12:36	08/20/21 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*08/19/21 12:36*	*08/20/21 19:21*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/19/21 12:36*	*08/20/21 19:21*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 12:36*	*08/20/21 19:21*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/19/21 12:36*	*08/20/21 19:21*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-3

Lab Sample ID: 820-1660-10
Matrix: Solid
Date Collected: 08/16/21 11:18
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/23/21 23:29	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/23/21 23:29	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/23/21 23:29	1
Total TPH	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/23/21 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*65 - 130*	*08/23/21 17:27*	*08/23/21 23:29*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:27*	*08/23/21 23:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**535**		10.0		mg/Kg		08/19/21 16:26	08/19/21 19:49	1

Client Sample ID: C-C-2

Lab Sample ID: 820-1660-11
Matrix: Solid
Date Collected: 08/16/21 11:20
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/20/21 19:41	1
Toluene	<0.00496	U	0.00496		mg/Kg		08/19/21 12:36	08/20/21 19:41	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 12:36	08/20/21 19:41	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 19:41	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 12:36	08/20/21 19:41	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 19:41	1
Total BTEX	<0.00496	U	0.00496		mg/Kg		08/19/21 12:36	08/20/21 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*56 - 150*	*08/19/21 12:36*	*08/20/21 19:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 12:36*	*08/20/21 19:41*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/20/21 19:41*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 12:36*	*08/20/21 19:41*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC) - RA2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/25/21 01:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/25/21 01:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/25/21 01:32	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:27	08/25/21 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*65 - 130*	*08/23/21 17:27*	*08/25/21 01:32*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:27*	*08/25/21 01:32*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-2

Lab Sample ID: 820-1660-11
Matrix: Solid
Date Collected: 08/16/21 11:20
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	756		10.1		mg/Kg		08/19/21 16:26	08/19/21 19:59	1

Client Sample ID: C-C-5

Lab Sample ID: 820-1660-12
Matrix: Solid
Date Collected: 08/16/21 11:22
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/20/21 20:02	1
Toluene	<0.00501	U	0.00501		mg/Kg		08/19/21 12:36	08/20/21 20:02	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/20/21 20:02	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 20:02	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/20/21 20:02	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/20/21 20:02	1
Total BTEX	<0.00501	U	0.00501		mg/Kg		08/19/21 12:36	08/20/21 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*56 - 150*	*08/19/21 12:36*	*08/20/21 20:02*	*1*
4-Bromofluorobenzene (Surr)	*110*		*68 - 152*	*08/19/21 12:36*	*08/20/21 20:02*	*1*
Dibromofluoromethane (Surr)	*107*		*53 - 142*	*08/19/21 12:36*	*08/20/21 20:02*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 12:36*	*08/20/21 20:02*	*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	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 00:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 00:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 00:06	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:06*	*1*
o-Terphenyl	*96*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:06*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	811		10.0		mg/Kg		08/19/21 16:26	08/19/21 20:08	1

Client Sample ID: C-C-6

Lab Sample ID: 820-1660-13
Matrix: Solid
Date Collected: 08/16/21 11:24
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/20/21 21:04	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 12:36	08/20/21 21:04	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 12:36	08/20/21 21:04	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 21:04	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-C-6
Lab Sample ID: 820-1660-13
Date Collected: 08/16/21 11:24
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 12:36	08/20/21 21:04	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/20/21 21:04	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 12:36	08/20/21 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*08/19/21 12:36*	*08/20/21 21:04*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/19/21 12:36*	*08/20/21 21:04*	*1*
Dibromofluoromethane (Surr)	*98*		*53 - 142*	*08/19/21 12:36*	*08/20/21 21:04*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*08/19/21 12:36*	*08/20/21 21:04*	*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	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 00:25	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 00:25	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 00:25	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:25*	*1*
o-Terphenyl	*112*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:25*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**568**		10.0		mg/Kg		08/19/21 16:26	08/19/21 20:18	1

Client Sample ID: C-C-7
Lab Sample ID: 820-1660-14
Date Collected: 08/16/21 11:26
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/21/21 01:28	1
Toluene	<0.00498	U	0.00498		mg/Kg		08/19/21 12:36	08/21/21 01:28	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		08/19/21 12:36	08/21/21 01:28	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 12:36	08/21/21 01:28	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		08/19/21 12:36	08/21/21 01:28	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 12:36	08/21/21 01:28	1
Total BTEX	<0.00498	U	0.00498		mg/Kg		08/19/21 12:36	08/21/21 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*08/19/21 12:36*	*08/21/21 01:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 12:36*	*08/21/21 01:28*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 12:36*	*08/21/21 01:28*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 12:36*	*08/21/21 01:28*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-7

Lab Sample ID: 820-1660-14
Matrix: Solid
Date Collected: 08/16/21 11:26
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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	<50.5	U	50.5		mg/Kg		08/23/21 17:27	08/24/21 00:43	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/23/21 17:27	08/24/21 00:43	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/23/21 17:27	08/24/21 00:43	1
Total TPH	<50.5	U	50.5		mg/Kg		08/23/21 17:27	08/24/21 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:43*	*1*
o-Terphenyl	*119*		*65 - 130*	*08/23/21 17:27*	*08/24/21 00:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**520**		10.1		mg/Kg		08/19/21 16:26	08/19/21 20:46	1

Client Sample ID: C-C-8

Lab Sample ID: 820-1660-15
Matrix: Solid
Date Collected: 08/16/21 11:28
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00428**		0.00101		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
Toluene	**0.0102**		0.00504		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
Ethylbenzene	**0.00133**		0.00101		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
m,p-Xylenes	**0.00417**		0.00202		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
o-Xylene	**0.00141**		0.00101		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
Xylenes, Total	**0.00558**		0.00202		mg/Kg		08/19/21 12:36	08/21/21 01:49	1
Total BTEX	**0.0214**		0.00504		mg/Kg		08/19/21 12:36	08/21/21 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*08/19/21 12:36*	*08/21/21 01:49*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 12:36*	*08/21/21 01:49*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/21/21 01:49*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 12:36*	*08/21/21 01:49*	*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	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 01:02	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 01:02	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 01:02	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:27	08/24/21 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:02*	*1*
o-Terphenyl	*118*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:02*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-8
Lab Sample ID: 820-1660-15
Matrix: Solid
Date Collected: 08/16/21 11:28
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	645		9.94		mg/Kg		08/19/21 16:26	08/19/21 20:55	1

Client Sample ID: C-C-9
Lab Sample ID: 820-1660-16
Matrix: Solid
Date Collected: 08/16/21 11:30
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/21/21 02:09	1
Toluene	<0.00500	U	0.00500		mg/Kg		08/19/21 12:36	08/21/21 02:09	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/21/21 02:09	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/21/21 02:09	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/21/21 02:09	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/21/21 02:09	1
Total BTEX	<0.00500	U	0.00500		mg/Kg		08/19/21 12:36	08/21/21 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*	*08/19/21 12:36*	*08/21/21 02:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 12:36*	*08/21/21 02:09*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 12:36*	*08/21/21 02:09*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 12:36*	*08/21/21 02:09*	*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		08/23/21 17:27	08/24/21 01:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 01:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 01:20	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:20*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:20*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	548		9.98		mg/Kg		08/19/21 16:26	08/19/21 21:05	1

Client Sample ID: C-C-10
Lab Sample ID: 820-1660-17
Matrix: Solid
Date Collected: 08/16/21 11:32
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 12:36	08/21/21 02:30	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 12:36	08/21/21 02:30	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 12:36	08/21/21 02:30	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/21/21 02:30	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-C-10
Lab Sample ID: 820-1660-17
Date Collected: 08/16/21 11:32
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 12:36	08/21/21 02:30	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 12:36	08/21/21 02:30	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 12:36	08/21/21 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*	*08/19/21 12:36*	*08/21/21 02:30*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 12:36*	*08/21/21 02:30*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 12:36*	*08/21/21 02:30*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 12:36*	*08/21/21 02:30*	*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	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 01:57	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 01:57	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 01:57	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:57*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:27*	*08/24/21 01:57*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**550**		10.0		mg/Kg		08/19/21 16:26	08/19/21 21:14	1

Client Sample ID: C-C-2W
Lab Sample ID: 820-1660-18
Date Collected: 08/16/21 11:34
Matrix: Solid
Date Received: 08/18/21 11:50
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	**0.00360**		0.000998		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
Toluene	**0.0113**		0.00499		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
Ethylbenzene	**0.00146**		0.000998		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
m,p-Xylenes	**0.00494**		0.00200		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
o-Xylene	**0.00163**		0.000998		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
Xylenes, Total	**0.00657**		0.00200		mg/Kg		08/19/21 12:36	08/21/21 02:50	1
Total BTEX	**0.0229**		0.00499		mg/Kg		08/19/21 12:36	08/21/21 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*	*08/19/21 12:36*	*08/21/21 02:50*	*1*
4-Bromofluorobenzene (Surr)	*110*		*68 - 152*	*08/19/21 12:36*	*08/21/21 02:50*	*1*
Dibromofluoromethane (Surr)	*96*		*53 - 142*	*08/19/21 12:36*	*08/21/21 02:50*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*	*08/19/21 12:36*	*08/21/21 02:50*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-2W

Lab Sample ID: 820-1660-18
Matrix: Solid
Date Collected: 08/16/21 11:34
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/24/21 02:16	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/24/21 02:16	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/24/21 02:16	1
Total TPH	<50.2	U	50.2		mg/Kg		08/23/21 17:27	08/24/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:16*	*1*
o-Terphenyl	*101*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:16*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**581**		10.1		mg/Kg		08/19/21 16:26	08/19/21 21:23	1

Client Sample ID: C-C-3W

Lab Sample ID: 820-1660-19
Matrix: Solid
Date Collected: 08/16/21 11:36
Date Received: 08/18/21 11:50
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	**0.00174**		0.00100		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
Toluene	<0.00501	U	0.00501		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 12:36	08/21/21 03:11	1
Total BTEX	<0.00501	U	0.00501		mg/Kg		08/19/21 12:36	08/21/21 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*	*08/19/21 12:36*	*08/21/21 03:11*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 12:36*	*08/21/21 03:11*	*1*
Dibromofluoromethane (Surr)	*102*		*53 - 142*	*08/19/21 12:36*	*08/21/21 03:11*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/19/21 12:36*	*08/21/21 03:11*	*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	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:34	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:34	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:34	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:34*	*1*
o-Terphenyl	*114*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:34*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-3W
Lab Sample ID: 820-1660-19
Matrix: Solid
Date Collected: 08/16/21 11:36
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**490**		9.88		mg/Kg		08/19/21 16:26	08/19/21 21:33	1

Client Sample ID: C-C-4
Lab Sample ID: 820-1660-20
Matrix: Solid
Date Collected: 08/16/21 11:38
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00341**		0.00100		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
Toluene	**0.00889**		0.00501		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
Ethylbenzene	**0.00141**		0.00100		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
m,p-Xylenes	**0.00441**		0.00200		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
o-Xylene	**0.00160**		0.00100		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
Xylenes, Total	**0.00601**		0.00200		mg/Kg		08/19/21 15:03	08/21/21 03:31	1
Total BTEX	**0.0197**		0.00501		mg/Kg		08/19/21 15:03	08/21/21 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*56 - 150*	*08/19/21 15:03*	*08/21/21 03:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*68 - 152*	*08/19/21 15:03*	*08/21/21 03:31*	*1*
Dibromofluoromethane (Surr)	*108*		*53 - 142*	*08/19/21 15:03*	*08/21/21 03:31*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/19/21 15:03*	*08/21/21 03:31*	*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	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:52	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:52	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:52	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:27	08/24/21 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:52*	*1*
o-Terphenyl	*114*		*65 - 130*	*08/23/21 17:27*	*08/24/21 02:52*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**525**		9.98		mg/Kg		08/19/21 16:26	08/19/21 21:42	1

Client Sample ID: C-C-2E
Lab Sample ID: 820-1660-21
Matrix: Solid
Date Collected: 08/16/21 11:40
Date Received: 08/18/21 11:50
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	**0.00112**		0.000998		mg/Kg		08/19/21 17:38	08/21/21 03:52	1
Toluene	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/21/21 03:52	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/21/21 03:52	1
m,p-Xylenes	**0.00205**		0.00200		mg/Kg		08/19/21 17:38	08/21/21 03:52	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-C-2E
Lab Sample ID: 820-1660-21
Date Collected: 08/16/21 11:40
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/21/21 03:52	1
Xylenes, Total	**0.00205**		0.00200		mg/Kg		08/19/21 17:38	08/21/21 03:52	1
Total BTEX	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/21/21 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*56 - 150*	*08/19/21 17:38*	*08/21/21 03:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 17:38*	*08/21/21 03:52*	*1*
Dibromofluoromethane (Surr)	*104*		*53 - 142*	*08/19/21 17:38*	*08/21/21 03:52*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 17:38*	*08/21/21 03:52*	*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		08/23/21 17:27	08/24/21 03:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 03:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 03:11	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/24/21 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*65 - 130*	*08/23/21 17:27*	*08/24/21 03:11*	*1*
o-Terphenyl	*124*		*65 - 130*	*08/23/21 17:27*	*08/24/21 03:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**673**		10.0		mg/Kg		08/20/21 08:29	08/20/21 09:27	1

Client Sample ID: C-C-11
Lab Sample ID: 820-1660-22
Date Collected: 08/16/21 11:42
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 17:38	08/21/21 04:12	1
Toluene	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/21/21 04:12	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/21/21 04:12	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/21/21 04:12	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/21/21 04:12	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/21/21 04:12	1
Total BTEX	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/21/21 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*56 - 150*	*08/19/21 17:38*	*08/21/21 04:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 17:38*	*08/21/21 04:12*	*1*
Dibromofluoromethane (Surr)	*107*		*53 - 142*	*08/19/21 17:38*	*08/21/21 04:12*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 17:38*	*08/21/21 04:12*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-11

Date Collected: 08/16/21 11:42
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-22

Matrix: Solid

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		08/23/21 17:42	08/23/21 20:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/23/21 20:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/23/21 20:58	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/23/21 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:42*	*08/23/21 20:58*	*1*
o-Terphenyl	*117*		*65 - 130*	*08/23/21 17:42*	*08/23/21 20:58*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**632**		10.0		mg/Kg		08/20/21 08:29	08/20/21 09:55	1

Client Sample ID: C-D-1

Date Collected: 08/16/21 11:44
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-23

Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00223**		0.00101		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
Toluene	**0.0241**		0.00503		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
Ethylbenzene	**0.00658**		0.00101		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
m,p-Xylenes	**0.0231**		0.00201		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
o-Xylene	**0.00748**		0.00101		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
Xylenes, Total	**0.0306**		0.00201		mg/Kg		08/23/21 10:00	08/23/21 13:42	1
Total BTEX	**0.0635**		0.00503		mg/Kg		08/23/21 10:00	08/23/21 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*56 - 150*	*08/23/21 10:00*	*08/23/21 13:42*	*1*
4-Bromofluorobenzene (Surr)	*103*		*68 - 152*	*08/23/21 10:00*	*08/23/21 13:42*	*1*
Dibromofluoromethane (Surr)	*113*		*53 - 142*	*08/23/21 10:00*	*08/23/21 13:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/23/21 10:00*	*08/23/21 13:42*	*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	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 21:17	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 21:17	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 21:17	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*65 - 130*	*08/23/21 17:42*	*08/23/21 21:17*	*1*
o-Terphenyl	*105*		*65 - 130*	*08/23/21 17:42*	*08/23/21 21:17*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-1
Date Collected: 08/16/21 11:44
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-23
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**617**		10.1		mg/Kg		08/20/21 08:29	08/20/21 10:24	1

Client Sample ID: C-D-9
Date Collected: 08/16/21 11:46
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-24
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		08/19/21 17:38	08/21/21 04:53	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/21/21 04:53	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/21/21 04:53	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/21/21 04:53	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/21/21 04:53	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/21/21 04:53	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/21/21 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*	*08/19/21 17:38*	*08/21/21 04:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/19/21 17:38*	*08/21/21 04:53*	*1*
Dibromofluoromethane (Surr)	*104*		*53 - 142*	*08/19/21 17:38*	*08/21/21 04:53*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 17:38*	*08/21/21 04:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 13:04	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 13:04	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 13:04	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:42*	*08/24/21 13:04*	*1*
o-Terphenyl	*121*		*65 - 130*	*08/23/21 17:42*	*08/24/21 13:04*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**578**		9.94		mg/Kg		08/20/21 08:29	08/20/21 10:52	1

Client Sample ID: C-D-1N
Date Collected: 08/16/21 11:48
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-25
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00187**		0.000992		mg/Kg		08/19/21 17:38	08/21/21 05:14	1
Toluene	**0.00577**		0.00496		mg/Kg		08/19/21 17:38	08/21/21 05:14	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/21/21 05:14	1
m,p-Xylenes	**0.00210**		0.00198		mg/Kg		08/19/21 17:38	08/21/21 05:14	1

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-1N

Date Collected: 08/16/21 11:48
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-25

Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/21/21 05:14	1
Xylenes, Total	**0.00210**		0.00198		mg/Kg		08/19/21 17:38	08/21/21 05:14	1
Total BTEX	**0.00974**		0.00496		mg/Kg		08/19/21 17:38	08/21/21 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*56 - 150*	*08/19/21 17:38*	*08/21/21 05:14*	*1*
4-Bromofluorobenzene (Surr)	*110*		*68 - 152*	*08/19/21 17:38*	*08/21/21 05:14*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 17:38*	*08/21/21 05:14*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/19/21 17:38*	*08/21/21 05:14*	*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	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/23/21 21:55	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/23/21 21:55	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/23/21 21:55	1
Total TPH	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/23/21 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*65 - 130*	*08/23/21 17:42*	*08/23/21 21:55*	*1*
o-Terphenyl	*120*		*65 - 130*	*08/23/21 17:42*	*08/23/21 21:55*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**506**		10.0		mg/Kg		08/20/21 08:29	08/20/21 11:24	1

Client Sample ID: C-D-10

Date Collected: 08/16/21 11:50
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-26

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		08/23/21 10:00	08/23/21 12:41	1
Toluene	<0.00504	U	0.00504		mg/Kg		08/23/21 10:00	08/23/21 12:41	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		08/23/21 10:00	08/23/21 12:41	1
m,p-Xylenes	<0.00202	U	0.00202		mg/Kg		08/23/21 10:00	08/23/21 12:41	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		08/23/21 10:00	08/23/21 12:41	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		08/23/21 10:00	08/23/21 12:41	1
Total BTEX	<0.00504	U	0.00504		mg/Kg		08/23/21 10:00	08/23/21 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*	*08/23/21 10:00*	*08/23/21 12:20*	*25*
1,2-Dichloroethane-d4 (Surr)	*112*		*56 - 150*	*08/23/21 10:00*	*08/23/21 12:41*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/23/21 10:00*	*08/23/21 12:20*	*25*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/23/21 10:00*	*08/23/21 12:41*	*1*
Dibromofluoromethane (Surr)	*106*		*53 - 142*	*08/23/21 10:00*	*08/23/21 12:20*	*25*
Dibromofluoromethane (Surr)	*114*		*53 - 142*	*08/23/21 10:00*	*08/23/21 12:41*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/23/21 10:00*	*08/23/21 12:20*	*25*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/23/21 10:00*	*08/23/21 12:41*	*1*

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Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-10

Date Collected: 08/16/21 11:50
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-26

Matrix: Solid

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	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/23/21 22:33	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/23/21 22:33	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/23/21 22:33	1
Total TPH	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/23/21 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*65 - 130*	*08/23/21 17:42*	*08/23/21 22:33*	*1*
o-Terphenyl	*135*	*S1+*	*65 - 130*	*08/23/21 17:42*	*08/23/21 22:33*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**614**		10.1		mg/Kg		08/20/21 08:29	08/20/21 11:34	1

Client Sample ID: C-D-18

Date Collected: 08/16/21 11:52
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-27

Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00352**		0.00100		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
Toluene	**0.00846**		0.00500		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
m,p-Xylenes	**0.00276**		0.00200		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
o-Xylene	**0.00105**		0.00100		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
Xylenes, Total	**0.00381**		0.00200		mg/Kg		08/19/21 17:38	08/21/21 05:54	1
Total BTEX	**0.0158**		0.00500		mg/Kg		08/19/21 17:38	08/21/21 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*56 - 150*	*08/19/21 17:38*	*08/21/21 05:54*	*1*
4-Bromofluorobenzene (Surr)	*109*		*68 - 152*	*08/19/21 17:38*	*08/21/21 05:54*	*1*
Dibromofluoromethane (Surr)	*109*		*53 - 142*	*08/19/21 17:38*	*08/21/21 05:54*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/21/21 05:54*	*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		08/23/21 17:42	08/23/21 22:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 22:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 22:52	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*65 - 130*	*08/23/21 17:42*	*08/23/21 22:52*	*1*
o-Terphenyl	*115*		*65 - 130*	*08/23/21 17:42*	*08/23/21 22:52*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-18

Lab Sample ID: 820-1660-27
Matrix: Solid
Date Collected: 08/16/21 11:52
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	694		10.1		mg/Kg		08/20/21 08:29	08/20/21 11:43	1

Client Sample ID: C-D-11

Lab Sample ID: 820-1660-28
Matrix: Solid
Date Collected: 08/16/21 11:54
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00116		0.000998		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
Toluene	0.00685		0.00499		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
Ethylbenzene	0.00158		0.000998		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
m,p-Xylenes	0.00529		0.00200		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
o-Xylene	0.00183		0.000998		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
Xylenes, Total	0.00712		0.00200		mg/Kg		08/23/21 10:00	08/23/21 14:02	1
Total BTEX	0.0167		0.00499		mg/Kg		08/23/21 10:00	08/23/21 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*56 - 150*	*08/23/21 10:00*	*08/23/21 14:02*	*1*
4-Bromofluorobenzene (Surr)	*103*		*68 - 152*	*08/23/21 10:00*	*08/23/21 14:02*	*1*
Dibromofluoromethane (Surr)	*110*		*53 - 142*	*08/23/21 10:00*	*08/23/21 14:02*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/23/21 10:00*	*08/23/21 14:02*	*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	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 23:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 23:10	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 23:10	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:42	08/23/21 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*65 - 130*	*08/23/21 17:42*	*08/23/21 23:10*	*1*
o-Terphenyl	*121*		*65 - 130*	*08/23/21 17:42*	*08/23/21 23:10*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	954		10.0		mg/Kg		08/20/21 08:29	08/20/21 11:53	1

Client Sample ID: C-D-16

Lab Sample ID: 820-1660-29
Matrix: Solid
Date Collected: 08/16/21 11:56
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00212		0.00101		mg/Kg		08/23/21 10:00	08/23/21 14:23	1
Toluene	0.0147		0.00505		mg/Kg		08/23/21 10:00	08/23/21 14:23	1
Ethylbenzene	0.00306		0.00101		mg/Kg		08/23/21 10:00	08/23/21 14:23	1
m,p-Xylenes	0.0105		0.00202		mg/Kg		08/23/21 10:00	08/23/21 14:23	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-16

Date Collected: 08/16/21 11:56
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-29
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	0.00341		0.00101		mg/Kg		08/23/21 10:00	08/23/21 14:23	1
Xylenes, Total	0.0139		0.00202		mg/Kg		08/23/21 10:00	08/23/21 14:23	1
Total BTEX	0.0338		0.00505		mg/Kg		08/23/21 10:00	08/23/21 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*56 - 150*	*08/23/21 10:00*	*08/23/21 14:23*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/23/21 10:00*	*08/23/21 14:23*	*1*
Dibromofluoromethane (Surr)	*107*		*53 - 142*	*08/23/21 10:00*	*08/23/21 14:23*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/23/21 10:00*	*08/23/21 14:23*	*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	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 23:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 23:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 23:29	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*65 - 130*	*08/23/21 17:42*	*08/23/21 23:29*	*1*
o-Terphenyl	*120*		*65 - 130*	*08/23/21 17:42*	*08/23/21 23:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	814		9.96		mg/Kg		08/20/21 08:29	08/20/21 12:02	1

Client Sample ID: C-D-12

Date Collected: 08/16/21 11:58
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-30
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00324		0.00100		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
Toluene	0.0108		0.00500		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
Ethylbenzene	0.00153		0.00100		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
m,p-Xylenes	0.00518		0.00200		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
o-Xylene	0.00191		0.00100		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
Xylenes, Total	0.00709		0.00200		mg/Kg		08/19/21 17:38	08/21/21 06:56	1
Total BTEX	0.0227		0.00500		mg/Kg		08/19/21 17:38	08/21/21 06:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*56 - 150*	*08/19/21 17:38*	*08/21/21 06:56*	*1*
4-Bromofluorobenzene (Surr)	*119*		*68 - 152*	*08/19/21 17:38*	*08/21/21 06:56*	*1*
Dibromofluoromethane (Surr)	*111*		*53 - 142*	*08/19/21 17:38*	*08/21/21 06:56*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 17:38*	*08/21/21 06:56*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-12

Date Collected: 08/16/21 11:58
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-30

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 13:48	1
Diesel Range Organics (Over C10-C28)	**434**		50.3		mg/Kg		08/23/21 17:42	08/24/21 13:48	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 13:48	1
Total TPH	**434**		50.3		mg/Kg		08/23/21 17:42	08/24/21 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*65 - 130*	*08/23/21 17:42*	*08/24/21 13:48*	*1*
o-Terphenyl	*79*		*65 - 130*	*08/23/21 17:42*	*08/24/21 13:48*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**646**		9.94		mg/Kg		08/20/21 08:29	08/20/21 12:11	1

Client Sample ID: C-D-15

Date Collected: 08/16/21 12:00
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-31

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		08/23/21 10:00	08/23/21 14:43	1
Toluene	<0.00502	U	0.00502		mg/Kg		08/23/21 10:00	08/23/21 14:43	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/23/21 10:00	08/23/21 14:43	1
m,p-Xylenes	<0.00201	U	0.00201		mg/Kg		08/23/21 10:00	08/23/21 14:43	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/23/21 10:00	08/23/21 14:43	1
Xylenes, Total	<0.00201	U	0.00201		mg/Kg		08/23/21 10:00	08/23/21 14:43	1
Total BTEX	<0.00502	U	0.00502		mg/Kg		08/23/21 10:00	08/23/21 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*56 - 150*	*08/23/21 10:00*	*08/23/21 14:43*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/23/21 10:00*	*08/23/21 14:43*	*1*
Dibromofluoromethane (Surr)	*108*		*53 - 142*	*08/23/21 10:00*	*08/23/21 14:43*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/23/21 10:00*	*08/23/21 14:43*	*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	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:06	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:06	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:06	1
Total TPH	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:06*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:06*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-15

Lab Sample ID: 820-1660-31
Matrix: Solid
Date Collected: 08/16/21 12:00
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**763**		10.1		mg/Kg		08/20/21 08:29	08/20/21 12:21	1

Client Sample ID: C-C-15

Lab Sample ID: 820-1660-32
Matrix: Solid
Date Collected: 08/16/21 12:02
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

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		08/19/21 17:38	08/20/21 21:24	1
Toluene	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 21:24	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 21:24	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 21:24	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 21:24	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 21:24	1
Total BTEX	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*08/19/21 17:38*	*08/20/21 21:24*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/19/21 17:38*	*08/20/21 21:24*	*1*
Dibromofluoromethane (Surr)	*94*		*53 - 142*	*08/19/21 17:38*	*08/20/21 21:24*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/19/21 17:38*	*08/20/21 21:24*	*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	<49.5	U	49.5		mg/Kg		08/23/21 17:42	08/24/21 00:25	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		08/23/21 17:42	08/24/21 00:25	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		08/23/21 17:42	08/24/21 00:25	1
Total TPH	<49.5	U	49.5		mg/Kg		08/23/21 17:42	08/24/21 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:25*	*1*
o-Terphenyl	*124*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:25*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**520**		10.0		mg/Kg		08/20/21 08:29	08/20/21 12:30	1

Client Sample ID: C-D-14

Lab Sample ID: 820-1660-33
Matrix: Solid
Date Collected: 08/16/21 12:04
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00323**		0.00100		mg/Kg		08/19/21 17:38	08/20/21 21:44	1
Toluene	**0.00826**		0.00500		mg/Kg		08/19/21 17:38	08/20/21 21:44	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 21:44	1
m,p-Xylenes	**0.00315**		0.00200		mg/Kg		08/19/21 17:38	08/20/21 21:44	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-D-14 Lab Sample ID: 820-1660-33

Date Collected: 08/16/21 12:04 **Matrix: Solid**
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	0.00135		0.00100		mg/Kg		08/19/21 17:38	08/20/21 21:44	1
Xylenes, Total	0.00450		0.00200		mg/Kg		08/19/21 17:38	08/20/21 21:44	1
Total BTEX	0.0160		0.00500		mg/Kg		08/19/21 17:38	08/20/21 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*08/19/21 17:38*	*08/20/21 21:44*	*1*
4-Bromofluorobenzene (Surr)	*98*		*68 - 152*	*08/19/21 17:38*	*08/20/21 21:44*	*1*
Dibromofluoromethane (Surr)	*96*		*53 - 142*	*08/19/21 17:38*	*08/20/21 21:44*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/19/21 17:38*	*08/20/21 21:44*	*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	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:43	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:43	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:43	1
Total TPH	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:43*	*1*
o-Terphenyl	*127*		*65 - 130*	*08/23/21 17:42*	*08/24/21 00:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	652		9.98		mg/Kg		08/20/21 08:29	08/20/21 12:40	1

Client Sample ID: C-D-1E Lab Sample ID: 820-1660-34

Date Collected: 08/16/21 12:06 **Matrix: Solid**
Date Received: 08/18/21 11:50
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	0.00364		0.000994		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
Toluene	0.0112		0.00497		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
Ethylbenzene	0.00130		0.000994		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
m,p-Xylenes	0.00459		0.00199		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
o-Xylene	0.00159		0.000994		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
Xylenes, Total	0.00618		0.00199		mg/Kg		08/19/21 17:38	08/20/21 22:04	1
Total BTEX	0.0223		0.00497		mg/Kg		08/19/21 17:38	08/20/21 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*	*08/19/21 17:38*	*08/20/21 22:04*	*1*
4-Bromofluorobenzene (Surr)	*97*		*68 - 152*	*08/19/21 17:38*	*08/20/21 22:04*	*1*
Dibromofluoromethane (Surr)	*96*		*53 - 142*	*08/19/21 17:38*	*08/20/21 22:04*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/19/21 17:38*	*08/20/21 22:04*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-1E

Lab Sample ID: 820-1660-34
Matrix: Solid
Date Collected: 08/16/21 12:06
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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	<50.5	U	50.5		mg/Kg		08/23/21 17:42	08/24/21 01:02	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/23/21 17:42	08/24/21 01:02	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/23/21 17:42	08/24/21 01:02	1
Total TPH	<50.5	U	50.5		mg/Kg		08/23/21 17:42	08/24/21 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*65 - 130*	*08/23/21 17:42*	*08/24/21 01:02*	*1*
o-Terphenyl	*117*		*65 - 130*	*08/23/21 17:42*	*08/24/21 01:02*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**561**		9.88		mg/Kg		08/20/21 08:29	08/20/21 13:08	1

Client Sample ID: C-D-19

Lab Sample ID: 820-1660-35
Matrix: Solid
Date Collected: 08/16/21 12:08
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00236**		0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:24	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*	*08/19/21 17:38*	*08/20/21 22:24*	*1*
4-Bromofluorobenzene (Surr)	*104*		*68 - 152*	*08/19/21 17:38*	*08/20/21 22:24*	*1*
Dibromofluoromethane (Surr)	*98*		*53 - 142*	*08/19/21 17:38*	*08/20/21 22:24*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 17:38*	*08/20/21 22:24*	*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	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 01:20	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 01:20	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 01:20	1
Total TPH	<50.4	U	50.4		mg/Kg		08/23/21 17:42	08/24/21 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*65 - 130*	*08/23/21 17:42*	*08/24/21 01:20*	*1*
o-Terphenyl	*141*	*S1+*	*65 - 130*	*08/23/21 17:42*	*08/24/21 01:20*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-19
Date Collected: 08/16/21 12:08
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-35
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**746**		10.0		mg/Kg		08/20/21 08:29	08/20/21 13:17	1

Client Sample ID: C-D-17
Date Collected: 08/16/21 12:10
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-36
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00103**		0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:44	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*08/19/21 17:38*	*08/20/21 22:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*68 - 152*	*08/19/21 17:38*	*08/20/21 22:44*	*1*
Dibromofluoromethane (Surr)	*95*		*53 - 142*	*08/19/21 17:38*	*08/20/21 22:44*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*08/19/21 17:38*	*08/20/21 22:44*	*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	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 01:57	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 01:57	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 01:57	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:42	08/24/21 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*65 - 130*	*08/23/21 17:42*	*08/24/21 01:57*	*1*
o-Terphenyl	*123*		*65 - 130*	*08/23/21 17:42*	*08/24/21 01:57*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**765**		10.1		mg/Kg		08/20/21 08:29	08/20/21 13:27	1

Client Sample ID: C-D-13
Date Collected: 08/16/21 12:12
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Lab Sample ID: 820-1660-37
Matrix: Solid

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00384**		0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:04	1
Toluene	**0.0112**		0.00496		mg/Kg		08/19/21 17:38	08/20/21 23:04	1
Ethylbenzene	**0.00129**		0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:04	1
m,p-Xylenes	**0.00415**		0.00198		mg/Kg		08/19/21 17:38	08/20/21 23:04	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-D-13
Lab Sample ID: 820-1660-37
Date Collected: 08/16/21 12:12
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	0.00160		0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:04	1
Xylenes, Total	0.00575		0.00198		mg/Kg		08/19/21 17:38	08/20/21 23:04	1
Total BTEX	0.0221		0.00496		mg/Kg		08/19/21 17:38	08/20/21 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*08/19/21 17:38*	*08/20/21 23:04*	*1*
4-Bromofluorobenzene (Surr)	*107*		*68 - 152*	*08/19/21 17:38*	*08/20/21 23:04*	*1*
Dibromofluoromethane (Surr)	*98*		*53 - 142*	*08/19/21 17:38*	*08/20/21 23:04*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*08/19/21 17:38*	*08/20/21 23:04*	*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		08/23/21 17:42	08/24/21 02:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:16	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:16	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*65 - 130*	*08/23/21 17:42*	*08/24/21 02:16*	*1*
o-Terphenyl	*128*		*65 - 130*	*08/23/21 17:42*	*08/24/21 02:16*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	694		10.1		mg/Kg		08/20/21 08:29	08/20/21 13:36	1

Client Sample ID: C-E6
Lab Sample ID: 820-1660-38
Date Collected: 08/16/21 12:14
Matrix: Solid
Date Received: 08/18/21 11:50
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	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
Toluene	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 23:24	1
Total BTEX	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*	*08/19/21 17:38*	*08/20/21 23:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 17:38*	*08/20/21 23:24*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 17:38*	*08/20/21 23:24*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 17:38*	*08/20/21 23:24*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-E6

Lab Sample ID: 820-1660-38
Matrix: Solid
Date Collected: 08/16/21 12:14
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 02:34	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 02:34	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 02:34	1
Total TPH	<50.3	U	50.3		mg/Kg		08/23/21 17:42	08/24/21 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*65 - 130*	*08/23/21 17:42*	*08/24/21 02:34*	*1*
o-Terphenyl	*129*		*65 - 130*	*08/23/21 17:42*	*08/24/21 02:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**505**		9.98		mg/Kg		08/20/21 08:29	08/20/21 13:45	1

Client Sample ID: C-W6

Lab Sample ID: 820-1660-39
Matrix: Solid
Date Collected: 08/16/21 12:16
Date Received: 08/18/21 11:50
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		08/19/21 17:38	08/20/21 23:44	1
Toluene	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 23:44	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 23:44	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 23:44	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 23:44	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 23:44	1
Total BTEX	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*	*08/19/21 17:38*	*08/20/21 23:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*68 - 152*	*08/19/21 17:38*	*08/20/21 23:44*	*1*
Dibromofluoromethane (Surr)	*94*		*53 - 142*	*08/19/21 17:38*	*08/20/21 23:44*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*08/19/21 17:38*	*08/20/21 23:44*	*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		08/23/21 17:42	08/24/21 02:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:52	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:42	08/24/21 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*65 - 130*	*08/23/21 17:42*	*08/24/21 02:52*	*1*
o-Terphenyl	*144*	*S1+*	*65 - 130*	*08/23/21 17:42*	*08/24/21 02:52*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W6

Lab Sample ID: 820-1660-39
Matrix: Solid
Date Collected: 08/16/21 12:16
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	504		9.96		mg/Kg		08/20/21 08:29	08/20/21 13:55	1

Client Sample ID: C-E7

Lab Sample ID: 820-1660-40
Matrix: Solid
Date Collected: 08/16/21 12:18
Date Received: 08/18/21 11:50
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	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
Toluene	<0.00501	U	0.00501		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 20:44	1
Total BTEX	<0.00501	U	0.00501		mg/Kg		08/19/21 17:38	08/20/21 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*	*08/19/21 17:38*	*08/20/21 20:44*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*	*08/19/21 17:38*	*08/20/21 20:44*	*1*
Dibromofluoromethane (Surr)	*95*		*53 - 142*	*08/19/21 17:38*	*08/20/21 20:44*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/19/21 17:38*	*08/20/21 20:44*	*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	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/24/21 03:11	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/24/21 03:11	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/24/21 03:11	1
Total TPH	<50.2	U	50.2		mg/Kg		08/23/21 17:42	08/24/21 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*65 - 130*	*08/23/21 17:42*	*08/24/21 03:11*	*1*
o-Terphenyl	*138*	*S1+*	*65 - 130*	*08/23/21 17:42*	*08/24/21 03:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	504		10.1		mg/Kg		08/20/21 08:29	08/20/21 14:04	1

Client Sample ID: C-W7

Lab Sample ID: 820-1660-41
Matrix: Solid
Date Collected: 08/16/21 12:20
Date Received: 08/18/21 11:50
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	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 22:35	1
Toluene	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 22:35	1
Ethylbenzene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 22:35	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:35	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-W7
Lab Sample ID: 820-1660-41
Date Collected: 08/16/21 12:20
Matrix: Solid
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000992	U	0.000992		mg/Kg		08/19/21 17:38	08/20/21 22:35	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 22:35	1
Total BTEX	<0.00496	U	0.00496		mg/Kg		08/19/21 17:38	08/20/21 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*	*08/19/21 17:38*	*08/20/21 22:35*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 22:35*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 17:38*	*08/20/21 22:35*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 22:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/24/21 10:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/24/21 10:59	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/24/21 10:59	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/24/21 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*65 - 130*	*08/23/21 17:57*	*08/24/21 10:59*	*1*
o-Terphenyl	*139*	*S1+*	*65 - 130*	*08/23/21 17:57*	*08/24/21 10:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**540**		9.98		mg/Kg		08/20/21 15:35	08/20/21 16:08	1

Client Sample ID: C-E8
Lab Sample ID: 820-1660-42
Date Collected: 08/16/21 12:22
Matrix: Solid
Date Received: 08/18/21 11:50
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		08/19/21 17:38	08/20/21 22:15	1
Toluene	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/20/21 22:15	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/20/21 22:15	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 22:15	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/20/21 22:15	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 22:15	1
Total BTEX	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/20/21 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*56 - 150*	*08/19/21 17:38*	*08/20/21 22:15*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 22:15*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*	*08/19/21 17:38*	*08/20/21 22:15*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/19/21 17:38*	*08/20/21 22:15*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-E8

Lab Sample ID: 820-1660-42
Matrix: Solid
Date Collected: 08/16/21 12:22
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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	<49.5	U	49.5		mg/Kg		08/23/21 17:57	08/23/21 21:40	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		08/23/21 17:57	08/23/21 21:40	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		08/23/21 17:57	08/23/21 21:40	1
Total TPH	<49.5	U	49.5		mg/Kg		08/23/21 17:57	08/23/21 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:57*	*08/23/21 21:40*	*1*
o-Terphenyl	*120*		*65 - 130*	*08/23/21 17:57*	*08/23/21 21:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**504**		9.96		mg/Kg		08/20/21 15:35	08/20/21 16:36	1

Client Sample ID: C-W8

Lab Sample ID: 820-1660-43
Matrix: Solid
Date Collected: 08/16/21 12:24
Date Received: 08/18/21 11:50
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		08/19/21 17:38	08/20/21 21:56	1
Toluene	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/20/21 21:56	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/20/21 21:56	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 21:56	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		08/19/21 17:38	08/20/21 21:56	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 21:56	1
Total BTEX	<0.00498	U	0.00498		mg/Kg		08/19/21 17:38	08/20/21 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*	*08/19/21 17:38*	*08/20/21 21:56*	*1*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*	*08/19/21 17:38*	*08/20/21 21:56*	*1*
Dibromofluoromethane (Surr)	*102*		*53 - 142*	*08/19/21 17:38*	*08/20/21 21:56*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 21:56*	*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	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/23/21 20:14	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/23/21 20:14	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/23/21 20:14	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/23/21 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*65 - 130*	*08/23/21 17:57*	*08/23/21 20:14*	*1*
o-Terphenyl	*91*		*65 - 130*	*08/23/21 17:57*	*08/23/21 20:14*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W8

Lab Sample ID: 820-1660-43
Matrix: Solid
Date Collected: 08/16/21 12:24
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	596		10.0		mg/Kg		08/30/21 12:11	08/30/21 23:14	1

Client Sample ID: C-E9

Lab Sample ID: 820-1660-44
Matrix: Solid
Date Collected: 08/16/21 12:26
Date Received: 08/18/21 11:50
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	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
Toluene	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 21:36	1
Total BTEX	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/20/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*	*08/19/21 17:38*	*08/20/21 21:36*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 21:36*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 17:38*	*08/20/21 21:36*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*	*08/19/21 17:38*	*08/20/21 21:36*	*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		08/23/21 17:57	08/23/21 22:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/23/21 22:02	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/23/21 22:02	1
Total TPH	<49.8	U	49.8		mg/Kg		08/23/21 17:57	08/23/21 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:57*	*08/23/21 22:02*	*1*
o-Terphenyl	*123*		*65 - 130*	*08/23/21 17:57*	*08/23/21 22:02*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	517		10.0		mg/Kg		08/20/21 15:35	08/20/21 17:33	1

Client Sample ID: C-W9

Lab Sample ID: 820-1660-45
Matrix: Solid
Date Collected: 08/16/21 12:28
Date Received: 08/18/21 11:50
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		08/19/21 17:38	08/20/21 21:16	1
Toluene	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 21:16	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 21:16	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 21:16	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

Client Sample ID: C-W9 Lab Sample ID: 820-1660-45

Date Collected: 08/16/21 12:28 **Matrix: Solid**
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 21:16	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 21:16	1
Total BTEX	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*56 - 150*	*08/19/21 17:38*	*08/20/21 21:16*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 21:16*	*1*
Dibromofluoromethane (Surr)	*103*		*53 - 142*	*08/19/21 17:38*	*08/20/21 21:16*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 21:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/23/21 17:57	08/24/21 11:19	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/23/21 17:57	08/24/21 11:19	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/23/21 17:57	08/24/21 11:19	1
Total TPH	<50.1	U	50.1		mg/Kg		08/23/21 17:57	08/24/21 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*65 - 130*	*08/23/21 17:57*	*08/24/21 11:19*	*1*
o-Terphenyl	*151*	*S1+*	*65 - 130*	*08/23/21 17:57*	*08/24/21 11:19*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**501**		9.94		mg/Kg		08/20/21 15:35	08/20/21 17:42	1

Client Sample ID: C-E10 Lab Sample ID: 820-1660-46

Date Collected: 08/16/21 12:30 **Matrix: Solid**
Date Received: 08/18/21 11:50
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	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
Toluene	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 20:56	1
Total BTEX	<0.00499	U	0.00499		mg/Kg		08/19/21 17:38	08/20/21 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*56 - 150*	*08/19/21 17:38*	*08/20/21 20:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 20:56*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 17:38*	*08/20/21 20:56*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 20:56*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-E10

Lab Sample ID: 820-1660-46
Matrix: Solid
Date Collected: 08/16/21 12:30
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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		08/23/21 17:57	08/23/21 23:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 23:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 23:05	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*65 - 130*	*08/23/21 17:57*	*08/23/21 23:05*	*1*
o-Terphenyl	*100*		*65 - 130*	*08/23/21 17:57*	*08/23/21 23:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**598**		9.88		mg/Kg		08/20/21 15:35	08/20/21 17:51	1

Client Sample ID: C-W10

Lab Sample ID: 820-1660-47
Matrix: Solid
Date Collected: 08/16/21 12:32
Date Received: 08/18/21 11:50
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		08/19/21 17:38	08/20/21 20:36	1
Toluene	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 20:36	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 20:36	1
m,p-Xylenes	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 20:36	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		08/19/21 17:38	08/20/21 20:36	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		08/19/21 17:38	08/20/21 20:36	1
Total BTEX	<0.00497	U	0.00497		mg/Kg		08/19/21 17:38	08/20/21 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*56 - 150*	*08/19/21 17:38*	*08/20/21 20:36*	*1*
4-Bromofluorobenzene (Surr)	*105*		*68 - 152*	*08/19/21 17:38*	*08/20/21 20:36*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 17:38*	*08/20/21 20:36*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 17:38*	*08/20/21 20:36*	*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		08/23/21 17:57	08/23/21 23:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/23/21 17:57	08/23/21 23:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/23/21 17:57	08/23/21 23:27	1
Total TPH	<49.9	U	49.9		mg/Kg		08/23/21 17:57	08/23/21 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*65 - 130*	*08/23/21 17:57*	*08/23/21 23:27*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:57*	*08/23/21 23:27*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W10

Lab Sample ID: 820-1660-47
Matrix: Solid
Date Collected: 08/16/21 12:32
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	509		9.98		mg/Kg		08/20/21 15:35	08/20/21 18:01	1

Client Sample ID: C-E11

Lab Sample ID: 820-1660-48
Matrix: Solid
Date Collected: 08/16/21 12:34
Date Received: 08/18/21 11:50
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	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 20:16	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*08/19/21 17:38*	*08/20/21 20:16*	*1*
4-Bromofluorobenzene (Surr)	*103*		*68 - 152*	*08/19/21 17:38*	*08/20/21 20:16*	*1*
Dibromofluoromethane (Surr)	*100*		*53 - 142*	*08/19/21 17:38*	*08/20/21 20:16*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*08/19/21 17:38*	*08/20/21 20:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/24/21 12:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/24/21 12:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/24/21 12:01	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/24/21 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*65 - 130*	*08/23/21 17:57*	*08/24/21 12:01*	*1*
o-Terphenyl	*132*	*S1+*	*65 - 130*	*08/23/21 17:57*	*08/24/21 12:01*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	577		10.1		mg/Kg		08/20/21 15:35	08/20/21 18:10	1

Client Sample ID: C-W11

Lab Sample ID: 820-1660-49
Matrix: Solid
Date Collected: 08/16/21 12:36
Date Received: 08/18/21 11:50
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	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 19:56	1
Toluene	<0.00500	U	0.00500		mg/Kg		08/19/21 17:38	08/20/21 19:56	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 19:56	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 19:56	1

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W11

Lab Sample ID: 820-1660-49
Matrix: Solid
Date Collected: 08/16/21 12:36
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00100	U	0.00100		mg/Kg		08/19/21 17:38	08/20/21 19:56	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 17:38	08/20/21 19:56	1
Total BTEX	<0.00500	U	0.00500		mg/Kg		08/19/21 17:38	08/20/21 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*08/19/21 17:38*	*08/20/21 19:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 19:56*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*	*08/19/21 17:38*	*08/20/21 19:56*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 19:56*	*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	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:09	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:09	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:09	1
Total TPH	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:09*	*1*
o-Terphenyl	*111*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:09*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**507**		10.1		mg/Kg		08/20/21 15:35	08/20/21 18:20	1

Client Sample ID: D-E12

Lab Sample ID: 820-1660-50
Matrix: Solid
Date Collected: 08/16/21 12:38
Date Received: 08/18/21 11:50
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	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
Toluene	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
Ethylbenzene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
m,p-Xylenes	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
o-Xylene	<0.000990	U	0.000990		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
Xylenes, Total	<0.00198	U	0.00198		mg/Kg		08/19/21 17:38	08/20/21 19:37	1
Total BTEX	<0.00495	U	0.00495		mg/Kg		08/19/21 17:38	08/20/21 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*08/19/21 17:38*	*08/20/21 19:37*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 17:38*	*08/20/21 19:37*	*1*
Dibromofluoromethane (Surr)	*102*		*53 - 142*	*08/19/21 17:38*	*08/20/21 19:37*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*	*08/19/21 17:38*	*08/20/21 19:37*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: D-E12

Lab Sample ID: 820-1660-50
Matrix: Solid
Date Collected: 08/16/21 12:38
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

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	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/24/21 00:30	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/24/21 00:30	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/24/21 00:30	1
Total TPH	<49.7	U	49.7		mg/Kg		08/23/21 17:57	08/24/21 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:30*	*1*
o-Terphenyl	*123*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:30*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**505**		9.96		mg/Kg		08/20/21 15:35	08/20/21 18:29	1

Client Sample ID: D-W12

Lab Sample ID: 820-1660-51
Matrix: Solid
Date Collected: 08/16/21 12:40
Date Received: 08/18/21 11:50
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	<0.000998	U	0.000998		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
Toluene	<0.00499	U	0.00499		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		08/19/21 18:45	08/20/21 16:18	1
Total BTEX	<0.00499	U	0.00499		mg/Kg		08/19/21 18:45	08/20/21 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*08/19/21 18:45*	*08/20/21 16:18*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*	*08/19/21 18:45*	*08/20/21 16:18*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*08/19/21 18:45*	*08/20/21 16:18*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*	*08/19/21 18:45*	*08/20/21 16:18*	*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	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:51	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:51	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:51	1
Total TPH	<50.3	U	50.3		mg/Kg		08/23/21 17:57	08/24/21 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:51*	*1*
o-Terphenyl	*103*		*65 - 130*	*08/23/21 17:57*	*08/24/21 00:51*	*1*

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: D-W12
Date Collected: 08/16/21 12:40
Date Received: 08/18/21 11:50
Sample Depth: 1.5 - 2

Lab Sample ID: 820-1660-51
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530		10.0		mg/Kg		08/20/21 15:35	08/20/21 18:38	1

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
820-1660-1	C-A-1N	108	101	103	99
820-1660-1	C-A-1N	109	99	100	101
820-1660-1 MS	C-A-1N	96	102	100	100
820-1660-2	C-A-1	111	102	110	101
820-1660-3	C-A-1S	102	102	99	101
820-1660-4	C-B-1N	104	101	101	101
820-1660-5	C-B-1	106	102	103	102
820-1660-6	C-B-1S	107	100	103	101
820-1660-7	C-C-1N	106	102	101	99
820-1660-8	C-C-1	107	100	103	100
820-1660-9	C-C-3E	108	100	104	99
820-1660-9 MS	C-C-3E	98	100	101	103
820-1660-10	C-C-3	106	101	101	102
820-1660-11	C-C-2	109	100	103	100
820-1660-12	C-C-5	115	110	107	99
820-1660-13	C-C-6	104	101	98	103
820-1660-14	C-C-7	106	99	100	101
820-1660-15	C-C-8	104	99	103	100
820-1660-16	C-C-9	107	100	103	101
820-1660-17	C-C-10	105	99	101	100
820-1660-18	C-C-2W	105	110	96	106
820-1660-19	C-C-3W	105	100	102	102
820-1660-20	C-C-4	115	105	108	97
820-1660-21	C-C-2E	112	100	104	100
820-1660-22	C-C-11	109	99	107	99
820-1660-23	C-D-1	116	103	113	98
820-1660-24	C-D-9	108	101	104	101
820-1660-25	C-D-1N	112	110	103	104
820-1660-26	C-D-10	112	102	114	98
820-1660-26	C-D-10	103	101	106	101
820-1660-26 MS	C-D-10	104	101	106	100
820-1660-27	C-D-18	117	109	109	98
820-1660-28	C-D-11	112	103	110	99
820-1660-29	C-D-16	111	101	107	102
820-1660-30	C-D-12	118	119	111	99
820-1660-31	C-D-15	109	101	108	101
820-1660-32	C-C-15	104	100	94	104
820-1660-33	C-D-14	104	98	96	104
820-1660-34	C-D-1E	107	97	96	102
820-1660-35	C-D-19	108	104	98	100
820-1660-36	C-D-17	102	97	95	102
820-1660-37	C-D-13	106	107	98	101
820-1660-38	C-E6	108	99	100	99
820-1660-39	C-W6	103	97	94	104
820-1660-40	C-E7	105	99	95	105
820-1660-40 MS	C-E7	106	110	102	96
820-1660-41	C-W7	103	102	101	98
820-1660-42	C-E8	98	102	99	97
820-1660-43	C-W8	99	101	102	98

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (56-150)	BFB (68-152)	DBFM (53-142)	TOL (70-130)
820-1660-44	C-E9	99	102	100	97
820-1660-45	C-W9	101	102	103	98
820-1660-46	C-E10	100	102	101	98
820-1660-47	C-W10	101	105	100	99
820-1660-48	C-E11	102	103	100	99
820-1660-49	C-W11	102	102	99	98
820-1660-50	D-E12	102	102	102	98
820-1660-51	D-W12	104	102	101	100
820-1660-51 MS	D-W12	105	100	102	98
860-10236-B-1-A MS	Matrix Spike	98	100	101	100
LCS 860-19643/3	Lab Control Sample	102	100	103	97
LCS 860-19699/3	Lab Control Sample	99	99	99	97
LCS 860-19728/3	Lab Control Sample	101	99	102	99
LCS 860-19733/1011	Lab Control Sample	94	100	97	101
LCS 860-19839/3	Lab Control Sample	106	101	105	100
LCS 860-20026/3	Lab Control Sample	105	99	102	102
LCSD 860-19643/4	Lab Control Sample Dup	105	100	103	99
LCSD 860-19699/4	Lab Control Sample Dup	99	100	98	100
LCSD 860-19728/4	Lab Control Sample Dup	104	100	104	98
LCSD 860-19733/12	Lab Control Sample Dup	102	100	102	100
LCSD 860-19839/4	Lab Control Sample Dup	107	102	105	101
LCSD 860-20026/4	Lab Control Sample Dup	105	99	103	102
MB 860-19643/8	Method Blank	97	97	99	101
MB 860-19699/8	Method Blank	99	100	99	99
MB 860-19728/8	Method Blank	103	99	99	100
MB 860-19733/16	Method Blank	102	100	96	104
MB 860-19839/8	Method Blank	103	102	105	101
MB 860-20026/8	Method Blank	109	99	104	99

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)	
Lab Sample ID	Client Sample ID	1CO1 (65-130)	OTPH1 (65-130)
820-1660-1 - RA	C-A-1N	99	113
820-1660-1 MS - RA	C-A-1N	117	99
820-1660-1 MSD - RA	C-A-1N	103	87
820-1660-2 - RA	C-A-1	73	88
820-1660-3	C-A-1S	91	116
820-1660-4	C-B-1N	77	101
820-1660-5	C-B-1	101	118
820-1660-5 MS	C-B-1	107	107
820-1660-5 MSD	C-B-1	106	103
820-1660-6 - RA	C-B-1S	104	119

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

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)								
820-1660-7 - RA	C-C-1N	92	108								
820-1660-8 - RA	C-C-1	94	109								
820-1660-9 - RA	C-C-3E	101	119								
820-1660-10	C-C-3	97	122								
820-1660-11 - RA2	C-C-2	105	122								
820-1660-12	C-C-5	76	96								
820-1660-13	C-C-6	89	112								
820-1660-14	C-C-7	94	119								
820-1660-15	C-C-8	94	118								
820-1660-16	C-C-9	98	122								
820-1660-17	C-C-10	97	122								
820-1660-18	C-C-2W	82	101								
820-1660-19	C-C-3W	92	114								
820-1660-20	C-C-4	94	114								
820-1660-21	C-C-2E	102	124								
820-1660-22	C-C-11	98	117								
820-1660-23	C-D-1	88	105								
820-1660-24 - RA	C-D-9	98	121								
820-1660-25	C-D-1N	103	120								
820-1660-26	C-D-10	113	135 S1+								
820-1660-27	C-D-18	100	115								
820-1660-28	C-D-11	104	121								
820-1660-29	C-D-16	104	120								
820-1660-30 - RA	C-D-12	76	79								
820-1660-31	C-D-15	106	122								
820-1660-32	C-C-15	105	124								
820-1660-33	C-D-14	108	127								
820-1660-34	C-D-1E	101	117								
820-1660-35	C-D-19	119	141 S1+								
820-1660-36	C-D-17	106	123								
820-1660-37	C-D-13	111	128								
820-1660-38	C-E6	107	129								
820-1660-39	C-W6	121	144 S1+								
820-1660-40	C-E7	116	138 S1+								
820-1660-41 - RA	C-W7	115	139 S1+								
820-1660-42	C-E8	98	120								
820-1660-43	C-W8	73	91								
820-1660-43 MS - RA	C-W8	139 S1+	122								
820-1660-43 MSD	C-W8	98	85								
820-1660-44	C-E9	98	123								
820-1660-45 - RA	C-W9	130	151 S1+								
820-1660-46	C-E10	82	100								
820-1660-47	C-W10	97	122								
820-1660-48 - RA	C-E11	110	132 S1+								
820-1660-49	C-W11	92	111								
820-1660-50	D-E12	99	123								
820-1660-51	D-W12	82	103								
LCS 860-19951/2-A	Lab Control Sample	128	120								
LCS 860-19956/2-A	Lab Control Sample	134 S1+	128								
LCS 860-19960/2-A	Lab Control Sample	140 S1+	126								

Surrogate Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

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)								
LCSD 860-19951/3-A	Lab Control Sample Dup	117	109								
LCSD 860-19956/3-A	Lab Control Sample Dup	124	121								
LCSD 860-19960/3-A	Lab Control Sample Dup	123	109								
MB 860-19951/1-A	Method Blank	98	122								
MB 860-19956/1-A	Method Blank	116	139 S1+								
MB 860-19960/1-A	Method Blank	94	119								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: 820-1660-1 MS
Matrix: Solid
Analysis Batch: 19728

Client Sample ID: C-A-1N
Prep Type: Total/NA
Prep Batch: 19530

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0248	U	1.24	1.421		mg/Kg		115	71 - 119
Toluene	<0.124	U	1.24	1.299		mg/Kg		105	74 - 122
Ethylbenzene	<0.0248	U	1.24	1.382		mg/Kg		111	80 - 123
m,p-Xylenes	<0.0496	U	1.24	1.398		mg/Kg		113	78 - 127
o-Xylene	<0.0248	U	1.24	1.361		mg/Kg		110	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*56 - 150*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*
Dibromofluoromethane (Surr)	*100*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: 820-1660-40 MS
Matrix: Solid
Analysis Batch: 19733

Client Sample ID: C-E7
Prep Type: Total/NA
Prep Batch: 19605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00100	U	0.0499	0.04544		mg/Kg		90	71 - 119
Toluene	<0.00501	U	0.0499	0.04255		mg/Kg		82	74 - 122
Ethylbenzene	<0.00100	U	0.0499	0.04342		mg/Kg		86	80 - 123
m,p-Xylenes	<0.00200	U	0.0499	0.04437		mg/Kg		86	78 - 127
o-Xylene	<0.00100	U	0.0499	0.04391		mg/Kg		88	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*
4-Bromofluorobenzene (Surr)	*110*		*68 - 152*
Dibromofluoromethane (Surr)	*102*		*53 - 142*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: 820-1660-51 MS
Matrix: Solid
Analysis Batch: 19699

Client Sample ID: D-W12
Prep Type: Total/NA
Prep Batch: 19605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000998	U	0.0500	0.04782		mg/Kg		95	71 - 119
Toluene	<0.00499	U	0.0500	0.04581		mg/Kg		87	74 - 122
Ethylbenzene	<0.000998	U	0.0500	0.04683		mg/Kg		92	80 - 123
m,p-Xylenes	<0.00200	U	0.0500	0.04622		mg/Kg		89	78 - 127
o-Xylene	<0.000998	U	0.0500	0.04709		mg/Kg		94	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*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: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-19643/8
Matrix: Solid
Analysis Batch: 19643

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			08/20/21 11:44	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/20/21 11:44	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/20/21 11:44	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/20/21 11:44	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/20/21 11:44	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/20/21 11:44	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/20/21 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*56 - 150*		*08/20/21 11:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*68 - 152*		*08/20/21 11:44*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*		*08/20/21 11:44*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/20/21 11:44*	*1*

Lab Sample ID: LCS 860-19643/3
Matrix: Solid
Analysis Batch: 19643

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	0.05880		mg/Kg		118	66 - 142		
Toluene			0.0500	0.05264		mg/Kg		105	74 - 130		
Ethylbenzene			0.0500	0.05640		mg/Kg		113	80 - 130		
m,p-Xylenes			0.0500	0.05669		mg/Kg		113	78 - 130		
o-Xylene			0.0500	0.05513		mg/Kg		110	79 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*103*		*53 - 142*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 860-19643/4
Matrix: Solid
Analysis Batch: 19643

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	0.06154		mg/Kg		123	66 - 142	5	25
Toluene			0.0500	0.05541		mg/Kg		111	74 - 130	5	25
Ethylbenzene			0.0500	0.05920		mg/Kg		118	80 - 130	5	25
m,p-Xylenes			0.0500	0.05995		mg/Kg		120	78 - 130	6	25
o-Xylene			0.0500	0.05852		mg/Kg		117	79 - 130	6	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*103*		*53 - 142*
Toluene-d8 (Surr)	*99*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 860-10236-B-1-A MS
Matrix: Solid
Analysis Batch: 19643

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19655

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.682		1.26	1.932		mg/Kg		100	71 - 119
Ethylbenzene	0.162		1.26	1.462		mg/Kg		104	80 - 123
m,p-Xylenes	1.69		1.26	2.759		mg/Kg		85	78 - 127
o-Xylene	0.971		1.26	2.117		mg/Kg		91	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*101*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 860-19699/8
Matrix: Solid
Analysis Batch: 19699

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			08/20/21 15:08	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/20/21 15:08	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/20/21 15:08	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/20/21 15:08	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/20/21 15:08	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/20/21 15:08	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/20/21 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*		*08/20/21 15:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*		*08/20/21 15:08*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*		*08/20/21 15:08*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/20/21 15:08*	*1*

Lab Sample ID: LCS 860-19699/3
Matrix: Solid
Analysis Batch: 19699

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	0.04964		mg/Kg		99	66 - 142
Toluene	0.0500	0.04701		mg/Kg		94	74 - 130
Ethylbenzene	0.0500	0.04868		mg/Kg		97	80 - 130
m,p-Xylenes	0.0500	0.04792		mg/Kg		96	78 - 130
o-Xylene	0.0500	0.04751		mg/Kg		95	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*
Dibromofluoromethane (Surr)	*99*		*53 - 142*
Toluene-d8 (Surr)	*97*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-19699/4
Matrix: Solid
Analysis Batch: 19699

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	0.05035		mg/Kg		101	66 - 142	1	25
Toluene			0.0500	0.05006		mg/Kg		100	74 - 130	6	25
Ethylbenzene			0.0500	0.05112		mg/Kg		102	80 - 130	5	25
m,p-Xylenes			0.0500	0.05032		mg/Kg		101	78 - 130	5	25
o-Xylene			0.0500	0.04973		mg/Kg		99	79 - 130	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*98*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 860-19728/8
Matrix: Solid
Analysis Batch: 19728

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			08/21/21 00:27	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/21/21 00:27	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/21/21 00:27	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/21/21 00:27	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/21/21 00:27	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/21/21 00:27	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/21/21 00:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*		*08/21/21 00:27*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*		*08/21/21 00:27*	*1*
Dibromofluoromethane (Surr)	*99*		*53 - 142*		*08/21/21 00:27*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*08/21/21 00:27*	*1*

Lab Sample ID: LCS 860-19728/3
Matrix: Solid
Analysis Batch: 19728

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	0.05454		mg/Kg		109	66 - 142
Toluene			0.0500	0.04957		mg/Kg		99	74 - 130
Ethylbenzene			0.0500	0.05297		mg/Kg		106	80 - 130
m,p-Xylenes			0.0500	0.05338		mg/Kg		107	78 - 130
o-Xylene			0.0500	0.05200		mg/Kg		104	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*56 - 150*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*
Dibromofluoromethane (Surr)	*102*		*53 - 142*
Toluene-d8 (Surr)	*99*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-19728/4
Matrix: Solid
Analysis Batch: 19728

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	0.05835		mg/Kg		117	66 - 142	7	25
Toluene			0.0500	0.05172		mg/Kg		103	74 - 130	4	25
Ethylbenzene			0.0500	0.05518		mg/Kg		110	80 - 130	4	25
m,p-Xylenes			0.0500	0.05571		mg/Kg		111	78 - 130	4	25
o-Xylene			0.0500	0.05490		mg/Kg		110	79 - 130	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*104*		*53 - 142*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 860-19733/16
Matrix: Solid
Analysis Batch: 19733

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			08/20/21 20:24	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/20/21 20:24	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/20/21 20:24	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/20/21 20:24	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/20/21 20:24	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/20/21 20:24	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/20/21 20:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*		*08/20/21 20:24*	*1*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*		*08/20/21 20:24*	*1*
Dibromofluoromethane (Surr)	*96*		*53 - 142*		*08/20/21 20:24*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*08/20/21 20:24*	*1*

Lab Sample ID: LCS 860-19733/1011
Matrix: Solid
Analysis Batch: 19733

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	0.04626		mg/Kg		93	66 - 142
Toluene			0.0500	0.04623		mg/Kg		92	74 - 130
Ethylbenzene			0.0500	0.04719		mg/Kg		94	80 - 130
m,p-Xylenes			0.0500	0.04743		mg/Kg		95	78 - 130
o-Xylene			0.0500	0.04729		mg/Kg		95	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*97*		*53 - 142*
Toluene-d8 (Surr)	*101*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-19733/12
Matrix: Solid
Analysis Batch: 19733

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	0.05061		mg/Kg		101	66 - 142	9	25
Toluene			0.0500	0.04876		mg/Kg		98	74 - 130	5	25
Ethylbenzene			0.0500	0.05104		mg/Kg		102	80 - 130	8	25
m,p-Xylenes			0.0500	0.05063		mg/Kg		101	78 - 130	7	25
o-Xylene			0.0500	0.05095		mg/Kg		102	79 - 130	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*102*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 860-19839/8
Matrix: Solid
Analysis Batch: 19839

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			08/23/21 12:00	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/23/21 12:00	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/23/21 12:00	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/23/21 12:00	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/23/21 12:00	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/23/21 12:00	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/23/21 12:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*		*08/23/21 12:00*	*1*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*		*08/23/21 12:00*	*1*
Dibromofluoromethane (Surr)	*105*		*53 - 142*		*08/23/21 12:00*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/23/21 12:00*	*1*

Lab Sample ID: LCS 860-19839/3
Matrix: Solid
Analysis Batch: 19839

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	0.05000		mg/Kg		100	66 - 142
Toluene			0.0500	0.04682		mg/Kg		94	74 - 130
Ethylbenzene			0.0500	0.04965		mg/Kg		99	80 - 130
m,p-Xylenes			0.0500	0.04936		mg/Kg		99	78 - 130
o-Xylene			0.0500	0.04883		mg/Kg		98	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*
Dibromofluoromethane (Surr)	*105*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-19839/4
Matrix: Solid
Analysis Batch: 19839

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	0.05450		mg/Kg		109	66 - 142	9	25
Toluene			0.0500	0.04919		mg/Kg		98	74 - 130	5	25
Ethylbenzene			0.0500	0.05307		mg/Kg		106	80 - 130	7	25
m,p-Xylenes			0.0500	0.05299		mg/Kg		106	78 - 130	7	25
o-Xylene			0.0500	0.05206		mg/Kg		104	79 - 130	6	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*
4-Bromofluorobenzene (Surr)	*102*		*68 - 152*
Dibromofluoromethane (Surr)	*105*		*53 - 142*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: 820-1660-26 MS
Matrix: Solid
Analysis Batch: 19839

Client Sample ID: C-D-10
Prep Type: Total/NA
Prep Batch: 19861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0248	U	1.24	1.396		mg/Kg		113	71 - 119
Toluene	<0.124	U	1.24	1.269		mg/Kg		103	74 - 122
Ethylbenzene	<0.0248	U	1.24	1.360		mg/Kg		110	80 - 123
m,p-Xylenes	<0.0495	U	1.24	1.373		mg/Kg		111	78 - 127
o-Xylene	<0.0248	U	1.24	1.325		mg/Kg		107	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*
4-Bromofluorobenzene (Surr)	*101*		*68 - 152*
Dibromofluoromethane (Surr)	*106*		*53 - 142*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: 820-1660-9 MS
Matrix: Solid
Analysis Batch: 20026

Client Sample ID: C-C-3E
Prep Type: Total/NA
Prep Batch: 19923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0249	U	1.25	1.339		mg/Kg		107	71 - 119
Toluene	<0.125	U	1.25	1.264		mg/Kg		101	74 - 122
Ethylbenzene	<0.0249	U	1.25	1.341		mg/Kg		108	80 - 123
m,p-Xylenes	<0.0498	U	1.25	1.340		mg/Kg		108	78 - 127
o-Xylene	<0.0249	U	1.25	1.340		mg/Kg		108	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*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: Zeus SWD

Job ID: 820-1660-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-20026/8
Matrix: Solid
Analysis Batch: 20026

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			08/24/21 12:33	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/24/21 12:33	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/24/21 12:33	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/24/21 12:33	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/24/21 12:33	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/24/21 12:33	1
Total BTEX	<0.00500	U	0.00500		mg/Kg			08/24/21 12:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*56 - 150*		*08/24/21 12:33*	*1*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*		*08/24/21 12:33*	*1*
Dibromofluoromethane (Surr)	*104*		*53 - 142*		*08/24/21 12:33*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/24/21 12:33*	*1*

Lab Sample ID: LCS 860-20026/3
Matrix: Solid
Analysis Batch: 20026

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	0.05069		mg/Kg		101	66 - 142		
Toluene			0.0500	0.04667		mg/Kg		93	74 - 130		
Ethylbenzene			0.0500	0.04973		mg/Kg		99	80 - 130		
m,p-Xylenes			0.0500	0.05004		mg/Kg		100	78 - 130		
o-Xylene			0.0500	0.05060		mg/Kg		101	79 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*
Dibromofluoromethane (Surr)	*102*		*53 - 142*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 860-20026/4
Matrix: Solid
Analysis Batch: 20026

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	0.05270		mg/Kg		105	66 - 142	4	25
Toluene			0.0500	0.04970		mg/Kg		99	74 - 130	6	25
Ethylbenzene			0.0500	0.05185		mg/Kg		104	80 - 130	4	25
m,p-Xylenes			0.0500	0.05182		mg/Kg		104	78 - 130	3	25
o-Xylene			0.0500	0.05313		mg/Kg		106	79 - 130	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*56 - 150*
4-Bromofluorobenzene (Surr)	*99*		*68 - 152*
Dibromofluoromethane (Surr)	*103*		*53 - 142*
Toluene-d8 (Surr)	*102*		*70 - 130*

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

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

Lab Sample ID: MB 860-19951/1-A
Matrix: Solid
Analysis Batch: 19859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19951

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		08/23/21 17:27	08/23/21 19:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/23/21 19:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/23/21 19:04	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:27	08/23/21 19:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*65 - 130*	*08/23/21 17:27*	*08/23/21 19:04*	*1*
o-Terphenyl	*122*		*65 - 130*	*08/23/21 17:27*	*08/23/21 19:04*	*1*

Lab Sample ID: LCS 860-19951/2-A
Matrix: Solid
Analysis Batch: 19859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1321		mg/Kg		132	70 - 135		
Diesel Range Organics (Over C10-C28)			999	1075		mg/Kg		108	70 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*128*		*65 - 130*
o-Terphenyl	*120*		*65 - 130*

Lab Sample ID: LCSD 860-19951/3-A
Matrix: Solid
Analysis Batch: 19859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1242		mg/Kg		124	70 - 135	6	35
Diesel Range Organics (Over C10-C28)			999	1030		mg/Kg		103	70 - 135	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*65 - 130*
o-Terphenyl	*109*		*65 - 130*

Lab Sample ID: MB 860-19956/1-A
Matrix: Solid
Analysis Batch: 19857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19956

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		08/23/21 17:42	08/23/21 19:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 19:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 19:04	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:42	08/23/21 19:04	1

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		65 - 130	08/23/21 17:42	08/23/21 19:04	1
o-Terphenyl	139	S1+	65 - 130	08/23/21 17:42	08/23/21 19:04	1

Lab Sample ID: LCS 860-19956/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19857 — **Prep Batch: 19956**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1243		mg/Kg		124	70 - 135		
Diesel Range Organics (Over C10-C28)			999	1169		mg/Kg		117	70 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	134	S1+	65 - 130
o-Terphenyl	128		65 - 130

Lab Sample ID: LCSD 860-19956/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19857 — **Prep Batch: 19956**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1133		mg/Kg		113	70 - 135	9	35
Diesel Range Organics (Over C10-C28)			999	1042		mg/Kg		104	70 - 135	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		65 - 130
o-Terphenyl	121		65 - 130

Lab Sample ID: 820-1660-5 MS — **Client Sample ID: C-B-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19857 — **Prep Batch: 19956**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	1010	1099		mg/Kg		109	70 - 135		
Diesel Range Organics (Over C10-C28)	<50.1	U	1000	958.0		mg/Kg		96	70 - 135		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	107		65 - 130
o-Terphenyl	107		65 - 130

Lab Sample ID: 820-1660-5 MSD — **Client Sample ID: C-B-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19857 — **Prep Batch: 19956**

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	<50.1	U	994	1061		mg/Kg		107	70 - 135	4	35

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

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

Lab Sample ID: 820-1660-5 MSD
Matrix: Solid
Analysis Batch: 19857

Client Sample ID: C-B-1
Prep Type: Total/NA
Prep Batch: 19956

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)	<50.1	U	991	944.9		mg/Kg		95	70 - 135	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*65 - 130*
o-Terphenyl	*103*		*65 - 130*

Lab Sample ID: MB 860-19960/1-A
Matrix: Solid
Analysis Batch: 19853

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19960

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		08/23/21 17:57	08/23/21 19:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 19:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 19:09	1
Total TPH	<50.0	U	50.0		mg/Kg		08/23/21 17:57	08/23/21 19:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*65 - 130*	*08/23/21 17:57*	*08/23/21 19:09*	*1*
o-Terphenyl	*119*		*65 - 130*	*08/23/21 17:57*	*08/23/21 19:09*	*1*

Lab Sample ID: LCS 860-19960/2-A
Matrix: Solid
Analysis Batch: 19853

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19960

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1137		mg/Kg		113	70 - 135		
Diesel Range Organics (Over C10-C28)			999	1176		mg/Kg		118	70 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*140*	*S1+*	*65 - 130*
o-Terphenyl	*126*		*65 - 130*

Lab Sample ID: LCSD 860-19960/3-A
Matrix: Solid
Analysis Batch: 19853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19960

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1001		mg/Kg		100	70 - 135	13	35
Diesel Range Organics (Over C10-C28)			999	1044		mg/Kg		105	70 - 135	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*123*		*65 - 130*

Eurofins Xenco, Lubbock

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

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

Lab Sample ID: LCSD 860-19960/3-A
Matrix: Solid
Analysis Batch: 19853

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19960

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	109		65 - 130

Lab Sample ID: 820-1660-43 MSD
Matrix: Solid
Analysis Batch: 19853

Client Sample ID: C-W8
Prep Type: Total/NA
Prep Batch: 19960

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	<49.7	U	1000	817.7		mg/Kg		81	70 - 135	32	35
Diesel Range Organics (Over C10-C28)	<49.7	U	1000	861.2		mg/Kg		86	70 - 135	30	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		65 - 130
o-Terphenyl	85		65 - 130

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

Lab Sample ID: 820-1660-1 MS
Matrix: Solid
Analysis Batch: 20013

Client Sample ID: C-A-1N
Prep Type: Total/NA
Prep Batch: 19951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10 - RA	<50.1	U	1010	1265		mg/Kg		125	70 - 135
Diesel Range Organics (Over C10-C28) - RA	<50.1	U	1010	1102		mg/Kg		109	70 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane - RA	117		65 - 130
o-Terphenyl - RA	99		65 - 130

Lab Sample ID: 820-1660-1 MSD
Matrix: Solid
Analysis Batch: 20013

Client Sample ID: C-A-1N
Prep Type: Total/NA
Prep Batch: 19951

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 - RA	<50.1	U	1010	1103		mg/Kg		109	70 - 135	14	35
Diesel Range Organics (Over C10-C28) - RA	<50.1	U	1010	952.2		mg/Kg		94	70 - 135	15	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane - RA	103		65 - 130
o-Terphenyl - RA	87		65 - 130

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

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

Lab Sample ID: 820-1660-43 MS
Matrix: Solid
Analysis Batch: 20019

Client Sample ID: C-W8
Prep Type: Total/NA
Prep Batch: 19960

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10 - RA	<49.7	U	1010	1133		mg/Kg		112	70 - 135
Diesel Range Organics (Over C10-C28) - RA	<49.7	U	1010	1169		mg/Kg		116	70 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane - RA	*139*	*S1+*	*65 - 130*
o-Terphenyl - RA	*122*		*65 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-19574/1-A
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		08/19/21 16:26	08/19/21 16:35	1

Lab Sample ID: LCS 860-19574/2-A
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	106.8		mg/Kg		107	80 - 120

Lab Sample ID: LCSD 860-19574/3-A
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	106.0		mg/Kg		106	80 - 120	1	20

Lab Sample ID: 820-1660-1 MS
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: C-A-1N
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	536		99.8	635.6	4	mg/Kg		100	80 - 120

Lab Sample ID: 820-1660-1 MSD
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: C-A-1N
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	536		100	637.8	4	mg/Kg		101	80 - 120	0	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 820-1660-2 MS
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: C-A-1
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	660		99.6	762.5	4	mg/Kg		103	80 - 120

Lab Sample ID: 820-1660-2 MSD
Matrix: Solid
Analysis Batch: 19443

Client Sample ID: C-A-1
Prep Type: Total/NA
Prep Batch: 19574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	660		99.8	761.2	4	mg/Kg		102	80 - 120	0	20

Lab Sample ID: MB 860-19627/1-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		08/20/21 08:29	08/20/21 08:59	1

Lab Sample ID: LCS 860-19627/2-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	102.9		mg/Kg		103	80 - 120

Lab Sample ID: LCSD 860-19627/3-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	103.1		mg/Kg		103	80 - 120	0	20

Lab Sample ID: 820-1660-21 MS
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-C-2E
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	673		99.8	759.6	4	mg/Kg		87	80 - 120

Lab Sample ID: 820-1660-21 MSD
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-C-2E
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	673		100	764.7	4	mg/Kg		91	80 - 120	1	20

Lab Sample ID: 820-1660-22 MS
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-C-11
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	632		99.8	716.9	4	mg/Kg		85	80 - 120

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 820-1660-22 MSD
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-C-11
Prep Type: Total/NA
Prep Batch: 19627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	632		100	718.7	4	mg/Kg		87	80 - 120	0	20

Lab Sample ID: MB 860-19756/1-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		08/20/21 15:35	08/20/21 15:40	1

Lab Sample ID: LCS 860-19756/2-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19756

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 860-19756/3-A
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19756

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	107.0		mg/Kg		107	80 - 120	0	20

Lab Sample ID: 820-1660-41 MS
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-W7
Prep Type: Total/NA
Prep Batch: 19756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	540		100	641.6	4	mg/Kg		101	80 - 120

Lab Sample ID: 820-1660-41 MSD
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-W7
Prep Type: Total/NA
Prep Batch: 19756

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	540		100	642.1	4	mg/Kg		102	80 - 120	0	20

Lab Sample ID: 820-1660-42 MS
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-E8
Prep Type: Total/NA
Prep Batch: 19756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	504		99.8	600.3	4	mg/Kg		96	80 - 120

Lab Sample ID: 820-1660-42 MSD
Matrix: Solid
Analysis Batch: 19621

Client Sample ID: C-E8
Prep Type: Total/NA
Prep Batch: 19756

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	504		100	603.4	4	mg/Kg		99	80 - 120	1	20

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-20800/1-A
Matrix: Solid
Analysis Batch: 20730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		08/30/21 12:11	08/30/21 12:16	1

Lab Sample ID: LCS 860-20800/2-A
Matrix: Solid
Analysis Batch: 20730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	97.79		mg/Kg		98	80 - 120

Lab Sample ID: LCSD 860-20800/3-A
Matrix: Solid
Analysis Batch: 20730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 20800

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	98.42		mg/Kg		98	80 - 120	1	20

Lab Sample ID: 870-2589-A-2-D MS
Matrix: Solid
Analysis Batch: 20730

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 20800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	545		100	635.5	4	mg/Kg		90	80 - 120

Lab Sample ID: 870-2589-A-2-E MSD
Matrix: Solid
Analysis Batch: 20730

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 20800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	545		99.6	634.0	4	mg/Kg		89	80 - 120	0	20

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

GC/MS VOA

Prep Batch: 19530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1	C-A-1N	Total/NA	Solid	5035	
820-1660-1	C-A-1N	Total/NA	Solid	5035	
820-1660-3	C-A-1S	Total/NA	Solid	5035	
820-1660-4	C-B-1N	Total/NA	Solid	5035	
820-1660-5	C-B-1	Total/NA	Solid	5035	
820-1660-6	C-B-1S	Total/NA	Solid	5035	
820-1660-7	C-C-1N	Total/NA	Solid	5035	
820-1660-8	C-C-1	Total/NA	Solid	5035	
820-1660-10	C-C-3	Total/NA	Solid	5035	
820-1660-11	C-C-2	Total/NA	Solid	5035	
820-1660-12	C-C-5	Total/NA	Solid	5035	
820-1660-13	C-C-6	Total/NA	Solid	5035	
820-1660-14	C-C-7	Total/NA	Solid	5035	
820-1660-15	C-C-8	Total/NA	Solid	5035	
820-1660-16	C-C-9	Total/NA	Solid	5035	
820-1660-17	C-C-10	Total/NA	Solid	5035	
820-1660-18	C-C-2W	Total/NA	Solid	5035	
820-1660-19	C-C-3W	Total/NA	Solid	5035	
820-1660-20	C-C-4	Total/NA	Solid	5035	
820-1660-1 MS	C-A-1N	Total/NA	Solid	5035	

Prep Batch: 19605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-21	C-C-2E	Total/NA	Solid	5035	
820-1660-22	C-C-11	Total/NA	Solid	5035	
820-1660-24	C-D-9	Total/NA	Solid	5035	
820-1660-25	C-D-1N	Total/NA	Solid	5035	
820-1660-27	C-D-18	Total/NA	Solid	5035	
820-1660-30	C-D-12	Total/NA	Solid	5035	
820-1660-32	C-C-15	Total/NA	Solid	5035	
820-1660-33	C-D-14	Total/NA	Solid	5035	
820-1660-34	C-D-1E	Total/NA	Solid	5035	
820-1660-35	C-D-19	Total/NA	Solid	5035	
820-1660-36	C-D-17	Total/NA	Solid	5035	
820-1660-37	C-D-13	Total/NA	Solid	5035	
820-1660-38	C-E6	Total/NA	Solid	5035	
820-1660-39	C-W6	Total/NA	Solid	5035	
820-1660-40	C-E7	Total/NA	Solid	5035	
820-1660-41	C-W7	Total/NA	Solid	5035	
820-1660-42	C-E8	Total/NA	Solid	5035	
820-1660-43	C-W8	Total/NA	Solid	5035	
820-1660-44	C-E9	Total/NA	Solid	5035	
820-1660-45	C-W9	Total/NA	Solid	5035	
820-1660-46	C-E10	Total/NA	Solid	5035	
820-1660-47	C-W10	Total/NA	Solid	5035	
820-1660-48	C-E11	Total/NA	Solid	5035	
820-1660-49	C-W11	Total/NA	Solid	5035	
820-1660-50	D-E12	Total/NA	Solid	5035	
820-1660-51	D-W12	Total/NA	Solid	5035	
820-1660-40 MS	C-E7	Total/NA	Solid	5035	
820-1660-51 MS	D-W12	Total/NA	Solid	5035	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

GC/MS VOA

Analysis Batch: 19643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-3	C-A-1S	Total/NA	Solid	8260C	19530
820-1660-4	C-B-1N	Total/NA	Solid	8260C	19530
820-1660-5	C-B-1	Total/NA	Solid	8260C	19530
820-1660-6	C-B-1S	Total/NA	Solid	8260C	19530
820-1660-7	C-C-1N	Total/NA	Solid	8260C	19530
820-1660-8	C-C-1	Total/NA	Solid	8260C	19530
820-1660-10	C-C-3	Total/NA	Solid	8260C	19530
820-1660-11	C-C-2	Total/NA	Solid	8260C	19530
820-1660-12	C-C-5	Total/NA	Solid	8260C	19530
MB 860-19643/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-19643/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-19643/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
860-10236-B-1-A MS	Matrix Spike	Total/NA	Solid	8260C	19655

Prep Batch: 19655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
860-10236-B-1-A MS	Matrix Spike	Total/NA	Solid	5030C	

Analysis Batch: 19699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-41	C-W7	Total/NA	Solid	8260C	19605
820-1660-42	C-E8	Total/NA	Solid	8260C	19605
820-1660-43	C-W8	Total/NA	Solid	8260C	19605
820-1660-44	C-E9	Total/NA	Solid	8260C	19605
820-1660-45	C-W9	Total/NA	Solid	8260C	19605
820-1660-46	C-E10	Total/NA	Solid	8260C	19605
820-1660-47	C-W10	Total/NA	Solid	8260C	19605
820-1660-48	C-E11	Total/NA	Solid	8260C	19605
820-1660-49	C-W11	Total/NA	Solid	8260C	19605
820-1660-50	D-E12	Total/NA	Solid	8260C	19605
820-1660-51	D-W12	Total/NA	Solid	8260C	19605
MB 860-19699/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-19699/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-19699/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-1660-51 MS	D-W12	Total/NA	Solid	8260C	19605

Analysis Batch: 19728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1	C-A-1N	Total/NA	Solid	8260C	19530
820-1660-1	C-A-1N	Total/NA	Solid	8260C	19530
820-1660-14	C-C-7	Total/NA	Solid	8260C	19530
820-1660-15	C-C-8	Total/NA	Solid	8260C	19530
820-1660-16	C-C-9	Total/NA	Solid	8260C	19530
820-1660-17	C-C-10	Total/NA	Solid	8260C	19530
820-1660-18	C-C-2W	Total/NA	Solid	8260C	19530
820-1660-19	C-C-3W	Total/NA	Solid	8260C	19530
820-1660-20	C-C-4	Total/NA	Solid	8260C	19530
820-1660-21	C-C-2E	Total/NA	Solid	8260C	19605
820-1660-22	C-C-11	Total/NA	Solid	8260C	19605
820-1660-24	C-D-9	Total/NA	Solid	8260C	19605
820-1660-25	C-D-1N	Total/NA	Solid	8260C	19605

QC Association Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

GC/MS VOA (Continued)

Analysis Batch: 19728 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-27	C-D-18	Total/NA	Solid	8260C	19605
820-1660-30	C-D-12	Total/NA	Solid	8260C	19605
MB 860-19728/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-19728/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-19728/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-1660-1 MS	C-A-1N	Total/NA	Solid	8260C	19530

Analysis Batch: 19733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-13	C-C-6	Total/NA	Solid	8260C	19530
820-1660-32	C-C-15	Total/NA	Solid	8260C	19605
820-1660-33	C-D-14	Total/NA	Solid	8260C	19605
820-1660-34	C-D-1E	Total/NA	Solid	8260C	19605
820-1660-35	C-D-19	Total/NA	Solid	8260C	19605
820-1660-36	C-D-17	Total/NA	Solid	8260C	19605
820-1660-37	C-D-13	Total/NA	Solid	8260C	19605
820-1660-38	C-E6	Total/NA	Solid	8260C	19605
820-1660-39	C-W6	Total/NA	Solid	8260C	19605
820-1660-40	C-E7	Total/NA	Solid	8260C	19605
MB 860-19733/16	Method Blank	Total/NA	Solid	8260C	
LCS 860-19733/1011	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-19733/12	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-1660-40 MS	C-E7	Total/NA	Solid	8260C	19605

Analysis Batch: 19839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-2	C-A-1	Total/NA	Solid	8260C	19861
820-1660-23	C-D-1	Total/NA	Solid	8260C	19861
820-1660-26	C-D-10	Total/NA	Solid	8260C	19861
820-1660-26	C-D-10	Total/NA	Solid	8260C	19861
820-1660-28	C-D-11	Total/NA	Solid	8260C	19861
820-1660-29	C-D-16	Total/NA	Solid	8260C	19861
820-1660-31	C-D-15	Total/NA	Solid	8260C	19861
MB 860-19839/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-19839/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-19839/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-1660-26 MS	C-D-10	Total/NA	Solid	8260C	19861

Prep Batch: 19861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-2	C-A-1	Total/NA	Solid	5035	
820-1660-23	C-D-1	Total/NA	Solid	5035	
820-1660-26	C-D-10	Total/NA	Solid	5035	
820-1660-26	C-D-10	Total/NA	Solid	5035	
820-1660-28	C-D-11	Total/NA	Solid	5035	
820-1660-29	C-D-16	Total/NA	Solid	5035	
820-1660-31	C-D-15	Total/NA	Solid	5035	
820-1660-26 MS	C-D-10	Total/NA	Solid	5035	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Job ID: 820-1660-1
Project/Site: Zeus SWD

GC/MS VOA

Prep Batch: 19923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-9	C-C-3E	Total/NA	Solid	5035	
820-1660-9 MS	C-C-3E	Total/NA	Solid	5035	

Analysis Batch: 20026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-9	C-C-3E	Total/NA	Solid	8260C	19923
MB 860-20026/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-20026/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-20026/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
820-1660-9 MS	C-C-3E	Total/NA	Solid	8260C	19923

GC Semi VOA

Analysis Batch: 19853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-42	C-E8	Total/NA	Solid	8015B NM	19960
820-1660-43	C-W8	Total/NA	Solid	8015B NM	19960
820-1660-44	C-E9	Total/NA	Solid	8015B NM	19960
820-1660-46	C-E10	Total/NA	Solid	8015B NM	19960
820-1660-47	C-W10	Total/NA	Solid	8015B NM	19960
820-1660-49	C-W11	Total/NA	Solid	8015B NM	19960
820-1660-50	D-E12	Total/NA	Solid	8015B NM	19960
820-1660-51	D-W12	Total/NA	Solid	8015B NM	19960
MB 860-19960/1-A	Method Blank	Total/NA	Solid	8015B NM	19960
LCS 860-19960/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19960
LCSD 860-19960/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19960
820-1660-43 MSD	C-W8	Total/NA	Solid	8015B NM	19960

Analysis Batch: 19857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-5	C-B-1	Total/NA	Solid	8015B NM	19956
820-1660-22	C-C-11	Total/NA	Solid	8015B NM	19956
820-1660-23	C-D-1	Total/NA	Solid	8015B NM	19956
820-1660-25	C-D-1N	Total/NA	Solid	8015B NM	19956
820-1660-26	C-D-10	Total/NA	Solid	8015B NM	19956
820-1660-27	C-D-18	Total/NA	Solid	8015B NM	19956
820-1660-28	C-D-11	Total/NA	Solid	8015B NM	19956
820-1660-29	C-D-16	Total/NA	Solid	8015B NM	19956
820-1660-31	C-D-15	Total/NA	Solid	8015B NM	19956
820-1660-32	C-C-15	Total/NA	Solid	8015B NM	19956
820-1660-33	C-D-14	Total/NA	Solid	8015B NM	19956
820-1660-34	C-D-1E	Total/NA	Solid	8015B NM	19956
820-1660-35	C-D-19	Total/NA	Solid	8015B NM	19956
820-1660-36	C-D-17	Total/NA	Solid	8015B NM	19956
820-1660-37	C-D-13	Total/NA	Solid	8015B NM	19956
820-1660-38	C-E6	Total/NA	Solid	8015B NM	19956
820-1660-39	C-W6	Total/NA	Solid	8015B NM	19956
820-1660-40	C-E7	Total/NA	Solid	8015B NM	19956
MB 860-19956/1-A	Method Blank	Total/NA	Solid	8015B NM	19956
LCS 860-19956/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19956
LCSD 860-19956/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19956

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

GC Semi VOA (Continued)

Analysis Batch: 19857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-5 MS	C-B-1	Total/NA	Solid	8015B NM	19956
820-1660-5 MSD	C-B-1	Total/NA	Solid	8015B NM	19956

Analysis Batch: 19859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-3	C-A-1S	Total/NA	Solid	8015B NM	19951
820-1660-4	C-B-1N	Total/NA	Solid	8015B NM	19951
820-1660-10	C-C-3	Total/NA	Solid	8015B NM	19951
820-1660-12	C-C-5	Total/NA	Solid	8015B NM	19951
820-1660-13	C-C-6	Total/NA	Solid	8015B NM	19951
820-1660-14	C-C-7	Total/NA	Solid	8015B NM	19951
820-1660-15	C-C-8	Total/NA	Solid	8015B NM	19951
820-1660-16	C-C-9	Total/NA	Solid	8015B NM	19951
820-1660-17	C-C-10	Total/NA	Solid	8015B NM	19951
820-1660-18	C-C-2W	Total/NA	Solid	8015B NM	19951
820-1660-19	C-C-3W	Total/NA	Solid	8015B NM	19951
820-1660-20	C-C-4	Total/NA	Solid	8015B NM	19951
820-1660-21	C-C-2E	Total/NA	Solid	8015B NM	19951
MB 860-19951/1-A	Method Blank	Total/NA	Solid	8015B NM	19951
LCS 860-19951/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19951
LCSD 860-19951/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19951

Prep Batch: 19951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1 - RA	C-A-1N	Total/NA	Solid	8015NM Prep	
820-1660-2 - RA	C-A-1	Total/NA	Solid	8015NM Prep	
820-1660-3	C-A-1S	Total/NA	Solid	8015NM Prep	
820-1660-4	C-B-1N	Total/NA	Solid	8015NM Prep	
820-1660-6 - RA	C-B-1S	Total/NA	Solid	8015NM Prep	
820-1660-7 - RA	C-C-1N	Total/NA	Solid	8015NM Prep	
820-1660-8 - RA	C-C-1	Total/NA	Solid	8015NM Prep	
820-1660-9 - RA	C-C-3E	Total/NA	Solid	8015NM Prep	
820-1660-10	C-C-3	Total/NA	Solid	8015NM Prep	
820-1660-11 - RA2	C-C-2	Total/NA	Solid	8015NM Prep	
820-1660-12	C-C-5	Total/NA	Solid	8015NM Prep	
820-1660-13	C-C-6	Total/NA	Solid	8015NM Prep	
820-1660-14	C-C-7	Total/NA	Solid	8015NM Prep	
820-1660-15	C-C-8	Total/NA	Solid	8015NM Prep	
820-1660-16	C-C-9	Total/NA	Solid	8015NM Prep	
820-1660-17	C-C-10	Total/NA	Solid	8015NM Prep	
820-1660-18	C-C-2W	Total/NA	Solid	8015NM Prep	
820-1660-19	C-C-3W	Total/NA	Solid	8015NM Prep	
820-1660-20	C-C-4	Total/NA	Solid	8015NM Prep	
820-1660-21	C-C-2E	Total/NA	Solid	8015NM Prep	
MB 860-19951/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-19951/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-19951/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1660-1 MS - RA	C-A-1N	Total/NA	Solid	8015NM Prep	
820-1660-1 MSD - RA	C-A-1N	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

GC Semi VOA

Prep Batch: 19956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-5	C-B-1	Total/NA	Solid	8015NM Prep	
820-1660-22	C-C-11	Total/NA	Solid	8015NM Prep	
820-1660-23	C-D-1	Total/NA	Solid	8015NM Prep	
820-1660-24 - RA	C-D-9	Total/NA	Solid	8015NM Prep	
820-1660-25	C-D-1N	Total/NA	Solid	8015NM Prep	
820-1660-26	C-D-10	Total/NA	Solid	8015NM Prep	
820-1660-27	C-D-18	Total/NA	Solid	8015NM Prep	
820-1660-28	C-D-11	Total/NA	Solid	8015NM Prep	
820-1660-29	C-D-16	Total/NA	Solid	8015NM Prep	
820-1660-30 - RA	C-D-12	Total/NA	Solid	8015NM Prep	
820-1660-31	C-D-15	Total/NA	Solid	8015NM Prep	
820-1660-32	C-C-15	Total/NA	Solid	8015NM Prep	
820-1660-33	C-D-14	Total/NA	Solid	8015NM Prep	
820-1660-34	C-D-1E	Total/NA	Solid	8015NM Prep	
820-1660-35	C-D-19	Total/NA	Solid	8015NM Prep	
820-1660-36	C-D-17	Total/NA	Solid	8015NM Prep	
820-1660-37	C-D-13	Total/NA	Solid	8015NM Prep	
820-1660-38	C-E6	Total/NA	Solid	8015NM Prep	
820-1660-39	C-W6	Total/NA	Solid	8015NM Prep	
820-1660-40	C-E7	Total/NA	Solid	8015NM Prep	
MB 860-19956/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-19956/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-19956/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1660-5 MS	C-B-1	Total/NA	Solid	8015NM Prep	
820-1660-5 MSD	C-B-1	Total/NA	Solid	8015NM Prep	

Prep Batch: 19960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-41 - RA	C-W7	Total/NA	Solid	8015NM Prep	
820-1660-42	C-E8	Total/NA	Solid	8015NM Prep	
820-1660-43	C-W8	Total/NA	Solid	8015NM Prep	
820-1660-44	C-E9	Total/NA	Solid	8015NM Prep	
820-1660-45 - RA	C-W9	Total/NA	Solid	8015NM Prep	
820-1660-46	C-E10	Total/NA	Solid	8015NM Prep	
820-1660-47	C-W10	Total/NA	Solid	8015NM Prep	
820-1660-48 - RA	C-E11	Total/NA	Solid	8015NM Prep	
820-1660-49	C-W11	Total/NA	Solid	8015NM Prep	
820-1660-50	D-E12	Total/NA	Solid	8015NM Prep	
820-1660-51	D-W12	Total/NA	Solid	8015NM Prep	
MB 860-19960/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-19960/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-19960/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-1660-43 MS - RA	C-W8	Total/NA	Solid	8015NM Prep	
820-1660-43 MSD	C-W8	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1 - RA	C-A-1N	Total/NA	Solid	8015B NM	19951
820-1660-6 - RA	C-B-1S	Total/NA	Solid	8015B NM	19951
820-1660-7 - RA	C-C-1N	Total/NA	Solid	8015B NM	19951
820-1660-8 - RA	C-C-1	Total/NA	Solid	8015B NM	19951

QC Association Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-1660-1
Project/Site: Zeus SWD

GC Semi VOA (Continued)

Analysis Batch: 20013 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-9 - RA	C-C-3E	Total/NA	Solid	8015B NM	19951
820-1660-11 - RA2	C-C-2	Total/NA	Solid	8015B NM	19951
820-1660-1 MS - RA	C-A-1N	Total/NA	Solid	8015B NM	19951
820-1660-1 MSD - RA	C-A-1N	Total/NA	Solid	8015B NM	19951

Analysis Batch: 20019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-2 - RA	C-A-1	Total/NA	Solid	8015B NM	19951
820-1660-24 - RA	C-D-9	Total/NA	Solid	8015B NM	19956
820-1660-30 - RA	C-D-12	Total/NA	Solid	8015B NM	19956
820-1660-41 - RA	C-W7	Total/NA	Solid	8015B NM	19960
820-1660-45 - RA	C-W9	Total/NA	Solid	8015B NM	19960
820-1660-48 - RA	C-E11	Total/NA	Solid	8015B NM	19960
820-1660-43 MS - RA	C-W8	Total/NA	Solid	8015B NM	19960

HPLC/IC

Analysis Batch: 19443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1	C-A-1N	Total/NA	Solid	300.0	19574
820-1660-2	C-A-1	Total/NA	Solid	300.0	19574
820-1660-3	C-A-1S	Total/NA	Solid	300.0	19574
820-1660-4	C-B-1N	Total/NA	Solid	300.0	19574
820-1660-5	C-B-1	Total/NA	Solid	300.0	19574
820-1660-6	C-B-1S	Total/NA	Solid	300.0	19574
820-1660-7	C-C-1N	Total/NA	Solid	300.0	19574
820-1660-8	C-C-1	Total/NA	Solid	300.0	19574
820-1660-9	C-C-3E	Total/NA	Solid	300.0	19574
820-1660-10	C-C-3	Total/NA	Solid	300.0	19574
820-1660-11	C-C-2	Total/NA	Solid	300.0	19574
820-1660-12	C-C-5	Total/NA	Solid	300.0	19574
820-1660-13	C-C-6	Total/NA	Solid	300.0	19574
820-1660-14	C-C-7	Total/NA	Solid	300.0	19574
820-1660-15	C-C-8	Total/NA	Solid	300.0	19574
820-1660-16	C-C-9	Total/NA	Solid	300.0	19574
820-1660-17	C-C-10	Total/NA	Solid	300.0	19574
820-1660-18	C-C-2W	Total/NA	Solid	300.0	19574
820-1660-19	C-C-3W	Total/NA	Solid	300.0	19574
820-1660-20	C-C-4	Total/NA	Solid	300.0	19574
MB 860-19574/1-A	Method Blank	Total/NA	Solid	300.0	19574
LCS 860-19574/2-A	Lab Control Sample	Total/NA	Solid	300.0	19574
LCSD 860-19574/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	19574
820-1660-1 MS	C-A-1N	Total/NA	Solid	300.0	19574
820-1660-1 MSD	C-A-1N	Total/NA	Solid	300.0	19574
820-1660-2 MS	C-A-1	Total/NA	Solid	300.0	19574
820-1660-2 MSD	C-A-1	Total/NA	Solid	300.0	19574

Prep Batch: 19574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-1	C-A-1N	Total/NA	Solid	300_Prep	
820-1660-2	C-A-1	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

HPLC/IC (Continued)

Prep Batch: 19574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-3	C-A-1S	Total/NA	Solid	300_Prep	
820-1660-4	C-B-1N	Total/NA	Solid	300_Prep	
820-1660-5	C-B-1	Total/NA	Solid	300_Prep	
820-1660-6	C-B-1S	Total/NA	Solid	300_Prep	
820-1660-7	C-C-1N	Total/NA	Solid	300_Prep	
820-1660-8	C-C-1	Total/NA	Solid	300_Prep	
820-1660-9	C-C-3E	Total/NA	Solid	300_Prep	
820-1660-10	C-C-3	Total/NA	Solid	300_Prep	
820-1660-11	C-C-2	Total/NA	Solid	300_Prep	
820-1660-12	C-C-5	Total/NA	Solid	300_Prep	
820-1660-13	C-C-6	Total/NA	Solid	300_Prep	
820-1660-14	C-C-7	Total/NA	Solid	300_Prep	
820-1660-15	C-C-8	Total/NA	Solid	300_Prep	
820-1660-16	C-C-9	Total/NA	Solid	300_Prep	
820-1660-17	C-C-10	Total/NA	Solid	300_Prep	
820-1660-18	C-C-2W	Total/NA	Solid	300_Prep	
820-1660-19	C-C-3W	Total/NA	Solid	300_Prep	
820-1660-20	C-C-4	Total/NA	Solid	300_Prep	
MB 860-19574/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-19574/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-19574/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
820-1660-1 MS	C-A-1N	Total/NA	Solid	300_Prep	
820-1660-1 MSD	C-A-1N	Total/NA	Solid	300_Prep	
820-1660-2 MS	C-A-1	Total/NA	Solid	300_Prep	
820-1660-2 MSD	C-A-1	Total/NA	Solid	300_Prep	

Analysis Batch: 19621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-21	C-C-2E	Total/NA	Solid	300.0	19627
820-1660-22	C-C-11	Total/NA	Solid	300.0	19627
820-1660-23	C-D-1	Total/NA	Solid	300.0	19627
820-1660-24	C-D-9	Total/NA	Solid	300.0	19627
820-1660-25	C-D-1N	Total/NA	Solid	300.0	19627
820-1660-26	C-D-10	Total/NA	Solid	300.0	19627
820-1660-27	C-D-18	Total/NA	Solid	300.0	19627
820-1660-28	C-D-11	Total/NA	Solid	300.0	19627
820-1660-29	C-D-16	Total/NA	Solid	300.0	19627
820-1660-30	C-D-12	Total/NA	Solid	300.0	19627
820-1660-31	C-D-15	Total/NA	Solid	300.0	19627
820-1660-32	C-C-15	Total/NA	Solid	300.0	19627
820-1660-33	C-D-14	Total/NA	Solid	300.0	19627
820-1660-34	C-D-1E	Total/NA	Solid	300.0	19627
820-1660-35	C-D-19	Total/NA	Solid	300.0	19627
820-1660-36	C-D-17	Total/NA	Solid	300.0	19627
820-1660-37	C-D-13	Total/NA	Solid	300.0	19627
820-1660-38	C-E6	Total/NA	Solid	300.0	19627
820-1660-39	C-W6	Total/NA	Solid	300.0	19627
820-1660-40	C-E7	Total/NA	Solid	300.0	19627
820-1660-41	C-W7	Total/NA	Solid	300.0	19756
820-1660-42	C-E8	Total/NA	Solid	300.0	19756
820-1660-44	C-E9	Total/NA	Solid	300.0	19756

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

HPLC/IC (Continued)

Analysis Batch: 19621 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-45	C-W9	Total/NA	Solid	300.0	19756
820-1660-46	C-E10	Total/NA	Solid	300.0	19756
820-1660-47	C-W10	Total/NA	Solid	300.0	19756
820-1660-48	C-E11	Total/NA	Solid	300.0	19756
820-1660-49	C-W11	Total/NA	Solid	300.0	19756
820-1660-50	D-E12	Total/NA	Solid	300.0	19756
820-1660-51	D-W12	Total/NA	Solid	300.0	19756
MB 860-19627/1-A	Method Blank	Total/NA	Solid	300.0	19627
MB 860-19756/1-A	Method Blank	Total/NA	Solid	300.0	19756
LCS 860-19627/2-A	Lab Control Sample	Total/NA	Solid	300.0	19627
LCS 860-19756/2-A	Lab Control Sample	Total/NA	Solid	300.0	19756
LCSD 860-19627/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	19627
LCSD 860-19756/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	19756
820-1660-21 MS	C-C-2E	Total/NA	Solid	300.0	19627
820-1660-21 MSD	C-C-2E	Total/NA	Solid	300.0	19627
820-1660-22 MS	C-C-11	Total/NA	Solid	300.0	19627
820-1660-22 MSD	C-C-11	Total/NA	Solid	300.0	19627
820-1660-41 MS	C-W7	Total/NA	Solid	300.0	19756
820-1660-41 MSD	C-W7	Total/NA	Solid	300.0	19756
820-1660-42 MS	C-E8	Total/NA	Solid	300.0	19756
820-1660-42 MSD	C-E8	Total/NA	Solid	300.0	19756

Prep Batch: 19627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-21	C-C-2E	Total/NA	Solid	300_Prep	
820-1660-22	C-C-11	Total/NA	Solid	300_Prep	
820-1660-23	C-D-1	Total/NA	Solid	300_Prep	
820-1660-24	C-D-9	Total/NA	Solid	300_Prep	
820-1660-25	C-D-1N	Total/NA	Solid	300_Prep	
820-1660-26	C-D-10	Total/NA	Solid	300_Prep	
820-1660-27	C-D-18	Total/NA	Solid	300_Prep	
820-1660-28	C-D-11	Total/NA	Solid	300_Prep	
820-1660-29	C-D-16	Total/NA	Solid	300_Prep	
820-1660-30	C-D-12	Total/NA	Solid	300_Prep	
820-1660-31	C-D-15	Total/NA	Solid	300_Prep	
820-1660-32	C-C-15	Total/NA	Solid	300_Prep	
820-1660-33	C-D-14	Total/NA	Solid	300_Prep	
820-1660-34	C-D-1E	Total/NA	Solid	300_Prep	
820-1660-35	C-D-19	Total/NA	Solid	300_Prep	
820-1660-36	C-D-17	Total/NA	Solid	300_Prep	
820-1660-37	C-D-13	Total/NA	Solid	300_Prep	
820-1660-38	C-E6	Total/NA	Solid	300_Prep	
820-1660-39	C-W6	Total/NA	Solid	300_Prep	
820-1660-40	C-E7	Total/NA	Solid	300_Prep	
MB 860-19627/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-19627/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-19627/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
820-1660-21 MS	C-C-2E	Total/NA	Solid	300_Prep	
820-1660-21 MSD	C-C-2E	Total/NA	Solid	300_Prep	
820-1660-22 MS	C-C-11	Total/NA	Solid	300_Prep	
820-1660-22 MSD	C-C-11	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

HPLC/IC

Prep Batch: 19756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-41	C-W7	Total/NA	Solid	300_Prep	
820-1660-42	C-E8	Total/NA	Solid	300_Prep	
820-1660-44	C-E9	Total/NA	Solid	300_Prep	
820-1660-45	C-W9	Total/NA	Solid	300_Prep	
820-1660-46	C-E10	Total/NA	Solid	300_Prep	
820-1660-47	C-W10	Total/NA	Solid	300_Prep	
820-1660-48	C-E11	Total/NA	Solid	300_Prep	
820-1660-49	C-W11	Total/NA	Solid	300_Prep	
820-1660-50	D-E12	Total/NA	Solid	300_Prep	
820-1660-51	D-W12	Total/NA	Solid	300_Prep	
MB 860-19756/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-19756/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-19756/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
820-1660-41 MS	C-W7	Total/NA	Solid	300_Prep	
820-1660-41 MSD	C-W7	Total/NA	Solid	300_Prep	
820-1660-42 MS	C-E8	Total/NA	Solid	300_Prep	
820-1660-42 MSD	C-E8	Total/NA	Solid	300_Prep	

Analysis Batch: 20730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-43	C-W8	Total/NA	Solid	300.0	20800
MB 860-20800/1-A	Method Blank	Total/NA	Solid	300.0	20800
LCS 860-20800/2-A	Lab Control Sample	Total/NA	Solid	300.0	20800
LCSD 860-20800/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	20800
870-2589-A-2-D MS	Matrix Spike	Total/NA	Solid	300.0	20800
870-2589-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	300.0	20800

Prep Batch: 20800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-1660-43	C-W8	Total/NA	Solid	300_Prep	
MB 860-20800/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-20800/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-20800/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
870-2589-A-2-D MS	Matrix Spike	Total/NA	Solid	300_Prep	
870-2589-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	300_Prep	

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-A-1N
Date Collected: 08/16/21 11:00
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-1
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			5.04 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		25	5 mL	5 mL	19728	08/21/21 00:47	CSP	XEN STF
Total/NA	Prep	5035			5.02 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 01:08	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.99 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20013	08/24/21 11:58	IS	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 17:28	WP	XEN STF

Client Sample ID: C-A-1
Date Collected: 08/16/21 11:02
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-2
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			4.97 g	5 mL	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 13:01	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.06 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 12:22	IS	XEN STF
Total/NA	Prep	300_Prep			4.99 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 17:56	WP	XEN STF

Client Sample ID: C-A-1S
Date Collected: 08/16/21 11:04
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-3
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	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 16:58	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/23/21 21:17	T1S	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 18:25	WP	XEN STF

Client Sample ID: C-B-1N
Date Collected: 08/16/21 11:06
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-4
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			5.00 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 17:18	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/23/21 21:36	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 18:53	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-B-1
Date Collected: 08/16/21 11:08
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-5
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			4.95 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 17:39	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 20:01	IS	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:02	WP	XEN STF

Client Sample ID: C-B-1S
Date Collected: 08/16/21 11:10
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-6
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			4.96 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 17:59	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.97 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20013	08/25/21 01:13	IS	XEN STF
Total/NA	Prep	300_Prep			4.96 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:12	WP	XEN STF

Client Sample ID: C-C-1N
Date Collected: 08/16/21 11:12
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-7
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	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 18:19	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.00 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20013	08/24/21 12:54	IS	XEN STF
Total/NA	Prep	300_Prep			4.93 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:21	WP	XEN STF

Client Sample ID: C-C-1
Date Collected: 08/16/21 11:14
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-8
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			4.96 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 18:40	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.94 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20013	08/24/21 13:13	IS	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:31	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-3E
Date Collected: 08/16/21 11:16
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-9
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			5.02 g	5 mL	19923	08/23/21 15:20	CSP	XEN STF
Total/NA	Analysis	8260C		25	5 mL	5 mL	20026	08/24/21 12:53	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.04 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20013	08/24/21 13:32	IS	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:40	WP	XEN STF

Client Sample ID: C-C-3
Date Collected: 08/16/21 11:18
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-10
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			5.04 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 19:21	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/23/21 23:29	T1S	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:49	WP	XEN STF

Client Sample ID: C-C-2
Date Collected: 08/16/21 11:20
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-11
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			5.04 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 19:41	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA2		10.02 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA2	1			20013	08/25/21 01:32	IS	XEN STF
Total/NA	Prep	300_Prep			4.96 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 19:59	WP	XEN STF

Client Sample ID: C-C-5
Date Collected: 08/16/21 11:22
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-12
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			4.99 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19643	08/20/21 20:02	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 00:06	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 20:08	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-6
Date Collected: 08/16/21 11:24
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-13
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			5.05 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 21:04	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 00:25	T1S	XEN STF
Total/NA	Prep	300_Prep			4.99 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 20:18	WP	XEN STF

Client Sample ID: C-C-7
Date Collected: 08/16/21 11:26
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-14
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			5.02 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 01:28	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 00:43	T1S	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 20:46	WP	XEN STF

Client Sample ID: C-C-8
Date Collected: 08/16/21 11:28
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-15
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			4.96 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 01:49	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 01:02	T1S	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 20:55	WP	XEN STF

Client Sample ID: C-C-9
Date Collected: 08/16/21 11:30
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-16
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			5.00 g	5 mL	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 02:09	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 01:20	T1S	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 21:05	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-10
Date Collected: 08/16/21 11:32
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-17
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	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 02:30	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 01:57	T1S	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 21:14	WP	XEN STF

Client Sample ID: C-C-2W
Date Collected: 08/16/21 11:34
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-18
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	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 02:50	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 02:16	T1S	XEN STF
Total/NA	Prep	300_Prep			4.93 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 21:23	WP	XEN STF

Client Sample ID: C-C-3W
Date Collected: 08/16/21 11:36
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-19
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	19530	08/19/21 12:36	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 03:11	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 02:34	T1S	XEN STF
Total/NA	Prep	300_Prep			5.06 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 21:33	WP	XEN STF

Client Sample ID: C-C-4
Date Collected: 08/16/21 11:38
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-20
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	19530	08/19/21 15:03	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 03:31	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 02:52	T1S	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19574	08/19/21 16:26	JM	XEN STF
Total/NA	Analysis	300.0		1			19443	08/19/21 21:42	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-C-2E
Date Collected: 08/16/21 11:40
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-21
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 03:52	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19951	08/23/21 17:27	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19859	08/24/21 03:11	T1S	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 09:27	WP	XEN STF

Client Sample ID: C-C-11
Date Collected: 08/16/21 11:42
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-22
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 04:12	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 20:58	IS	XEN STF
Total/NA	Prep	300_Prep			4.99 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 09:55	WP	XEN STF

Client Sample ID: C-D-1
Date Collected: 08/16/21 11:44
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-23
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	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 13:42	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 21:17	IS	XEN STF
Total/NA	Prep	300_Prep			4.96 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 10:24	WP	XEN STF

Client Sample ID: C-D-9
Date Collected: 08/16/21 11:46
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-24
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 04:53	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.06 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 13:04	IS	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 10:52	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-1N
Date Collected: 08/16/21 11:48
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-25
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 05:14	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 21:55	IS	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 11:24	WP	XEN STF

Client Sample ID: C-D-10
Date Collected: 08/16/21 11:50
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-26
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	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		25	5 mL	5 mL	19839	08/23/21 12:20	CSP	XEN STF
Total/NA	Prep	5035			4.96 g	5 mL	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 12:41	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 22:33	IS	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 11:34	WP	XEN STF

Client Sample ID: C-D-18
Date Collected: 08/16/21 11:52
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-27
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	5035			5.00 g	5 mL	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 05:54	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 22:52	IS	XEN STF
Total/NA	Prep	300_Prep			4.95 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 11:43	WP	XEN STF

Client Sample ID: C-D-11
Date Collected: 08/16/21 11:54
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-28
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			5.01 g	5 mL	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 14:02	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 23:10	IS	XEN STF
Total/NA	Prep	300_Prep			4.99 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 11:53	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-16
Date Collected: 08/16/21 11:56
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-29
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			4.95 g	5 mL	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 14:23	CSP	XEN STF
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/23/21 23:29	IS	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 12:02	WP	XEN STF

Client Sample ID: C-D-12
Date Collected: 08/16/21 11:58
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-30
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			5.00 g	5 mL	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19728	08/21/21 06:56	CSP	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.95 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 13:48	IS	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 12:11	WP	XEN STF

Client Sample ID: C-D-15
Date Collected: 08/16/21 12:00
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-31
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	19861	08/23/21 10:00	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19839	08/23/21 14:43	CSP	XEN STF
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 00:06	IS	XEN STF
Total/NA	Prep	300_Prep			4.96 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 12:21	WP	XEN STF

Client Sample ID: C-C-15
Date Collected: 08/16/21 12:02
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-32
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 21:24	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 00:25	IS	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 12:30	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-14
Date Collected: 08/16/21 12:04
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-33
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 21:44	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 00:43	IS	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 12:40	WP	XEN STF

Client Sample ID: C-D-1E
Date Collected: 08/16/21 12:06
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-34
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 22:04	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 01:02	IS	XEN STF
Total/NA	Prep	300_Prep			5.06 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:08	WP	XEN STF

Client Sample ID: C-D-19
Date Collected: 08/16/21 12:08
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-35
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 22:24	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 01:20	IS	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:17	WP	XEN STF

Client Sample ID: C-D-17
Date Collected: 08/16/21 12:10
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-36
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			5.05 g	5 mL	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 22:44	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 01:57	IS	XEN STF
Total/NA	Prep	300_Prep			4.95 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:27	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-D-13
Date Collected: 08/16/21 12:12
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-37
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 23:04	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 02:16	IS	XEN STF
Total/NA	Prep	300_Prep			4.93 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:36	WP	XEN STF

Client Sample ID: C-E6
Date Collected: 08/16/21 12:14
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-38
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 23:24	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 02:34	IS	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:45	WP	XEN STF

Client Sample ID: C-W6
Date Collected: 08/16/21 12:16
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-39
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 23:44	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 02:52	IS	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 13:55	WP	XEN STF

Client Sample ID: C-E7
Date Collected: 08/16/21 12:18
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-40
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19733	08/20/21 20:44	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	19956	08/23/21 17:42	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19857	08/24/21 03:11	IS	XEN STF
Total/NA	Prep	300_Prep			4.94 g	50 mL	19627	08/20/21 08:29	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 14:04	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W7
Date Collected: 08/16/21 12:20
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-41
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 22:35	KLV	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.04 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 10:59	IS	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 16:08	WP	XEN STF

Client Sample ID: C-E8
Date Collected: 08/16/21 12:22
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-42
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 22:15	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/23/21 21:40	T1S	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 16:36	WP	XEN STF

Client Sample ID: C-W8
Date Collected: 08/16/21 12:24
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-43
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 21:56	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/23/21 20:14	T1S	XEN STF
Total/NA	Prep	300_Prep			4.98 g	50 mL	20800	08/30/21 12:11	JM	XEN STF
Total/NA	Analysis	300.0		1			20730	08/30/21 23:14	WP	XEN STF

Client Sample ID: C-E9
Date Collected: 08/16/21 12:26
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-44
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 21:36	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/23/21 22:02	T1S	XEN STF
Total/NA	Prep	300_Prep			5.00 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 17:33	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W9
Date Collected: 08/16/21 12:28
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-45
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 21:16	KLV	XEN STF
Total/NA	Prep	8015NM Prep	RA		9.99 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 11:19	IS	XEN STF
Total/NA	Prep	300_Prep			5.03 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 17:42	WP	XEN STF

Client Sample ID: C-E10
Date Collected: 08/16/21 12:30
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-46
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 20:56	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/23/21 23:05	T1S	XEN STF
Total/NA	Prep	300_Prep			5.06 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 17:51	WP	XEN STF

Client Sample ID: C-W10
Date Collected: 08/16/21 12:32
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-47
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 20:36	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/23/21 23:27	T1S	XEN STF
Total/NA	Prep	300_Prep			5.01 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 18:01	WP	XEN STF

Client Sample ID: C-E11
Date Collected: 08/16/21 12:34
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-48
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 20:16	KLV	XEN STF
Total/NA	Prep	8015NM Prep	RA		10.00 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM	RA	1			20019	08/24/21 12:01	IS	XEN STF
Total/NA	Prep	300_Prep			4.96 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 18:10	WP	XEN STF

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Client Sample ID: C-W11
Date Collected: 08/16/21 12:36
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-49
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 19:56	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/24/21 00:09	T1S	XEN STF
Total/NA	Prep	300_Prep			4.97 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 18:20	WP	XEN STF

Client Sample ID: D-E12
Date Collected: 08/16/21 12:38
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-50
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	19605	08/19/21 17:38	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 19:37	KLV	XEN STF
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/24/21 00:30	T1S	XEN STF
Total/NA	Prep	300_Prep			5.02 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 18:29	WP	XEN STF

Client Sample ID: D-W12
Date Collected: 08/16/21 12:40
Date Received: 08/18/21 11:50

Lab Sample ID: 820-1660-51
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	19605	08/19/21 18:45	AW	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	19699	08/20/21 16:18	KLV	XEN STF
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	19960	08/23/21 17:57	DAW	XEN STF
Total/NA	Analysis	8015B NM		1			19853	08/24/21 00:51	T1S	XEN STF
Total/NA	Prep	300_Prep			4.99 g	50 mL	19756	08/20/21 15:35	JM	XEN STF
Total/NA	Analysis	300.0		1			19621	08/20/21 18:38	WP	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
Job ID: 820-1660-1
Project/Site: Zeus SWD

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
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)
8015B NM	8015NM Prep	Solid	Total TPH
8260C	5035	Solid	Total BTEX

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus SWD

Job ID: 820-1660-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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.

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: Zeus SWD

Job ID: 820-1660-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-1660-1	C-A-1N	Solid	08/16/21 11:00	08/18/21 11:50	1.5 - 2
820-1660-2	C-A-1	Solid	08/16/21 11:02	08/18/21 11:50	4 - 4.5
820-1660-3	C-A-1S	Solid	08/16/21 11:04	08/18/21 11:50	1.5 - 2
820-1660-4	C-B-1N	Solid	08/16/21 11:06	08/18/21 11:50	1.5 - 2
820-1660-5	C-B-1	Solid	08/16/21 11:08	08/18/21 11:50	4 - 4.5
820-1660-6	C-B-1S	Solid	08/16/21 11:10	08/18/21 11:50	1.5 - 2
820-1660-7	C-C-1N	Solid	08/16/21 11:12	08/18/21 11:50	1.5 - 2
820-1660-8	C-C-1	Solid	08/16/21 11:14	08/18/21 11:50	4 - 4.5
820-1660-9	C-C-3E	Solid	08/16/21 11:16	08/18/21 11:50	1.5 - 2
820-1660-10	C-C-3	Solid	08/16/21 11:18	08/18/21 11:50	4 - 4.5
820-1660-11	C-C-2	Solid	08/16/21 11:20	08/18/21 11:50	4 - 4.5
820-1660-12	C-C-5	Solid	08/16/21 11:22	08/18/21 11:50	4 - 4.5
820-1660-13	C-C-6	Solid	08/16/21 11:24	08/18/21 11:50	4 - 4.5
820-1660-14	C-C-7	Solid	08/16/21 11:26	08/18/21 11:50	4 - 4.5
820-1660-15	C-C-8	Solid	08/16/21 11:28	08/18/21 11:50	4 - 4.5
820-1660-16	C-C-9	Solid	08/16/21 11:30	08/18/21 11:50	4 - 4.5
820-1660-17	C-C-10	Solid	08/16/21 11:32	08/18/21 11:50	4 - 4.5
820-1660-18	C-C-2W	Solid	08/16/21 11:34	08/18/21 11:50	1.5 - 2
820-1660-19	C-C-3W	Solid	08/16/21 11:36	08/18/21 11:50	1.5 - 2
820-1660-20	C-C-4	Solid	08/16/21 11:38	08/18/21 11:50	4 - 4.5
820-1660-21	C-C-2E	Solid	08/16/21 11:40	08/18/21 11:50	1.5 - 2
820-1660-22	C-C-11	Solid	08/16/21 11:42	08/18/21 11:50	4 - 4.5
820-1660-23	C-D-1	Solid	08/16/21 11:44	08/18/21 11:50	4 - 4.5
820-1660-24	C-D-9	Solid	08/16/21 11:46	08/18/21 11:50	4 - 4.5
820-1660-25	C-D-1N	Solid	08/16/21 11:48	08/18/21 11:50	1.5 - 2
820-1660-26	C-D-10	Solid	08/16/21 11:50	08/18/21 11:50	4 - 4.5
820-1660-27	C-D-18	Solid	08/16/21 11:52	08/18/21 11:50	4 - 4.5
820-1660-28	C-D-11	Solid	08/16/21 11:54	08/18/21 11:50	4 - 4.5
820-1660-29	C-D-16	Solid	08/16/21 11:56	08/18/21 11:50	4 - 4.5
820-1660-30	C-D-12	Solid	08/16/21 11:58	08/18/21 11:50	4 - 4.5
820-1660-31	C-D-15	Solid	08/16/21 12:00	08/18/21 11:50	4 - 4.5
820-1660-32	C-C-15	Solid	08/16/21 12:02	08/18/21 11:50	4 - 4.5
820-1660-33	C-D-14	Solid	08/16/21 12:04	08/18/21 11:50	4 - 4.5
820-1660-34	C-D-1E	Solid	08/16/21 12:06	08/18/21 11:50	1.5 - 2
820-1660-35	C-D-19	Solid	08/16/21 12:08	08/18/21 11:50	4 - 4.5
820-1660-36	C-D-17	Solid	08/16/21 12:10	08/18/21 11:50	4 - 4.5
820-1660-37	C-D-13	Solid	08/16/21 12:12	08/18/21 11:50	4 - 4.5
820-1660-38	C-E6	Solid	08/16/21 12:14	08/18/21 11:50	1.5 - 2
820-1660-39	C-W6	Solid	08/16/21 12:16	08/18/21 11:50	1.5 - 2
820-1660-40	C-E7	Solid	08/16/21 12:18	08/18/21 11:50	1.5 - 2
820-1660-41	C-W7	Solid	08/16/21 12:20	08/18/21 11:50	1.5 - 2
820-1660-42	C-E8	Solid	08/16/21 12:22	08/18/21 11:50	1.5 - 2
820-1660-43	C-W8	Solid	08/16/21 12:24	08/18/21 11:50	1.5 - 2
820-1660-44	C-E9	Solid	08/16/21 12:26	08/18/21 11:50	1.5 - 2
820-1660-45	C-W9	Solid	08/16/21 12:28	08/18/21 11:50	1.5 - 2
820-1660-46	C-E10	Solid	08/16/21 12:30	08/18/21 11:50	1.5 - 2
820-1660-47	C-W10	Solid	08/16/21 12:32	08/18/21 11:50	1.5 - 2
820-1660-48	C-E11	Solid	08/16/21 12:34	08/18/21 11:50	1.5 - 2
820-1660-49	C-W11	Solid	08/16/21 12:36	08/18/21 11:50	1.5 - 2
820-1660-50	D-E12	Solid	08/16/21 12:38	08/18/21 11:50	1.5 - 2
820-1660-51	D-W12	Solid	08/16/21 12:40	08/18/21 11:50	1.5 - 2

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820-1660 Chain of Custody

Loc: 820
1660

8/31/2021 (Rev. 1)

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CHAIN OF CUSTOD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubbock, Texas 79424

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

Phone:
Contact: J. Guesnier 806-544-9276
SRS #:
Sampler's Signature

Project Number: AR197210
Project Name: Zeus SWD

ANALYSIS REQUESTED

DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 3.6/3.56 IR-4

Page 1 of 3

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	8/16/2021	11:00	X		C-A-1N	1.5'	2'	X				X	X	X	
S	8/16/2021	11:02	X		C-A-1	4'	4.5'	X				X	X	X	
S	8/16/2021	11:04	X		C-A-1S	1.5'	2'	X				X	X	X	
S	8/16/2021	11:06	X		C-B-1N	1.5'	2'	X				X	X	X	
S	8/16/2021	11:08	X		C-B-1	4'	4.5'	X				X	X	X	
S	8/16/2021	11:10	X		C-B-1S	1.5'	2'	X				X	X	X	
S	8/16/2021	11:12	X		C-C-1N	1.5'	2'	X				X	X	X	
S	8/16/2021	11:14	X		C-C-1	4'	4.5'	X				X	X	X	
S	8/16/2021	11:16	X		C-C-3E	1.5'	2'	X				X	X	X	
S	8/16/2021	11:18	X		C-C-3	4'	4.5'	X				X	X	X	
S	8/16/2021	11:20	X		C-C-2	4'	4.5'	X				X	X	X	
S	8/16/2021	11:22	X		C-C-5	4'	4.5'	X				X	X	X	
S	8/16/2021	11:24	X		C-C-6	4'	4.5'	X				X	X	X	
S	8/16/2021	11:26	X		C-C-7	4'	4.5'	X				X	X	X	
S	8/16/2021	11:28	X		C-C-8	4'	4.5'	X				X	X	X	
S	8/16/2021	11:30	X		C-C-9	4'	4.5'	X				X	X	X	
S	8/16/2021	11:32	X		C-C-10	4'	4.5'	X				X	X	X	
S	8/16/2021	11:34	X		C-C-2W	1.5'	2'	X				X	X	X	
S	8/16/2021	11:36	X		C-C-3W	1.5'	2'	X				X	X	X	
S	8/16/2021	11:38	X		C-C-4	4'	4.5'	X				X	X	X	
S	8/16/2021	11:40	X		C-C-2E	1.5'	2'	X				X	X	X	
S	8/16/2021	11:42	X		C-C-11	4'	4.5'	X				X	X	X	
S	8/16/2021	11:44	X		C-D-1	4'	4.5'	X				X	X	X	
S	8/16/2021	11:46	X		C-D-9	4'	4.5'	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
[signature]	8-19-21	11:51	Teddy Rendon	8/19/21	1150

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

Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

CHAIN OF CUSTODY RECORD

Terracon

Laboratory: Xenco
Address: 6701 Aberdeen
Lubkock, 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

Project Number: AR197210
Project Name: Zeus SWD

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C): 3.6/3.5
IR-4
Page 2 of 3

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	8/16/2021	11:48	X		C-D-1N	1.5'	2'	X				X	X	X	
S	8/16/2021	11:50	X		C-D-10	4'	4.5'	X				X	X	X	
S	8/16/2021	11:52	X		C-D-18	4'	4.5'	X				X	X	X	
S	8/16/2021	11:54	X		C-D-11	4'	4.5'	X				X	X	X	
S	8/16/2021	11:56	X		C-D-16	4'	4.5'	X				X	X	X	
S	8/16/2021	11:58	X		C-D-12	4'	4.5'	X				X	X	X	
S	8/16/2021	12:00	X		C-D-15	4'	4.5'	X				X	X	X	
S	8/16/2021	12:02	X		C-C-15	4'	4.5'	X				X	X	X	
S	8/16/2021	12:04	X		C-D-14	4'	4.5'	X				X	X	X	
S	8/16/2021	12:06	X		C-D-1E	1.5'	2'	X				X	X	X	
S	8/16/2021	12:08	X		C-D-19	4'	4.5'	X				X	X	X	
S	8/16/2021	12:10	X		C-D-17	4'	4.5'	X				X	X	X	
S	8/16/2021	12:12	X		C-D-13	4'	4.5'	X				X	X	X	
S	8/16/2021	12:14	X		C-E6	1.5'	2'	X				X	X	X	
S	8/16/2021	12:16	X		C-W6	1.5'	2'	X				X	X	X	
S	8/16/2021	12:18	X		C-E7	1.5'	2'	X				X	X	X	
S	8/16/2021	12:20	X		C-W7	1.5'	2'	X				X	X	X	
S	8/16/2021	12:22	X		C-E8	1.5'	2'	X				X	X	X	
S	8/16/2021	12:24	X		C-W8	1.5'	2'	X				X	X	X	
S	8/16/2021	12:26	X		C-E9	1.5'	2'	X				X	X	X	
S	8/16/2021	12:28	X		C-W9	1.5'	2'	X				X	X	X	
S	8/16/2021	12:30	X		C-E10	1.5'	2'	X				X	X	X	
S	8/16/2021	12:32	X		C-W10	1.5'	2'	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
	8/16/21	11:51	Teddy Rendall	8/16/21	11:50

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 _____

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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): 3.6/3.56 IR-4

Page 3 of 3

Project Number: AR197210
Project Name: Zeus SWD

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	8/16/2021	12:34	X		C-E11	1.5'	2'	X				X	X	X	
S	8/16/2021	12:36	X		C-W11	1.5'	2'	X				X	X	X	
S	8/16/2021	12:38	X		D-E12	1.5'	2'	X				X	X	X	
S	8/16/2021	12:40	X		D-W12	1.5'	2'	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:
	8/19/21	11:51	Teddy Landeta	8/18/21	1140

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 _____

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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: 820-1892.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 1 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note:
Preservation Code:											
C-A-1N (820-1660-1)	8/16/21	11 00 Central		Solid			X	X	X	1	
C-A-1 (820-1660-2)	8/16/21	11.02 Central		Solid			X	X	X	1	
C-A-1S (820-1660-3)	8/16/21	11:04 Central		Solid			X	X	X	1	
C-B-1N (820-1660-4)	8/16/21	11:06 Central		Solid			X	X	X	1	
C-B-1 (820-1660-5)	8/16/21	11 08 Central		Solid			X	X	X	1	
C-B-1S (820-1660-6)	8/16/21	11 10 Central		Solid			X	X	X	1	
C-C-1N (820-1660-7)	8/16/21	11 12 Central		Solid			X	X	X	1	
C-C-1 (820-1660-8)	8/16/21	11 14 Central		Solid			X	X	X	1	
C-C-3E (820-1660-9)	8/16/21	11 16 Central		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:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Teddy Randell La FEDEX	8/18/21 1700		FEDEX		
Relinquished by:	08/18/21 1040	XENCO			
Relinquished by:	08/19/21				

Temp: 4.8 IR ID:HOU-188
C/F:+0.2
Corrected Temp: 5.0

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

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Received by OCD: 2/16/2022 9:49:04 AM
Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/31/2021 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1892.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 2 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
C-C-3 (820-1660-10)	8/16/21	11 18 Central		Solid			X	X	X	1	
C-C-2 (820-1660-11)	8/16/21	11:20 Central		Solid			X	X	X	1	
C-C-5 (820-1660-12)	8/16/21	11:22 Central		Solid			X	X	X	1	
C-C-6 (820-1660-13)	8/16/21	11.24 Central		Solid			X	X	X	1	
C-C-7 (820-1660-14)	8/16/21	11.26 Central		Solid			X	X	X	1	
C-C-8 (820-1660-15)	8/16/21	11.28 Central		Solid			X	X	X	1	
C-C-9 (820-1660-16)	8/16/21	11:30 Central		Solid			X	X	X	1	
C-C-10 (820-1660-17)	8/16/21	11:32 Central		Solid			X	X	X	1	
C-C-2W (820-1660-18)	8/16/21	11.34 Central		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: Teddy Randell Lee FEDEX	Date/Time: 8/18/21 1700	Company	Received by: FEDEX	Date/Time:	Company		
Relinquished by:	Date/Time: ~~08/18/21~~ ~~1100~~	Company XENCO	Received by:	Date/Time:		Temp 4.8 IR ID HOU-188 C/F +0.2 Corrected Temp 5.0	
Relinquished by:	Date/Time: 8/19/21 1040	Company	Received by:	Date/Time:			

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

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/31/2021 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1892.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 3 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
C-C-3W (820-1660-19)	8/16/21	11.36 Central		Solid			X	X	X	1	
C-C-4 (820-1660-20)	8/16/21	11:38 Central		Solid			X	X	X	1	
C-C-2E (820-1660-21)	8/16/21	11.40 Central		Solid			X	X	X	1	
C-C-11 (820-1660-22)	8/16/21	11:42 Central		Solid			X	X	X	1	
C-D-1 (820-1660-23)	8/16/21	11.44 Central		Solid			X	X	X	1	
C-D-9 (820-1660-24)	8/16/21	11:46 Central		Solid			X	X	X	1	
C-D-1N (820-1660-25)	8/16/21	11.48 Central		Solid			X	X	X	1	
C-D-10 (820-1660-26)	8/16/21	11.50 Central		Solid			X	X	X	1	
C-D-18 (820-1660-27)	8/16/21	11 52 Central		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: Teddy Randell Lee FEDEX	Date/Time: 8/18/21 1700	Company	Received by: FEDEX	Date/Time:	Company	
Relinquished by:	Date/Time: 08/19/21 1040	Company XENCO	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Temp 4 8 IR ID HOU-188
C/F +0.2
Corrected Temp 5 0

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

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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

8/31/2021 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1892.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 4 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
C-D-11 (820-1660-28)	8/16/21	11.54 Central		Solid			X	X	X	1	
C-D-16 (820-1660-29)	8/16/21	11.56 Central		Solid			X	X	X	1	
C-D-12 (820-1660-30)	8/16/21	11.58 Central		Solid			X	X	X	1	
C-D-15 (820-1660-31)	8/16/21	12:00 Central		Solid			X	X	X	1	
C-C-15 (820-1660-32)	8/16/21	12:02 Central		Solid			X	X	X	1	
C-D-14 (820-1660-33)	8/16/21	12:04 Central		Solid			X	X	X	1	
C-D-1E (820-1660-34)	8/16/21	12:06 Central		Solid			X	X	X	1	
C-D-19 (820-1660-35)	8/16/21	12:08 Central		Solid			X	X	X	1	
C-D-17 (820-1660-36)	8/16/21	12:10 Central		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: Teddy Randell La	Date/Time: 8/18/21 1700	Company	Received by: FEDEX	Date/Time:	Company
Relinquished by: FEDEX	Date/Time: 08/19/2021 1040	Company XENCO	Received by:	Date/Time:	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	

Temp: 4 8 IR ID:HOU-188
C/F:+0.2
Corrected Temp: 5 0

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

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Received by OCD: 2/16/2022 9:49:04 AM

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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

8/31/2021 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1892.5
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 5 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
C-D-13 (820-1660-37)	8/16/21	12:12 Central		Solid			X	X	X	1	
C-E6 (820-1660-38)	8/16/21	12:14 Central		Solid			X	X	X	1	
C-W6 (820-1660-39)	8/16/21	12:16 Central		Solid			X	X	X	1	
C-E7 (820-1660-40)	8/16/21	12:18 Central		Solid			X	X	X	1	
C-W7 (820-1660-41)	8/16/21	12:20 Central		Solid			X	X	X	1	
C-E8 (820-1660-42)	8/16/21	12:22 Central		Solid			X	X	X	1	
C-W8 (820-1660-43)	8/16/21	12:24 Central		Solid			X	X	X	1	
C-E9 (820-1660-44)	8/16/21	12:26 Central		Solid			X	X	X	1	
C-W9 (820-1660-45)	8/16/21	12:28 Central		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	Teddy Kendall Lee	8/18/21 1700		FEDEX		
2	FEDEX	08/19/21 1040	XENCO			
3						

Temp: 4.8 IR ID: HOU-188
C/F: +0.2
Corrected Temp: 5.0

Custody Seals Intact: | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

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Received by OCD: 2/16/2022 9:49:04 AM

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

Chain of Custody Record

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8/31/2021 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 820-1892.6
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: Texas	Page: Page 6 of 6
Company: Eurofins Xenco		Accreditations Required (See note): NELAP Texas		Job #: 820-1660-1
Address: 4147 Greenbriar Dr	Due Date Requested: 8/24/2021			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zues SWD AR197210	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)	8260C/5035FP_Calc BTEX	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/300_Prep Chloride	Total Number of containers	Special Instructions/Note
			Preservation Code:								
C-E10 (820-1660-46)	8/16/21	12:30 Central		Solid			X	X	X	1	
C-W10 (820-1660-47)	8/16/21	12:32 Central		Solid			X	X	X	1	
C-E11 (820-1660-48)	8/16/21	12:34 Central		Solid			X	X	X	1	
C-W11 (820-1660-49)	8/16/21	12:36 Central		Solid			X	X	X	1	
D-E12 (820-1660-50)	8/16/21	12:38 Central		Solid			X	X	X	1	
D-W12 (820-1660-51)	8/16/21	12:40 Central		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: Teddy Randell Lee FEDEX	Date/Time: 8/18/21 1700	Company	Received by: FEDEX
Relinquished by:	Date/Time: 08/19/21 1040	Company XENCO	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Custody Seals Intact: | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: Temp: 4 8 IR ID:HOU-188 C/F:+0.2 Corrected Temp: 5 0

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Received by OCD: 2/16/2022 9:49:04 AM

Released to Imaging: 3/21/2022 8:15:26 AM

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists Job Number: 820-1660-1

Login Number: 1660 **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: 820-1660-1

Login Number: 1660
List Number: 2
Creator: Edralin, Jhyrom

List Source: Eurofins Xenco, Stafford
List Creation: 08/19/21 12:35 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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 820-2360-1
Client Project/Site: Zeus AR197210

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

Attn: Erin Lloyd

JKramer

Authorized for release by:
10/29/2021 9:52:51 PM

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

Pre Liminary Data

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 Jacqueline Gartner (Water Microbiology).

JKramer

Jessica Kramer
Project Manager
10/29/2021 9:52:51 PM

Preliminary Data

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Laboratory Job ID: 820-2360-1

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Preliminary Data

Definitions/Glossary

Client: Terracon Consulting Eng & Scientists Job ID: 820-2360-1
Project/Site: Zeus AR197210

Qualifiers

GC/MS VOA

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.
S1+	Surrogate recovery exceeds control limits, high biased.
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.

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

Preliminary Data

Case Narrative

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Job ID: 820-2360-1

Laboratory: Eurofins Xenco, Lubbock

Narrative

Job Narrative
820-2360-1

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: The following samples were diluted due to the nature of the sample matrix and abundance of non-target analytes: (860-14385-A-6-A) and (860-14385-A-6-A MS). Elevated reporting limits (RLs) are provided.

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: 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: The following samples were diluted due to it being sand blast media: (860-14478-C-1-A) and (860-14478-C-1-A MS). Elevated reporting limits (RL) are provided.

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.

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-2E

Date Collected: 10/25/21 12:45
Date Received: 10/27/21 08:36
Sample Depth: 1.5 - 2

Lab Sample ID: 820-2360-1
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		10/28/21 14:24	10/28/21 15:45	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/28/21 14:24	10/28/21 15:45	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 15:45	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 15:45	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 15:45	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*56 - 150*	*10/28/21 14:24*	*10/28/21 15:45*	*1*
4-Bromofluorobenzene (Surr)	*110*		*68 - 152*	*10/28/21 14:24*	*10/28/21 15:45*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*10/28/21 14:24*	*10/28/21 15:45*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*10/28/21 14:24*	*10/28/21 15:45*	*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	<50.1	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	10/28/21 18:48	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/28/21 18:48	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/28/21 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*65 - 130*	*10/28/21 16:08*	*10/28/21 18:48*	*1*
o-Terphenyl	*83*		*65 - 130*	*10/28/21 16:08*	*10/28/21 18:48*	*1*

Client Sample ID: C-B-16

Date Collected: 10/25/21 12:50
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-2
Matrix: Solid

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 16:06	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/28/21 14:24	10/28/21 16:06	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 16:06	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 16:06	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/28/21 14:24	10/28/21 16:06	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*56 - 150*	*10/28/21 14:24*	*10/28/21 16:06*	*1*
4-Bromofluorobenzene (Surr)	*112*		*68 - 152*	*10/28/21 14:24*	*10/28/21 16:06*	*1*
Dibromofluoromethane (Surr)	*110*		*53 - 142*	*10/28/21 14:24*	*10/28/21 16:06*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*	*10/28/21 14:24*	*10/28/21 16:06*	*1*

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-B-16
Date Collected: 10/25/21 12:50
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-2
Matrix: Solid

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	10/28/21 19:42	1
Over C10-C28	<49.6	U	49.6		mg/Kg		10/28/21 16:08	10/28/21 19:42	1
Over C28-C36	<49.6	U	49.6		mg/Kg		10/28/21 16:08	10/28/21 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*65 - 130*	*10/28/21 16:08*	*10/28/21 19:42*	*1*
o-Terphenyl	*109*		*65 - 130*	*10/28/21 16:08*	*10/28/21 19:42*	*1*

Client Sample ID: C-C-16
Date Collected: 10/25/21 12:55
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-3
Matrix: Solid

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		10/29/21 10:19	10/29/21 13:05	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/29/21 10:19	10/29/21 13:05	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/29/21 10:19	10/29/21 13:05	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/29/21 10:19	10/29/21 13:05	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/29/21 10:19	10/29/21 13:05	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/29/21 10:19	10/29/21 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*56 - 150*	*10/29/21 10:19*	*10/29/21 13:05*	*1*
4-Bromofluorobenzene (Surr)	*111*		*68 - 152*	*10/29/21 10:19*	*10/29/21 13:05*	*1*
Dibromofluoromethane (Surr)	*111*		*53 - 142*	*10/29/21 10:19*	*10/29/21 13:05*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*	*10/29/21 10:19*	*10/29/21 13:05*	*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)

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	10/28/21 20:00	1
Over C10-C28	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/28/21 20:00	1
Over C28-C36	<50.1	U	50.1		mg/Kg		10/28/21 16:08	10/28/21 20:00	1

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-16
Date Collected: 10/25/21 12:55
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-3
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		65 - 130	10/28/21 16:08	10/28/21 20:00	1
o-Terphenyl	95		65 - 130	10/28/21 16:08	10/28/21 20:00	1

Client Sample ID: C-A-17
Date Collected: 10/25/21 13:00
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-4
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		10/28/21 14:24	10/28/21 16:46	1
Toluene	<0.00500	U	0.00500		mg/Kg		10/28/21 14:24	10/28/21 16:46	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:24	10/28/21 16:46	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 16:46	1
o-Xylene	<0.00100	U	0.00100		mg/Kg		10/28/21 14:24	10/28/21 16:46	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150	10/28/21 14:24	10/28/21 16:46	1
4-Bromofluorobenzene (Surr)	115		68 - 152	10/28/21 14:24	10/28/21 16:46	1
Dibromofluoromethane (Surr)	108		53 - 142	10/28/21 14:24	10/28/21 16:46	1
Toluene-d8 (Surr)	99		70 - 130	10/28/21 14:24	10/28/21 16:46	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 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 20:18	1
Over C10-C28	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 20:18	1
Over C28-C36	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		65 - 130	10/28/21 16:08	10/28/21 20:18	1
o-Terphenyl	109		65 - 130	10/28/21 16:08	10/28/21 20:18	1

Client Sample ID: C-B-17
Date Collected: 10/25/21 13:05
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-5
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		10/28/21 14:24	10/28/21 17:07	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 17:07	1

Pre Liminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-B-17

Lab Sample ID: 820-2360-5
Matrix: Solid
Date Collected: 10/25/21 13:05
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 17:07	1
Xylenes, Total	<0.00199	U	0.00199		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)	*96*		*56 - 150*	*10/28/21 14:24*	*10/28/21 17:07*	*1*
4-Bromofluorobenzene (Surr)	*115*		*68 - 152*	*10/28/21 14:24*	*10/28/21 17:07*	*1*
Dibromofluoromethane (Surr)	*105*		*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	<0.00199	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 10:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 20:36	1
Over C10-C28	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 20:36	1
Over C28-C36	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*65 - 130*	*10/28/21 16:08*	*10/28/21 20:36*	*1*
o-Terphenyl	*110*		*65 - 130*	*10/28/21 16:08*	*10/28/21 20:36*	*1*

Client Sample ID: C-C-17

Lab Sample ID: 820-2360-6
Matrix: Solid
Date Collected: 10/25/21 13:10
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

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 17:27	1
Toluene	<0.00504	U	0.00504		mg/Kg		10/28/21 14:24	10/28/21 17:27	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:27	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 17:27	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 17:27	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*56 - 150*	*10/28/21 14:24*	*10/28/21 17:27*	*1*
4-Bromofluorobenzene (Surr)	*111*		*68 - 152*	*10/28/21 14:24*	*10/28/21 17:27*	*1*
Dibromofluoromethane (Surr)	*102*		*53 - 142*	*10/28/21 14:24*	*10/28/21 17:27*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*	*10/28/21 14:24*	*10/28/21 17:27*	*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

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-17

Lab Sample ID: 820-2360-6
Matrix: Solid
Date Collected: 10/25/21 13:10
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

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	10/28/21 21:31	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 21:31	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:31*	*1*
o-Terphenyl	*107*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:31*	*1*

Client Sample ID: C-A-18

Lab Sample ID: 820-2360-7
Matrix: Solid
Date Collected: 10/25/21 13:15
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

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		10/29/21 10:19	10/29/21 13:26	1
Toluene	<0.00498	U	0.00498		mg/Kg		10/29/21 10:19	10/29/21 13:26	1
Ethylbenzene	<0.000996	U	0.000996		mg/Kg		10/29/21 10:19	10/29/21 13:26	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/29/21 10:19	10/29/21 13:26	1
o-Xylene	<0.000996	U	0.000996		mg/Kg		10/29/21 10:19	10/29/21 13:26	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/29/21 10:19	10/29/21 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*56 - 150*	*10/29/21 10:19*	*10/29/21 13:26*	*1*
4-Bromofluorobenzene (Surr)	*111*		*68 - 152*	*10/29/21 10:19*	*10/29/21 13:26*	*1*
Dibromofluoromethane (Surr)	*114*		*53 - 142*	*10/29/21 10:19*	*10/29/21 13:26*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/29/21 10:19*	*10/29/21 13:26*	*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	<50.2	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 21:13	1
Over C10-C28	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/28/21 21:13	1
Over C28-C36	<50.2	U	50.2		mg/Kg		10/28/21 16:08	10/28/21 21:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:13*	*1*
o-Terphenyl	*115*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:13*	*1*

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-B-19
Date Collected: 10/25/21 13:20
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-8
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		10/28/21 14:24	10/28/21 19:18	1
Toluene	<0.00497	U	0.00497		mg/Kg		10/28/21 14:24	10/28/21 19:18	1
Ethylbenzene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 19:18	1
m-Xylene & p-Xylene	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 19:18	1
o-Xylene	<0.000994	U	0.000994		mg/Kg		10/28/21 14:24	10/28/21 19:18	1
Xylenes, Total	<0.00199	U	0.00199		mg/Kg		10/28/21 14:24	10/28/21 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*56 - 150*	*10/28/21 14:24*	*10/28/21 19:18*	*1*
4-Bromofluorobenzene (Surr)	*119*		*68 - 152*	*10/28/21 14:24*	*10/28/21 19:18*	*1*
Dibromofluoromethane (Surr)	*110*		*53 - 142*	*10/28/21 14:24*	*10/28/21 19:18*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*	*10/28/21 14:24*	*10/28/21 19:18*	*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	<49.7	U	49.7		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	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 21:50	1
Over C10-C28	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 21:50	1
Over C28-C36	<49.7	U	49.7		mg/Kg		10/28/21 16:08	10/28/21 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:50*	*1*
o-Terphenyl	*98*		*65 - 130*	*10/28/21 16:08*	*10/28/21 21:50*	*1*

Client Sample ID: C-C-19
Date Collected: 10/25/21 13:25
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-9
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		10/28/21 14:24	10/28/21 19:38	1
Toluene	<0.00505	U	0.00505		mg/Kg		10/28/21 14:24	10/28/21 19:38	1
Ethylbenzene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 19:38	1
m-Xylene & p-Xylene	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 19:38	1
o-Xylene	<0.00101	U	0.00101		mg/Kg		10/28/21 14:24	10/28/21 19:38	1
Xylenes, Total	<0.00202	U	0.00202		mg/Kg		10/28/21 14:24	10/28/21 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*56 - 150*	*10/28/21 14:24*	*10/28/21 19:38*	*1*
4-Bromofluorobenzene (Surr)	*115*		*68 - 152*	*10/28/21 14:24*	*10/28/21 19:38*	*1*
Dibromofluoromethane (Surr)	*106*		*53 - 142*	*10/28/21 14:24*	*10/28/21 19:38*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*	*10/28/21 14:24*	*10/28/21 19:38*	*1*

Pre Liminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-19

Lab Sample ID: 820-2360-9
Matrix: Solid
Date Collected: 10/25/21 13:25
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

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	10/28/21 22:08	1
Over C10-C28	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 22:08	1
Over C28-C36	<50.0	U	50.0		mg/Kg		10/28/21 16:08	10/28/21 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*65 - 130*	*10/28/21 16:08*	*10/28/21 22:08*	*1*
o-Terphenyl	*97*		*65 - 130*	*10/28/21 16:08*	*10/28/21 22:08*	*1*

Client Sample ID: C-C-18

Lab Sample ID: 820-2360-10
Matrix: Solid
Date Collected: 10/25/21 13:30
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

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 14:24	10/28/21 20:01	1
Toluene	<0.00499	U	0.00499		mg/Kg		10/28/21 14:24	10/28/21 20:01	1
Ethylbenzene	<0.000998	U	0.000998		mg/Kg		10/28/21 14:24	10/28/21 20:01	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 20:01	1
o-Xylene	<0.000998	U	0.000998		mg/Kg		10/28/21 14:24	10/28/21 20:01	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg		10/28/21 14:24	10/28/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*56 - 150*	*10/28/21 14:24*	*10/28/21 20:01*	*1*
4-Bromofluorobenzene (Surr)	*118*		*68 - 152*	*10/28/21 14:24*	*10/28/21 20:01*	*1*
Dibromofluoromethane (Surr)	*101*		*53 - 142*	*10/28/21 14:24*	*10/28/21 20:01*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*	*10/28/21 14:24*	*10/28/21 20:01*	*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	<49.5	U	49.5		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	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 22:27	1
Over C10-C28	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 22:27	1
Over C28-C36	<49.5	U	49.5		mg/Kg		10/28/21 16:08	10/28/21 22:27	1

Preliminary Data

Client Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-18
Date Collected: 10/25/21 13:30
Date Received: 10/27/21 08:36
Sample Depth: 4 - 4.5

Lab Sample ID: 820-2360-10
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		65 - 130	10/28/21 16:08	10/28/21 22:27	1
o-Terphenyl	87		65 - 130	10/28/21 16:08	10/28/21 22:27	1

Preliminary Data

Surrogate Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

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)
820-2360-1	C-C-2E	97	110	101	104
820-2360-2	C-B-16	102	112	110	101
820-2360-3	C-C-16	106	111	111	99
820-2360-4	C-A-17	104	115	108	99
820-2360-5	C-B-17	96	115	105	101
820-2360-6	C-C-17	100	111	102	103
820-2360-7	C-A-18	116	111	114	102
820-2360-8	C-B-19	104	119	110	96
820-2360-9	C-C-19	100	115	106	102
820-2360-10	C-C-18	95	118	101	104
860-14385-A-6-A MS	Matrix Spike	110	166 S1+	112	98
860-14478-C-1-A MS	Matrix Spike	110	108	110	94
LCS 860-28433/3	Lab Control Sample	107	103	110	95
LCS 860-28595/3	Lab Control Sample	111	108	112	93
LCSD 860-28433/4	Lab Control Sample Dup	105	107	108	95
LCSD 860-28595/4	Lab Control Sample Dup	115	104	113	93
MB 860-28433/8	Method Blank	93	107	104	98
MB 860-28595/8	Method Blank	99	108	107	95

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)
820-2360-1	C-C-2E	70	83
820-2360-1 MS	C-C-2E	113	94
820-2360-1 MSD	C-C-2E	115	94
820-2360-2	C-B-16	97	109
820-2360-3	C-C-16	82	95
820-2360-4	C-A-17	99	109
820-2360-5	C-B-17	96	110
820-2360-6	C-C-17	95	107
820-2360-7	C-A-18	102	115
820-2360-8	C-B-19	85	98
820-2360-9	C-C-19	84	97
820-2360-10	C-C-18	75	87
LCS 860-28527/2-A	Lab Control Sample	119	102
LCSD 860-28527/3-A	Lab Control Sample Dup	117	100
MB 860-28527/1-A	Method Blank	96	110

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Preliminary Data

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

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: 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*

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*

Preliminary Data

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

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 860-28595/8
Matrix: Solid
Analysis Batch: 28595

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			10/29/21 12:24	1
Toluene	<0.00500	U	0.00500		mg/Kg			10/29/21 12:24	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			10/29/21 12:24	1
m-Xylene & p-Xylene	<0.00200	U	0.00200		mg/Kg			10/29/21 12:24	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			10/29/21 12:24	1
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			10/29/21 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*56 - 150*		*10/29/21 12:24*	*1*
4-Bromofluorobenzene (Surr)	*108*		*68 - 152*		*10/29/21 12:24*	*1*
Dibromofluoromethane (Surr)	*107*		*53 - 142*		*10/29/21 12:24*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*10/29/21 12:24*	*1*

Lab Sample ID: LCS 860-28595/3
Matrix: Solid
Analysis Batch: 28595

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	0.05140		mg/Kg		103	66 - 142
Toluene			0.0500	0.04367		mg/Kg		87	74 - 130
Ethylbenzene			0.0500	0.04761		mg/Kg		95	80 - 130
m-Xylene & p-Xylene			0.0500	0.04845		mg/Kg		97	78 - 130
o-Xylene			0.0500	0.04713		mg/Kg		94	79 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*56 - 150*
4-Bromofluorobenzene (Surr)	*108*		*68 - 152*
Dibromofluoromethane (Surr)	*112*		*53 - 142*
Toluene-d8 (Surr)	*93*		*70 - 130*

Preliminary Data

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-28595/4
Matrix: Solid
Analysis Batch: 28595

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	0.05485		mg/Kg		110	66 - 142	7	25
Toluene			0.0500	0.04584		mg/Kg		92	74 - 130	5	25
Ethylbenzene			0.0500	0.05011		mg/Kg		100	80 - 130	5	25
m-Xylene & p-Xylene			0.0500	0.05108		mg/Kg		102	78 - 130	5	25
o-Xylene			0.0500	0.05098		mg/Kg		102	79 - 130	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*56 - 150*
4-Bromofluorobenzene (Surr)	*104*		*68 - 152*
Dibromofluoromethane (Surr)	*113*		*53 - 142*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: 860-14478-C-1-A MS
Matrix: Solid
Analysis Batch: 28595

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 28623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0250	U	1.25	1.302		mg/Kg		104	71 - 119
Toluene	<0.125	U	1.25	1.104		mg/Kg		89	74 - 122
Ethylbenzene	<0.0250	U	1.25	1.233		mg/Kg		98	80 - 123
m-Xylene & p-Xylene	0.0573		1.25	1.300		mg/Kg		100	78 - 127
o-Xylene	0.0739		1.25	1.311		mg/Kg		99	79 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*56 - 150*
4-Bromofluorobenzene (Surr)	*108*		*68 - 152*
Dibromofluoromethane (Surr)	*110*		*53 - 142*
Toluene-d8 (Surr)	*94*		*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*

Preliminary Data

QC Sample Results

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

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: 820-2360-1 MS
Matrix: Solid
Analysis Batch: 28449

Client Sample ID: C-C-2E
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: 820-2360-1 MSD
Matrix: Solid
Analysis Batch: 28449

Client Sample ID: C-C-2E
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*

Preliminary Data

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

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	

Analysis Batch: 28433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	8260C	28500
820-2360-2	C-B-16	Total/NA	Solid	8260C	28500
820-2360-4	C-A-17	Total/NA	Solid	8260C	28500
820-2360-5	C-B-17	Total/NA	Solid	8260C	28500
820-2360-6	C-C-17	Total/NA	Solid	8260C	28500
820-2360-8	C-B-19	Total/NA	Solid	8260C	28500
820-2360-9	C-C-19	Total/NA	Solid	8260C	28500
820-2360-10	C-C-18	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

Prep Batch: 28500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	5035	
820-2360-2	C-B-16	Total/NA	Solid	5035	
820-2360-4	C-A-17	Total/NA	Solid	5035	
820-2360-5	C-B-17	Total/NA	Solid	5035	
820-2360-6	C-C-17	Total/NA	Solid	5035	
820-2360-8	C-B-19	Total/NA	Solid	5035	
820-2360-9	C-C-19	Total/NA	Solid	5035	
820-2360-10	C-C-18	Total/NA	Solid	5035	

Analysis Batch: 28595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-3	C-C-16	Total/NA	Solid	8260C	28623
820-2360-7	C-A-18	Total/NA	Solid	8260C	28623
MB 860-28595/8	Method Blank	Total/NA	Solid	8260C	
LCS 860-28595/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 860-28595/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
860-14478-C-1-A MS	Matrix Spike	Total/NA	Solid	8260C	28623

Prep Batch: 28623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-3	C-C-16	Total/NA	Solid	5035	
820-2360-7	C-A-18	Total/NA	Solid	5035	
860-14478-C-1-A MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 28673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	Total BTEX	
820-2360-2	C-B-16	Total/NA	Solid	Total BTEX	
820-2360-3	C-C-16	Total/NA	Solid	Total BTEX	
820-2360-4	C-A-17	Total/NA	Solid	Total BTEX	
820-2360-5	C-B-17	Total/NA	Solid	Total BTEX	
820-2360-6	C-C-17	Total/NA	Solid	Total BTEX	

Preliminary Data

QC Association Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-2360-1
Project/Site: Zeus AR197210

GC/MS VOA (Continued)

Analysis Batch: 28673 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-7	C-A-18	Total/NA	Solid	Total BTEX	
820-2360-8	C-B-19	Total/NA	Solid	Total BTEX	
820-2360-9	C-C-19	Total/NA	Solid	Total BTEX	
820-2360-10	C-C-18	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 28449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	8015B NM	28527
820-2360-2	C-B-16	Total/NA	Solid	8015B NM	28527
820-2360-3	C-C-16	Total/NA	Solid	8015B NM	28527
820-2360-4	C-A-17	Total/NA	Solid	8015B NM	28527
820-2360-5	C-B-17	Total/NA	Solid	8015B NM	28527
820-2360-6	C-C-17	Total/NA	Solid	8015B NM	28527
820-2360-7	C-A-18	Total/NA	Solid	8015B NM	28527
820-2360-8	C-B-19	Total/NA	Solid	8015B NM	28527
820-2360-9	C-C-19	Total/NA	Solid	8015B NM	28527
820-2360-10	C-C-18	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
820-2360-1 MS	C-C-2E	Total/NA	Solid	8015B NM	28527
820-2360-1 MSD	C-C-2E	Total/NA	Solid	8015B NM	28527

Prep Batch: 28527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	8015NM Prep	
820-2360-2	C-B-16	Total/NA	Solid	8015NM Prep	
820-2360-3	C-C-16	Total/NA	Solid	8015NM Prep	
820-2360-4	C-A-17	Total/NA	Solid	8015NM Prep	
820-2360-5	C-B-17	Total/NA	Solid	8015NM Prep	
820-2360-6	C-C-17	Total/NA	Solid	8015NM Prep	
820-2360-7	C-A-18	Total/NA	Solid	8015NM Prep	
820-2360-8	C-B-19	Total/NA	Solid	8015NM Prep	
820-2360-9	C-C-19	Total/NA	Solid	8015NM Prep	
820-2360-10	C-C-18	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	
820-2360-1 MS	C-C-2E	Total/NA	Solid	8015NM Prep	
820-2360-1 MSD	C-C-2E	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-1	C-C-2E	Total/NA	Solid	8015 NM	
820-2360-2	C-B-16	Total/NA	Solid	8015 NM	
820-2360-3	C-C-16	Total/NA	Solid	8015 NM	
820-2360-4	C-A-17	Total/NA	Solid	8015 NM	
820-2360-5	C-B-17	Total/NA	Solid	8015 NM	
820-2360-6	C-C-17	Total/NA	Solid	8015 NM	

Preliminary Data

QC Association Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

GC Semi VOA (Continued)

Analysis Batch: 28624 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-2360-7	C-A-18	Total/NA	Solid	8015 NM	
820-2360-8	C-B-19	Total/NA	Solid	8015 NM	
820-2360-9	C-C-19	Total/NA	Solid	8015 NM	
820-2360-10	C-C-18	Total/NA	Solid	8015 NM	

Preliminary Data

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-2E
Date Collected: 10/25/21 12:45
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-1
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			4.96 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 15:45	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			9.98 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 18:48	WP	XEN STF

Client Sample ID: C-B-16
Date Collected: 10/25/21 12:50
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-2
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			5.02 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 16:06	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			10.08 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 19:42	WP	XEN STF

Client Sample ID: C-C-16
Date Collected: 10/25/21 12:55
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-3
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	28623	10/29/21 10:19	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28595	10/29/21 13:05	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			9.98 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 20:00	WP	XEN STF

Client Sample ID: C-A-17
Date Collected: 10/25/21 13:00
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-4
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			5.00 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 16:46	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			10.07 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 20:18	WP	XEN STF

Preliminary Data

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-B-17
Date Collected: 10/25/21 13:05
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-5
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			5.03 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 17:07	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			10.1 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 20:36	WP	XEN STF

Client Sample ID: C-C-17
Date Collected: 10/25/21 13:10
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-6
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			4.96 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 17:27	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			10.01 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 21:31	WP	XEN STF

Client Sample ID: C-A-18
Date Collected: 10/25/21 13:15
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-7
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			5.02 g	5 mL	28623	10/29/21 10:19	CSP	XEN STF
Total/NA	Analysis	8260C		1	5 mL	5 mL	28595	10/29/21 13:26	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			9.97 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 21:13	WP	XEN STF

Client Sample ID: C-B-19
Date Collected: 10/25/21 13:20
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-8
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			5.03 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 19:18	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			10.07 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 21:50	WP	XEN STF

Preliminary Data

Lab Chronicle

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Client Sample ID: C-C-19
Date Collected: 10/25/21 13:25
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-9
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			4.95 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 19:38	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			10.01 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 22:08	WP	XEN STF

Client Sample ID: C-C-18
Date Collected: 10/25/21 13:30
Date Received: 10/27/21 08:36

Lab Sample ID: 820-2360-10
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			5.01 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 20:01	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			10.1 g	10 mL	28527	10/28/21 16:08	IS	XEN STF
Total/NA	Analysis	8015B NM		1			28449	10/28/21 22:27	WP	XEN STF

Laboratory References:
XEN STF = Eurofins Xenco, Stafford, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Preliminary Data

Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists Job ID: 820-2360-1
Project/Site: Zeus AR197210

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

Preliminary Data

Method Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

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
5035	Closed System Purge and Trap	SW846	XEN STF
8015NM Prep	Microextraction	SW846	XEN STF

Protocol References:

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

Preliminary Data

Sample Summary

Client: Terracon Consulting Eng & Scientists
Project/Site: Zeus AR197210

Job ID: 820-2360-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-2360-1	C-C-2E	Solid	10/25/21 12:45	10/27/21 08:36	1.5 - 2
820-2360-2	C-B-16	Solid	10/25/21 12:50	10/27/21 08:36	4 - 4.5
820-2360-3	C-C-16	Solid	10/25/21 12:55	10/27/21 08:36	4 - 4.5
820-2360-4	C-A-17	Solid	10/25/21 13:00	10/27/21 08:36	4 - 4.5
820-2360-5	C-B-17	Solid	10/25/21 13:05	10/27/21 08:36	4 - 4.5
820-2360-6	C-C-17	Solid	10/25/21 13:10	10/27/21 08:36	4 - 4.5
820-2360-7	C-A-18	Solid	10/25/21 13:15	10/27/21 08:36	4 - 4.5
820-2360-8	C-B-19	Solid	10/25/21 13:20	10/27/21 08:36	4 - 4.5
820-2360-9	C-C-19	Solid	10/25/21 13:25	10/27/21 08:36	4 - 4.5
820-2360-10	C-C-18	Solid	10/25/21 13:30	10/27/21 08:36	4 - 4.5

Preliminary Data

Released to Imaging: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

Loc: 820
2360

820-2360 Chain of Custody

IR-4

-8.61/-8.64

CHAIN OF CUSTODY RECORD

terracon

Address: Lubbock, Texas 79424

Office Location: Lubbock
Project Manager: J. Guesnier
Sampler's Name: J. Guesnier
Phone:
Contact: J. Guesnier 806-544-9276
SRS #:
Sampler's Signature

Project Number: AR197210
Project Name: Zeus

ANALYSIS REQUESTED

LAB USE ONLY
DUE DATE:
TEMP OF COOLER WHEN RECEIVED (°C)
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	40 ml VOA	250 ml Poly	5035 kit	Chloride (EPA Method 300)	BTEX (EPA Method 8260B)	TPH Extended 8015	Hold	Lab Sample ID
S	10/25/2021	12:45	X		C-C-2E	1.5'	2'	X				X	X	X		
S	10/25/2021	12:50	X		C-B-16	4'	4.5'	X				X	X	X		
S	10/25/2021	12:55	X		C-C-16	4'	4.5'	X				X	X	X		
S	10/25/2021	13:00	X		C-A-17	4'	4.5'	X				X	X	X		
S	10/25/2021	13:05	X		C-B-17	4'	4.5'	X				X	X	X		
S	10/25/2021	13:10	X		C-C-17	4'	4.5'	X				X	X	X		
S	10/25/2021	13:15	X		C-A-18	4'	4.5'	X				X	X	X		
S	10/25/2021	13:20	X		C-B-19	4'	4.5'	X				X	X	X		
S	10/25/2021	13:25	X		C-C-19	4'	4.5'	X				X	X	X		
S	10/25/2021	13:30	X		C-C-18	4'	4.5'	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
	10/28/21	8:36		10/27/21	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

Data Entered by

Released to Imaging: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

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: 820-2382.1
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 #: 820-2360-1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/28/2021			Preservation Codes:
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Zeus AR197210	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)	8260C/5035FP_Calc (MOD) BTEX	8015M/OD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/300_Prep Chloride	Total_BTEX	Special Instructions/Note:
C-C-2E (820-2360-1)	10/25/21	12:45 Central		Solid	X	X	X	X	X	
C-B-16 (820-2360-2)	10/25/21	12:50 Central		Solid	X	X	X	X	X	
C-C-16 (820-2360-3)	10/25/21	12:55 Central		Solid	X	X	X	X	X	
C-A-17 (820-2360-4)	10/25/21	13:00 Central		Solid	X	X	X	X	X	
C-B-17 (820-2360-5)	10/25/21	13:05 Central		Solid	X	X	X	X	X	
C-C-17 (820-2360-6)	10/25/21	13:10 Central		Solid	X	X	X	X	X	
C-A-18 (820-2360-7)	10/25/21	13:15 Central		Solid	X	X	X	X	X	
C-B-19 (820-2360-8)	10/25/21	13:20 Central		Solid	X	X	X	X	X	
C-C-19 (820-2360-9)	10/25/21	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
Teddy Rendell Lee	10/27/21 1700				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/28/21 1039	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

Temp: 1.0 IR ID:HOU-223
C/F:+0.0
Corrected Temp: 1.0

Ver: 06/08/2021

Pre Litigation Data

Released to Imaging: 3/21/2022 8:15:26 AM
Received by OCD: 2/16/2022 9:49:04 AM

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: 820-2382.2
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 #: 820-2360-1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/28/2021			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)
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			Other:
Project Name: Zeus AR197210	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)	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:
C-C-18 (820-2360-10)	10/25/21	13:30 Central		Solid	X	X	X	X	X	

Temp: 1.0 IR ID.HOU-223
C/F: +0.0
Corrected Temp: 1.0

Pre Liminary Data

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 La	10/27/21 1700				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/28/21 1039	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: 820-2360-1

Login Number: 2360 **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	

Pre Liminary Data

Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists Job Number: 820-2360-1

Login Number: 2360
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	

Pre Liminary Data

APPENDIX D – 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, Solaris Water Midstream, as reflected in our proposal (PA4197040).

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 Solaris Water Midstream, 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 Solaris Water Midstream and Terracon. Any unauthorized distribution or reuse is at Solaris Water Midstream sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Solaris Water Midstream 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 Solaris Water Midstream and all relying parties unless otherwise agreed in writing.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 82056

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 907 Tradewinds Blvd, Suite B Midland, TX 79706	OGRID: 371643
	Action Number: 82056
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	Closure approved.	3/21/2022