Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2116030736
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 08/18/2021

email: Adrian.Baker@exxonmobil.com Telephone: (432)-236-3808

OCD Only

Received by: Robert Hamlet Date: 11/22/2021

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

Closure Approved by: Robert Hamlet Date: 11/22/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2116030736
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email kyle.littrell@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.24588 Longitude -103.91644

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Poker Lake Unit North Frac Pond	Site Type Frac Pond
Date Release Discovered 05/26/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
I	06	24S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 29.30	Volume Recovered (bbls) 0.00
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: A connection failure on a lay flat hose resulted in a release of fluids onto permeable soil. Vac trucks were unable to recover any of the fluid. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2116030736
District RP	
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Garrett Green to Mike Bratcher; Victoria Venegas; Rob Hamlet; emily.hernandez@state.nm.us; camorgan@blm.gov; blm_nm_cfo_spill@blm.gov on Thursday, May 27, 2021 9:38 AM via email.	

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Kyle Littrell
Title: Environmental Manager
Signature:
Date: 6-9-21
email: kyle.littrell@exxonmobil.com
Telephone: 432-221-7331

OCD Only

Received by: Ramona Marcus
Date: 6/9/2021

Location:	PLU North Frac Pond	
Spill Date:	5/26/2021	
Area 1		
Approximate Area =	16638.00	sq. ft.
Average Saturation (or depth) of spill =	1.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Produced Water =	11.11	bbls
Area 2		
Approximate Area =	54463.00	sq. ft.
Average Saturation (or depth) of spill =	0.75	inches

Average Porosity Factor =	0.03	

VOLUME OF LEAK		
Total Produced Water =	18.19	bbls

TOTAL VOLUME OF LEAK		
Total Produced Water =	**29.30**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**0.00**	**bbls**

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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 31111
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	6/9/2021

Incident ID	NAPP2116030736
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2116030736
District RP	
Facility ID	
Application ID	

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

Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 08/18/2021

email: Adrian.Baker@exxonmobil.com Telephone: (432)-236-3808

OCD Only

Received by: Date:

Incident ID	NAPP2116030736
District RP	
Facility ID	
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Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 08/18/2021

email: Adrian.Baker@exxonmobil.com Telephone: (432)-236-3808

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

WSP USA
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

August 17, 2021

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request
Poker Lake Unit North Frac Pond
Incident Number NAPP2116030736
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Poker Lake Unit (PLU) North Frac Pond (Site) located in Unit I, Section 06, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of produced water at the Site. Based on excavation activities and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NAPP2116030736.

RELEASE BACKGROUND

On May 26, 2021, a connection on a lay flat hose failed, resulting in the release of approximately 29.30 barrels (bbls) of produced water onto the caliche pad. No fluids were recovered. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on May 27, 2021. A Release Notification and Corrective Action Form C-141 (Form C-141) was submitted on June 9, 2021. The release was assigned Incident Number NAPP2116030736.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During May 2021, WSP installed a soil boring (C-04526) within 0.5 miles of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-04526 was drilled to a depth of 105 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The location of the borehole is on Site in the southwest corner of the pad (approximately 0.02 miles southwest of the release extent) and is depicted on Figure 1. The borehole was left open for over 72 hours to

allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 100 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine located approximately 3,143 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On June 14, 2021 and July 9, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected eight preliminary assessment soil samples (SS01 through SS08) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. Soil from the preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-

DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS02 and SS05 through SS08 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for preliminary soil samples SS01, SS03, and SS04 indicated that chloride concentrations exceeded the Site Closure Criteria. Based on visible staining in the release area, field screening activities, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

DELINEATION SOIL SAMPLING AND EXCAVATION ACTIVITIES

Between July 8, 2021 and July 15, 2021, WSP personnel returned to the Site to oversee delineation and excavation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples.

Eleven potholes (PH01 through PH11) were advanced via track-mounted backhoe within the release extent to assess the vertical extent of impacted soil. Potholes PH01 through PH11 were advanced to a depth of 2 feet bgs. Delineation soil samples were collected from each pothole from depths ranging from 0.5 feet to 2 feet bgs. Soil from the potholes were field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. Potholes were not advanced in the area of preliminary samples SS05 through SS08 due to the presence of the frac pond impermeable liner at 1-foot bgs in this area. The potholes and delineation soil sample locations are depicted on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico. Photographic documentation was conducted during the Site visits. A photographic log is included in Attachment 3.

Excavation activities were completed to remove surficial staining in the release footprint and remove impacted soil in the areas surrounding preliminary soil samples SS01, SS03, and SS04. Excavation activities were performed using a track-mounted backhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavations were completed to a depth of 1-foot bgs.

Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor of the excavations. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS68 were collected from the floor of the excavations, from a depth of 1-foot bgs. Due to the shallow depth of the excavations, the soil samples represented the floor and sidewalls of the excavations.

The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extents and excavation soil sample locations are presented on Figure 4. Photographic documentation is included in Attachment 3.

The excavation areas totaled approximately 13,380 square feet. A total of approximately 495 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH11 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Laboratory analytical results for excavation floor samples FS01 through FS68, collected from the final excavation extents, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the May 26, 2021 release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extents, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, the release was vertically delineated to the most stringent Table 1 Closure Criteria by soil samples collected from potholes PH01 through PH11. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. Depth to groundwater has been determined to be greater than 105 feet bgs and no other sensitive receptors were identified near the release extent. WSP and XTO believe these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests no further action for Incident Number NAPP2116030736.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

Kaleb Henry
Assistant Consultant, Geologist

Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Figure 4	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Lithologic/Sampling Log
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

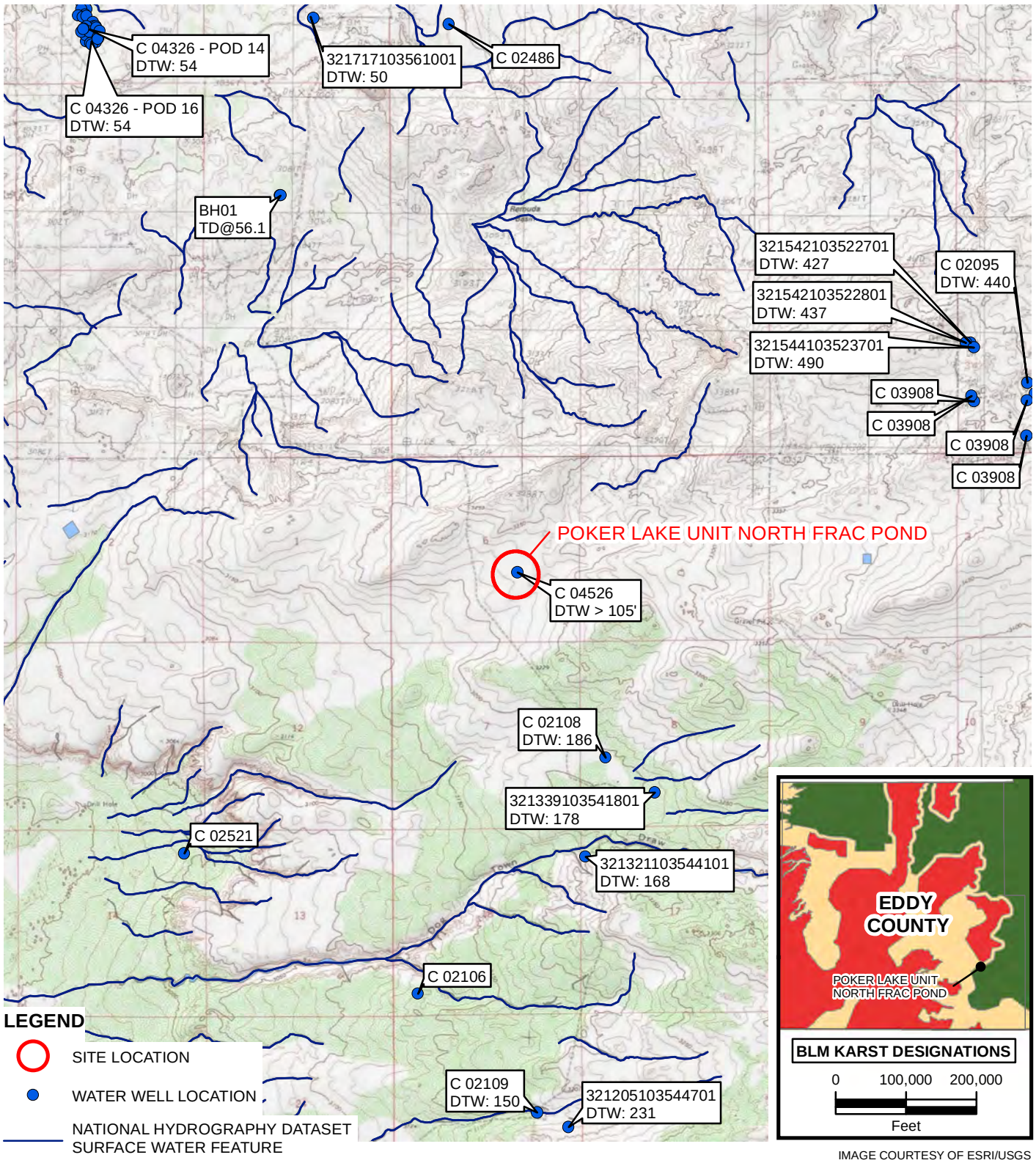


FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT NORTH FRAC POND
UNIT I SEC 6 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\31403236.013.0129_PLU NORTH FRAC POND\31403236.013.0129_FIG01_SL_RECEPTOR_2021.mxd

LEGEND

- RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

NOTE: INCIDENT NUMBER NAPP2116030736
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

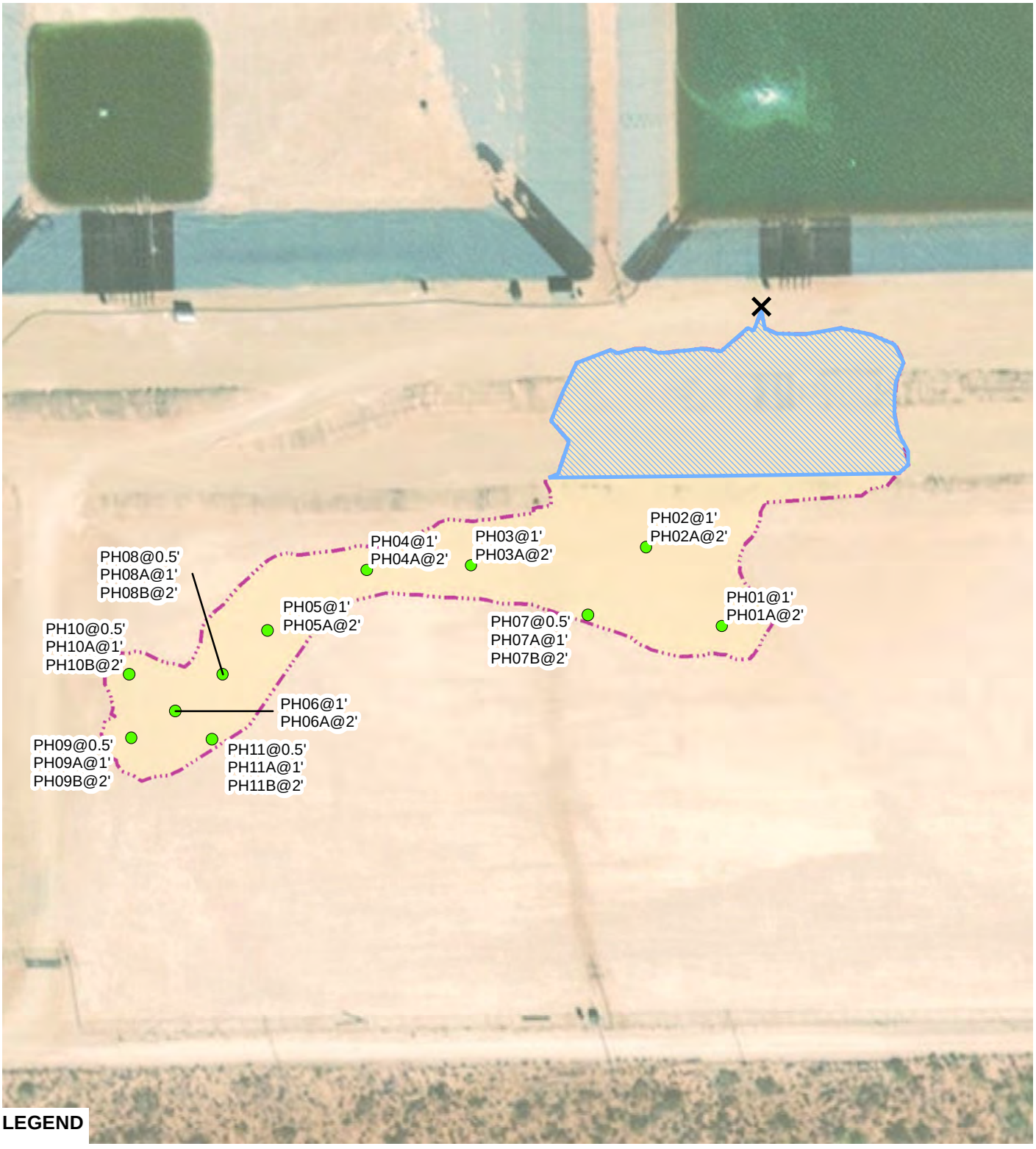
IMAGE COURTESY OF ESRI

0 100 200
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
POKER LAKE UNIT NORTH FRAC POND
UNIT I SEC 6 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\31403236.013.0129_PLU NORTH FRAC POND\31403236.013.0129_FIG02_PRELIMINARY_2021.mxd



LEGEND

- RELEASE LOCATION
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- IMPERMEABLE LINER AT 1' BGS

NOTE: INCIDENT NUMBER NAPP2116030736
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
BGS: BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

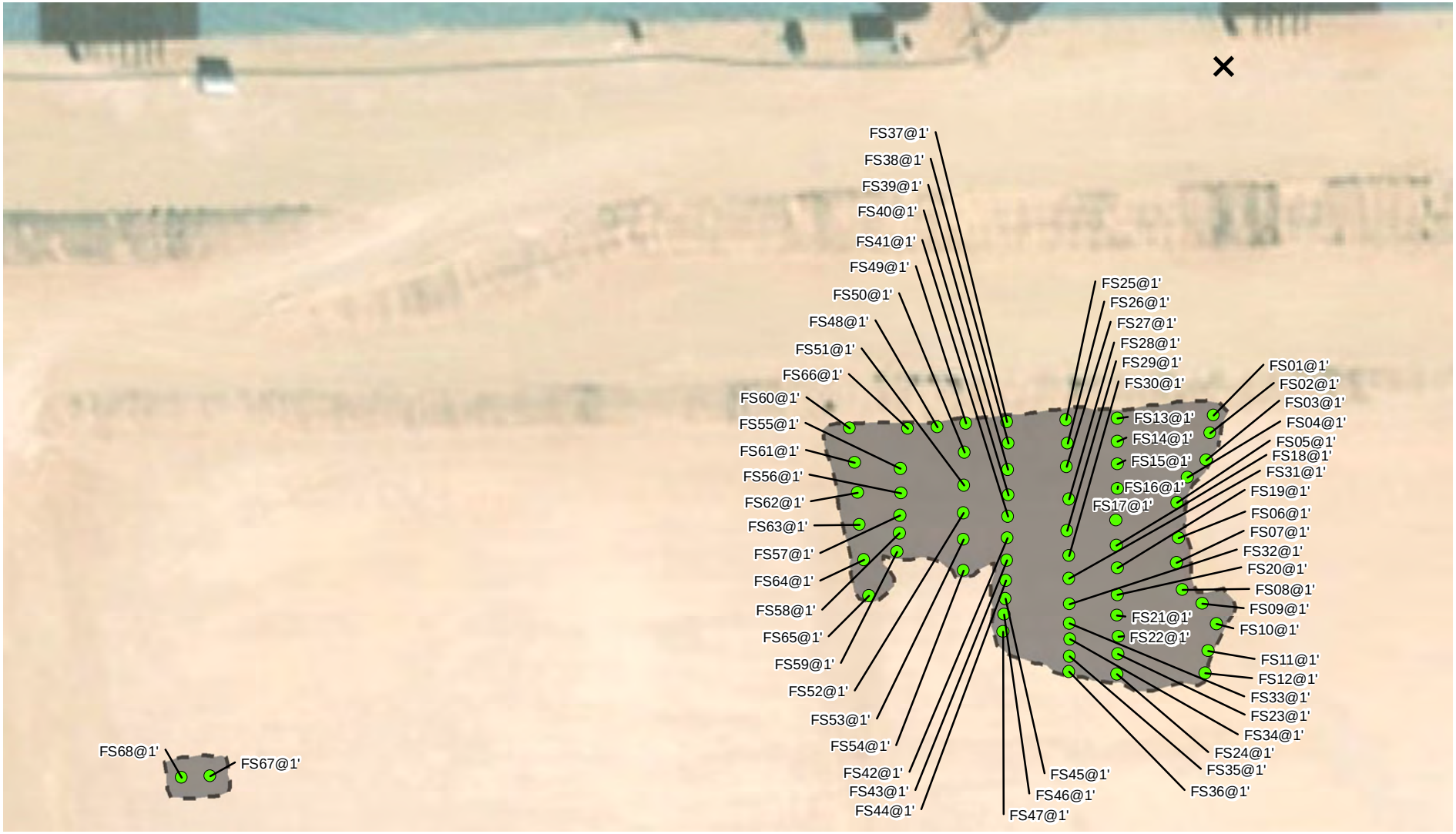
IMAGE COURTESY OF ESRI

0 100 200
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
POKER LAKE UNIT NORTH FRAC POND
UNIT I SEC 6 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\31403236.013.0129_PLU NORTH FRAC POND\31403236.013.0129_FIG03_DELINEATION_2021_1.mxd



LEGEND

- RELEASE LOCATION
- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- EXCAVATION EXTENT

IMAGE COURTESY OF ESRI

0 60 120

Feet

N

NOTE: INCIDENT NUMBER NAPP2116030736
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
POKER LAKE UNIT NORTH FRAC POND
UNIT I SEC 6 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\31403236.013.0129_PLU NORTH FRAC POND\31403236.013.0129_FIG04_EXCAVATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
POKER LAKE UNIT NORTH FRAC POND
Incident Number: NAPP2116030736
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Preliminary Soil Samples										
SS01	06/14/2021	0.5	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	**31,000**
SS02	06/14/2021	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	14,400
SS03	06/14/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	**46,500**
SS04	06/14/2021	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	**21,000**
SS05	06/14/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	17,800
SS06	06/14/2021	0.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	7,790
SS07	07/09/2021	0.5	<.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,420
SS08	07/09/2021	0.5	<.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	3,010
Delineation Soil Samples										
PH01	07/08/2021	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	1,420
PH01A	07/08/2021	2	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	95.9
PH02	07/08/2021	1	0.00828	0.0829	<50.0	<50.0	<50.0	<50.0	<50.0	172
PH02A	07/08/2021	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	29.7
PH03	07/08/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,620
PH03A	07/08/2021	2	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	56.0
PH04	07/08/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	240
PH04A	07/08/2021	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	88.8
PH05	07/08/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	790
PH05A	07/08/2021	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	109
PH06	07/08/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,360
PH06A	07/08/2021	2	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	145

Table 1

Soil Analytical Results
POKER LAKE UNIT NORTH FRAC POND
Incident Number: NAPP2116030736
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
PH07	07/12/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,900
PH07A	07/12/2021	1	0.0138	0.224	<49.9	<49.9	<49.9	<49.9	<49.9	361
PH07B	07/12/2021	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	484
PH08	07/14/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,860
PH08A	07/14/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	476
PH08B	07/14/2021	2	0.00753	0.00753	<50.0	<50.0	<50.0	<50.0	<50.0	67.2
PH09	07/14/2021	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	994
PH09A	07/14/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	157
PH09B	07/14/2021	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	55.6
PH10	07/14/2021	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	235
PH10A	07/14/2021	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	84.1
PH10B	07/14/2021	2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	60.3
PH11	07/14/2021	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	2,120
PH11A	07/14/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	79.4
PH11B	07/14/2021	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	164
Excavation Soil Samples										
FS01	07/12/2021	1	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	506
FS02	07/12/2021	1	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	99.3
FS03	07/12/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	530
FS04	07/12/2021	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	413
FS05	07/12/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	250
FS06	07/12/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	298

Table 1

Soil Analytical Results
POKER LAKE UNIT NORTH FRAC POND
Incident Number: NAPP2116030736
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS07	07/12/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	382
FS08	07/12/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	520
FS09	07/12/2021	1	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	1,570
FS10	07/12/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	548
FS11	07/12/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	876
FS12	07/12/2021	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	212
FS13	07/12/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,530
FS14	07/12/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,260
FS15	07/12/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	195
FS16	07/12/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	350
FS17	07/12/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	507
FS18	07/15/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,150
FS19	07/15/2021	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	513
FS20	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,270
FS21	07/15/2021	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	201
FS22	07/15/2021	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	207
FS23	07/15/2021	1	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	<49.7	250
FS24	07/15/2021	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	121
FS25	07/15/2021	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	1,430
FS26	07/15/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	942
FS27	07/15/2021	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	506
FS28	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	134

Table 1

Soil Analytical Results
POKER LAKE UNIT NORTH FRAC POND
Incident Number: NAPP2116030736
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS29	07/15/2021	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	298
FS30	07/15/2021	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	90.6
FS31	07/15/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	129
FS32	07/15/2021	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	340
FS33	07/15/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	223
FS34	07/15/2021	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	539
FS35	07/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	352
FS36	07/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	358
FS37	07/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	146
FS38	07/15/2021	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	133
FS39	07/15/2021	1	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	91.9
FS40	07/15/2021	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	17.5
FS41	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	15.0
FS42	07/15/2021	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	25.5
FS43	07/15/2021	1	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	74.8
FS44	07/15/2021	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	102
FS45	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	111
FS46	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	237
FS47	07/15/2021	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	168
FS48	07/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	111
FS49	07/15/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	444
FS50	07/15/2021	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	262

Table 1

Soil Analytical Results
POKER LAKE UNIT NORTH FRAC POND
Incident Number: NAPP2116030736
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS51	07/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	146
FS52	07/15/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	83.5
FS53	07/15/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	347
FS54	07/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,140
FS55	07/15/2021	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	881
FS56	07/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	936
FS57	07/15/2021	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	97.2
FS58	07/15/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	481
FS59	07/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	300
FS60	07/15/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	83.2
FS61	07/15/2021	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	347
FS62	07/15/2021	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	901
FS63	07/15/2021	1	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	729
FS64	07/15/2021	1	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	265
FS65	07/15/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	140
FS66	07/15/2021	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	10.4
FS67	07/15/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	234
FS68	07/15/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	128

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - motor oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Text impacted soil was removed

ATTACHMENT 1: REFERENCED WELL RECORDS

Atkins ENGINEERING ASSOCIATES INC.
2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

06/09/2021

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4526 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4526 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

Lucas Middleton

Enclosures: as noted above

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).
POD1 (MW-1)	n/a	C-4526

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32°	14'	42.15"	N
	LONGITUDE	103°	55'	6.20"	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

NW NE Sec. 06 T24S R30E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
05/14/2021	05/14/2021	temporary well material	105	n/a

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

STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

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

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	±6.5	Boring- HSA	--	--	--	--

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

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	4	4	SAND, poorly graded, fine-very grained, Reddish-brown, dry	Y ✓ N	
4	12	8	CALICHE, poorly-mod. consolidated, tan-off white, dry	Y ✓ N	
12	19	7	SAND, poorly graded, fine-very grained, some caliche gravel, Tan ,dry	Y ✓ N	
19	24	5	SAND, poorly graded, fine-very grained, some caliche gravel, Light- Brown, dry	Y ✓ N	
24	72	48	SAND, poorly graded, fine-very grained, Reddish Brown, moist	Y ✓ N	
72	92	20	SAND, poorly graded, fine-very grained, some silt, Reddish Brown, moist	Y ✓ N	
92	102	10	SILTY SAND, poorly graded, fine-very grained, Reddish Brown, moist	Y ✓ N	
102	105	3	SILTY SAND, poorly graded, fine-very grained, Reddish Brown, 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	

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: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.

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

Shane Eldridge, Carmelo Trevino, Cameron Pruitt

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:

Jack Atkins — Jackie D. Atkins — 06/09/2021

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

PLUGGING RECORD

NOTE: **A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4526-POD1

Well owner: XTO ENERGY (Kyle Littrell) Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland State: Texas Zip code: 79707

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge, Carmelo Trevino, Cameron Pruitt

4) Date well plugging began: 06/08/2021 Date well plugging concluded: 06/08/2021

5) GPS Well Location: Latitude: 32 deg, 14 min, 42.15 sec
Longitude: 103 deg, 55 min, 6.20 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 105 ft below ground level (bgl), by the following manner: weighted tape

7) Static water level measured at initiation of plugging: n/a ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 04/12/2021

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

Version: September 8, 2009
Page 1 of 2

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	0-10' Hydrated Bentonite	Approx. 15.6 gallons	15.9 gallons	Augers	
	10'-105' Drill Cuttings	Approx. 151 gallons	151 gallons	Boring	

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jack Atkins

Signature of Well Driller

06/09/2021

Date

Version: September 8, 2009
Page 2 of 2

2021-06-07_C-4526_POD1_OSE_Well Record and Log_155-forsign

Final Audit Report 2021-06-09

Created:	2021-06-09
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAARqNIK9bZ1aR8TqT_nRoFVSc9LoFFimkY

"2021-06-07_C-4526_POD1_OSE_Well Record and Log_155-for sign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2021-06-09 - 5:43:46 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-06-09 - 5:44:36 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2021-06-09 - 6:44:57 PM GMT- IP address: 64.90.153.232

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-06-09 - 6:45:44 PM GMT - Time Source: server- IP address: 64.90.153.232

Agreement completed.
2021-06-09 - 6:45:44 PM GMT

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH01	07/08/2021

Site Name: Poker Lake Unit North Frac Pond

RP or Incident Number: NAPP2116030736

WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	1,192	0.1	N	PH01	1'	1		
dry	<151	0.2	N	PH01A	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH02	07/08/2021

Site Name: Poker Lake Unit North Frac Pond

RP or Incident Number: NAPP2116030736

WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	790.4	0.1	N	PH02	1'	1		
dry	451.2	0.0	N	PH02A	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH03	07/08/2021

Site Name: Poker Lake Unit North Frac Pond

RP or Incident Number: NAPP2116030736

WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	1,328.5	0.2	N	PH03	1'	1		
dry	451.2	0.0	N	PH03A	2'	2		
								Total Depth: 2 feet bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH04	Date: 07/08/2021
Site Name: Poker Lake Unit North Frac Pond	
RP or Incident Number: NAPP2116030736	
WSP Job Number: 31403236.013.0129	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: LAD / Method: Backhoe
Lat/Long: / Field Screening: Chloride, PID	Hole Diameter: / Total Depth: 2'
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	308	1.7	N	PH04	1'	1		
dry	451.2	0.4	N	PH04A	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH05	07/08/2021
Site Name: Poker Lake Unit North Frac Pond	
RP or Incident Number: NAPP2116030736	
WSP Job Number: 31403236.013.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe
Hole Diameter:	Total Depth: 2'

Lat/Long:	Field Screening: Chloride, PID

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	572	0.1	N	PH05	1'	1		
dry	<151.2	0.1	N	PH05A	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH06	07/08/2021

Site Name: Poker Lake Unit North Frac Pond

RP or Incident Number: NAPP2116030736

WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	1,607.2	0.1	N	PH06	1'	1		
dry	190.4	0.1	N	PH06A	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH07	07/12/2021
Site Name: Poker Lake Unit North Frac Pond	
RP or Incident Number: NAPP2116030736	
WSP Job Number: 31403236.013.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	2,311.6	0.0	N	PH07	0.5'	0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	436.8	0.0	N	PH07A	1'	1		
dry	336	0.0	N	PH07B	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH08	07/14/2021

Site Name: Poker Lake Unit North Frac Pond

RP or Incident Number: NAPP2116030736

WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	1,523.2	0.2	N	PH08	0.5'	0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	936.8	0.0	N	PH08A	1'	1		
dry	<179.2	0.0	N	PH08B	2'	2		
								Total Depth: 2 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH09	07/14/2021
Site Name: Poker Lake Unit North Frac Pond	
RP or Incident Number: NAPP2116030736	
WSP Job Number: 31403236.013.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	1,047.2	0.0	N	PH09	0.5'	0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	<179.2	0.0	N	PH09A	1'	1		
dry	<179.2	0.0	N	PH09B	2'	2		
								Total Depth: 2 feet bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH10	07/14/2021

Site Name: Poker Lake Unit North Frac Pond
RP or Incident Number: NAPP2116030736
WSP Job Number: 31403236.013.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	336.0	0.0	N	PH10	0.5'	0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	<179.2	0.0	N	PH10A	1'	1		
dry	<179.2	0.0	N	PH10B	2'	2		
								Total Depth: 2 feet bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH11	Date: 07/14/2021
Site Name: Poker Lake Unit North Frac Pond	
RP or Incident Number: NAPP2116030736	
WSP Job Number: 31403236.013.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: LAD	Method: Backhoe		
Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 2'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	1,875	0.2	N	PH11	0.5'	0	SW	SILTY SAND, dry, brown-reddish brown, low plasticity, some off-white caliche, no stain, no odor
dry	295.2	0.0	N	PH11A	1'	1		
dry	212.8	0.0	N	PH11B	2'	2		
								Total Depth: 2 feet bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Poker Lake Unit North Frac Pond Eddy County, New Mexico	NAPP2116030736

Photo No.	Date
1	June 14, 2021

Southwest facing view of release extent.

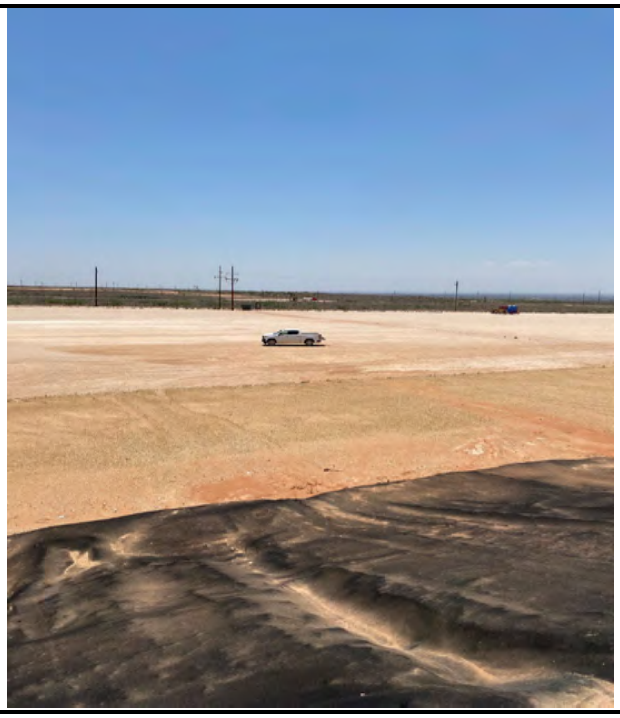


Photo No.	Date
2	June 14, 2021

East facing view of release extent.

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Poker Lake Unit North Frac Pond Eddy County, New Mexico	NAPP2116030736

Photo No.	Date
3	July 9, 2021

Northwest facing view of excavation activities.

Photo No.	Date
4	July 13, 2021

Southwest facing view of final excavation extent.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-806-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Kalei Jennings

JKramer

Authorized for release by:
6/21/2021 2:39:08 PM

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

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Laboratory Job ID: 890-806-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

Qualifiers

GC 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, low biased.
U	Indicates the analyte was analyzed for but not detected.

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Job ID: 890-806-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-806-1

Receipt
The samples were received on 6/14/2021 3:51 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 2.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS01 (890-806-1), SS02 (890-806-2), SS03 (890-806-3), SS04 (890-806-4), SS05 (890-806-5) and SS06 (890-806-6).

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Client Sample ID: SS01

Lab Sample ID: 890-806-1
Matrix: Solid
Date Collected: 06/14/21 12:35
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:23	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*06/16/21 10:17*	*06/17/21 04:23*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/16/21 10:17*	*06/17/21 04:23*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 13:39	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 13:39	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 13:39	1
Total TPH	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*06/16/21 13:46*	*06/20/21 13:39*	*1*
o-Terphenyl	*73*		*70 - 130*	*06/16/21 13:46*	*06/20/21 13:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**31000**		248		mg/Kg			06/17/21 19:57	50

Client Sample ID: SS02

Lab Sample ID: 890-806-2
Matrix: Solid
Date Collected: 06/14/21 12:38
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:44	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/16/21 10:17	06/17/21 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*06/16/21 10:17*	*06/17/21 04:44*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/16/21 10:17*	*06/17/21 04:44*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Client Sample ID: SS02

Lab Sample ID: 890-806-2
Matrix: Solid
Date Collected: 06/14/21 12:38
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/16/21 13:46	06/20/21 14:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/16/21 13:46	06/20/21 14:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/16/21 13:46	06/20/21 14:42	1
Total TPH	<49.9	U	49.9		mg/Kg		06/16/21 13:46	06/20/21 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*06/16/21 13:46*	*06/20/21 14:42*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*06/16/21 13:46*	*06/20/21 14:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14400**		100		mg/Kg			06/17/21 20:03	20

Client Sample ID: SS03

Lab Sample ID: 890-806-3
Matrix: Solid
Date Collected: 06/14/21 12:52
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/17/21 05:04	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/17/21 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:04*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:04*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 15:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 15:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 15:03	1
Total TPH	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:03*	*1*
o-Terphenyl	*72*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46500**		250		mg/Kg			06/17/21 20:08	50

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Client Sample ID: SS04

Lab Sample ID: 890-806-4
Matrix: Solid
Date Collected: 06/14/21 12:55
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 05:25	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:25*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:25*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:24	1
Total TPH	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:24*	*1*
o-Terphenyl	*70*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21000**		252		mg/Kg			06/17/21 20:14	50

Client Sample ID: SS05

Lab Sample ID: 890-806-5
Matrix: Solid
Date Collected: 06/14/21 13:15
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/16/21 10:17	06/17/21 05:45	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/16/21 10:17	06/17/21 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:45*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/16/21 10:17*	*06/17/21 05:45*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Client Sample ID: SS05

Lab Sample ID: 890-806-5
Matrix: Solid
Date Collected: 06/14/21 13:15
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:46	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:46	1
Total TPH	<49.8	U	49.8		mg/Kg		06/16/21 13:46	06/20/21 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:46*	*1*
o-Terphenyl	*84*		*70 - 130*	*06/16/21 13:46*	*06/20/21 15:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17800		248		mg/Kg			06/17/21 20:19	50

Client Sample ID: SS06

Lab Sample ID: 890-806-6
Matrix: Solid
Date Collected: 06/14/21 13:26
Date Received: 06/14/21 15:51
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 06:05	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/16/21 10:17	06/17/21 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/16/21 10:17*	*06/17/21 06:05*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/16/21 10:17*	*06/17/21 06:05*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 16:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 16:07	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 16:07	1
Total TPH	<49.7	U	49.7		mg/Kg		06/16/21 13:46	06/20/21 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*06/16/21 13:46*	*06/20/21 16:07*	*1*
o-Terphenyl	*89*		*70 - 130*	*06/16/21 13:46*	*06/20/21 16:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7790		49.8		mg/Kg			06/17/21 20:25	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-806-1	SS01	105	92										
890-806-2	SS02	124	93										
890-806-3	SS03	107	92										
890-806-4	SS04	107	93										
890-806-5	SS05	119	94										
890-806-6	SS06	108	95										
LCS 880-4169/1-A	Lab Control Sample	115	103										
LCSD 880-4169/2-A	Lab Control Sample Dup	124	104										
MB 880-4155/5-A	Method Blank	88	90										
MB 880-4169/5-A	Method Blank	98	90										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-806-1	SS01	85	73										
890-806-1 MS	SS01	81	64 S1-										
890-806-1 MSD	SS01	84	69 S1-										
890-806-2	SS02	79	66 S1-										
890-806-3	SS03	83	72										
890-806-4	SS04	83	70										
890-806-5	SS05	95	84										
890-806-6	SS06	91	89										
LCS 880-4196/2-A	Lab Control Sample	89	74										
LCSD 880-4196/3-A	Lab Control Sample Dup	105	88										
MB 880-4196/1-A	Method Blank	91	84										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4155/5-A
Matrix: Solid
Analysis Batch: 4156

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4155

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/16/21 08:28	06/16/21 11:47	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/16/21 08:28	06/16/21 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*06/16/21 08:28*	*06/16/21 11:47*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/16/21 08:28*	*06/16/21 11:47*	*1*

Lab Sample ID: MB 880-4169/5-A
Matrix: Solid
Analysis Batch: 4156

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4169

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/16/21 23:16	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/16/21 10:17	06/16/21 23:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*06/16/21 10:17*	*06/16/21 23:16*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/16/21 10:17*	*06/16/21 23:16*	*1*

Lab Sample ID: LCS 880-4169/1-A
Matrix: Solid
Analysis Batch: 4156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4169

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.09800		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1031		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2214		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1146		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-4169/2-A
Matrix: Solid
Analysis Batch: 4156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4169

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1009		mg/Kg		101	70 - 130	0	35
Toluene			0.100	0.09782		mg/Kg		98	70 - 130	0	35
Ethylbenzene			0.100	0.1042		mg/Kg		104	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2249		mg/Kg		112	70 - 130	2	35
o-Xylene			0.100	0.1160		mg/Kg		116	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-4196/1-A
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4196

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 12:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 12:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 12:32	1
Total TPH	<50.0	U	50.0		mg/Kg		06/16/21 13:46	06/20/21 12:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*06/16/21 13:46*	*06/20/21 12:32*	*1*
o-Terphenyl	*84*		*70 - 130*	*06/16/21 13:46*	*06/20/21 12:32*	*1*

Lab Sample ID: LCS 880-4196/2-A
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4196

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	889.5		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	845.6		mg/Kg		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Lab Sample ID: LCSD 880-4196/3-A
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4196

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1049		mg/Kg		105	70 - 130	16	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-4196/3-A
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4196

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1011		mg/Kg		101	70 - 130	18	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-806-1 MS
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 4196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	898.6		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.7	U	999	799.3		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*64*	*S1-*	*70 - 130*

Lab Sample ID: 890-806-1 MSD
Matrix: Solid
Analysis Batch: 4362

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 4196

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	997	910.2		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.7	U	997	863.9		mg/Kg		87	70 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*69*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4207/1-A
Matrix: Solid
Analysis Batch: 4255

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/17/21 18:43	1

Lab Sample ID: LCS 880-4207/2-A
Matrix: Solid
Analysis Batch: 4255

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	234.9		mg/Kg		94	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-4207/3-A
Matrix: Solid
Analysis Batch: 4255

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			252	234.6		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 890-806-6 MS
Matrix: Solid
Analysis Batch: 4255

Client Sample ID: SS06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	7790		2490	10450		mg/Kg		107	90 - 110		

Lab Sample ID: 890-806-6 MSD
Matrix: Solid
Analysis Batch: 4255

Client Sample ID: SS06
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7790		2490	10540		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

GC VOA

Prep Batch: 4155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4155/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 4156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Total/NA	Solid	8021B	4169
890-806-2	SS02	Total/NA	Solid	8021B	4169
890-806-3	SS03	Total/NA	Solid	8021B	4169
890-806-4	SS04	Total/NA	Solid	8021B	4169
890-806-5	SS05	Total/NA	Solid	8021B	4169
890-806-6	SS06	Total/NA	Solid	8021B	4169
MB 880-4155/5-A	Method Blank	Total/NA	Solid	8021B	4155
MB 880-4169/5-A	Method Blank	Total/NA	Solid	8021B	4169
LCS 880-4169/1-A	Lab Control Sample	Total/NA	Solid	8021B	4169
LCSD 880-4169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4169

Prep Batch: 4169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Total/NA	Solid	5035	
890-806-2	SS02	Total/NA	Solid	5035	
890-806-3	SS03	Total/NA	Solid	5035	
890-806-4	SS04	Total/NA	Solid	5035	
890-806-5	SS05	Total/NA	Solid	5035	
890-806-6	SS06	Total/NA	Solid	5035	
MB 880-4169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 4196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Total/NA	Solid	8015NM Prep	
890-806-2	SS02	Total/NA	Solid	8015NM Prep	
890-806-3	SS03	Total/NA	Solid	8015NM Prep	
890-806-4	SS04	Total/NA	Solid	8015NM Prep	
890-806-5	SS05	Total/NA	Solid	8015NM Prep	
890-806-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-4196/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4196/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4196/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-806-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-806-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Total/NA	Solid	8015B NM	4196
890-806-2	SS02	Total/NA	Solid	8015B NM	4196
890-806-3	SS03	Total/NA	Solid	8015B NM	4196
890-806-4	SS04	Total/NA	Solid	8015B NM	4196
890-806-5	SS05	Total/NA	Solid	8015B NM	4196
890-806-6	SS06	Total/NA	Solid	8015B NM	4196

QC Association Summary

Client: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 4362 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4196/1-A	Method Blank	Total/NA	Solid	8015B NM	4196
LCS 880-4196/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4196
LCSD 880-4196/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4196
890-806-1 MS	SS01	Total/NA	Solid	8015B NM	4196
890-806-1 MSD	SS01	Total/NA	Solid	8015B NM	4196

HPLC/IC

Leach Batch: 4207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Soluble	Solid	DI Leach	
890-806-2	SS02	Soluble	Solid	DI Leach	
890-806-3	SS03	Soluble	Solid	DI Leach	
890-806-4	SS04	Soluble	Solid	DI Leach	
890-806-5	SS05	Soluble	Solid	DI Leach	
890-806-6	SS06	Soluble	Solid	DI Leach	
MB 880-4207/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4207/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4207/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-806-6 MS	SS06	Soluble	Solid	DI Leach	
890-806-6 MSD	SS06	Soluble	Solid	DI Leach	

Analysis Batch: 4255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-806-1	SS01	Soluble	Solid	300.0	4207
890-806-2	SS02	Soluble	Solid	300.0	4207
890-806-3	SS03	Soluble	Solid	300.0	4207
890-806-4	SS04	Soluble	Solid	300.0	4207
890-806-5	SS05	Soluble	Solid	300.0	4207
890-806-6	SS06	Soluble	Solid	300.0	4207
MB 880-4207/1-A	Method Blank	Soluble	Solid	300.0	4207
LCS 880-4207/2-A	Lab Control Sample	Soluble	Solid	300.0	4207
LCSD 880-4207/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4207
890-806-6 MS	SS06	Soluble	Solid	300.0	4207
890-806-6 MSD	SS06	Soluble	Solid	300.0	4207

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

Client Sample ID: SS01 Lab Sample ID: 890-806-1

Date Collected: 06/14/21 12:35 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 04:23	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 13:39	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		50	4255	06/17/21 19:57	CH	XEN MID

Client Sample ID: SS02 Lab Sample ID: 890-806-2

Date Collected: 06/14/21 12:38 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 04:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 14:42	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		20	4255	06/17/21 20:03	CH	XEN MID

Client Sample ID: SS03 Lab Sample ID: 890-806-3

Date Collected: 06/14/21 12:52 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 05:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 15:03	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		50	4255	06/17/21 20:08	CH	XEN MID

Client Sample ID: SS04 Lab Sample ID: 890-806-4

Date Collected: 06/14/21 12:55 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 05:25	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 15:24	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		50	4255	06/17/21 20:14	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

Client Sample ID: SS05 Lab Sample ID: 890-806-5

Date Collected: 06/14/21 13:15 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 05:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 15:46	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		50	4255	06/17/21 20:19	CH	XEN MID

Client Sample ID: SS06 Lab Sample ID: 890-806-6

Date Collected: 06/14/21 13:26 **Matrix: Solid**
Date Received: 06/14/21 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4169	06/16/21 10:17	KL	XEN MID
Total/NA	Analysis	8021B		1	4156	06/17/21 06:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			4196	06/16/21 13:46	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4362	06/20/21 16:07	AJ	XEN MID
Soluble	Leach	DI Leach			4207	06/16/21 16:46	CH	XEN MID
Soluble	Analysis	300.0		10	4255	06/17/21 20:25	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: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-806-1
Project/Site: PLU North Frac Pond SDG: Eddy County

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-806-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-806-1	SS01	Solid	06/14/21 12:35	06/14/21 15:51	- 0.5
890-806-2	SS02	Solid	06/14/21 12:38	06/14/21 15:51	- 0.5
890-806-3	SS03	Solid	06/14/21 12:52	06/14/21 15:51	- 0.5
890-806-4	SS04	Solid	06/14/21 12:55	06/14/21 15:51	- 0.5
890-806-5	SS05	Solid	06/14/21 13:15	06/14/21 15:51	- 0.5
890-806-6	SS06	Solid	06/14/21 13:26	06/14/21 15:51	- 0.5

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432) 704-5440 EL Paso,TX (915) 585-3443 Lubbock,TX (806) 794-1296 Crasibad, NM (432) 704-5440
Phoenix,AZ (480) 355-0900 Atlanta,GA (770) 449-8800 Tampa,FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

Work Order No: _____

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6/21/2021

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(817) 683-2503	Email:	Kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU North Frac Pond	Turn Around	
Project Number:	314032360.013.0129	Routine	☑
Project Location	Eddy county	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	
PO #:		Quote #:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	2.2 / 2.0	Thermometer ID	
Received Intact:	Yes No		TNM_007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	Pres. Code	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
	SS01	S	6/14/21	1235	0.5'	1				
	SS02			1238						
	SS03			1252						
	SS04			1255						
	SS05			1315						
	SS06			1326						

ANALYSIS REQUEST

890-806 Chain of Custody

Preservative Codes

MeOH: Me
None: NO
HNO3: HN
H2S04: H2
HCL: HL
NaOH: Na
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:00pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6.14.21 1550	2		
3			4		
5			6		

Revised Date 022619 Rev. 2019 1

Incident #: Not assigned
CC: 2094031001

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-262 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-806-1
Address: 1211 W Florida Ave	Due Date Requested: 6/18/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PLU North Frac Pond	Project #: 89000004			
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)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc BTEX	Total Number of containers	Special Instructions/Note.
Preservation Code:											
SS01 (890-806-1)	6/14/21	12 35 Mountain		Solid			X	X	X	1	
SS02 (890-806-2)	6/14/21	12 38 Mountain		Solid			X	X	X	1	
SS03 (890-806-3)	6/14/21	12 52 Mountain		Solid			X	X	X	1	
SS04 (890-806-4)	6/14/21	12 55 Mountain		Solid			X	X	X	1	
SS05 (890-806-5)	6/14/21	13 15 Mountain		Solid			X	X	X	1	
SS06 (890-806-6)	6/14/21	13 26 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Gabby Ordonez	Date/Time: 6/15/21	Company	Received by:	Date/Time: 6-16-21 11:30 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: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-806-1
SDG Number: Eddy County

Login Number: 806
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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.	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: WSP USA Inc.

Job Number: 890-806-1
SDG Number: Eddy County

Login Number: 806
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/16/21 11:38 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

Job Number: 890-916-1

SDG Number: 31403236.013.0129

Job Description: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, TX 75207

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
7/15/2021 2:47 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
07/15/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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.

Eurofins Xenco, Carlsbad
1089 N Canal St., Carlsbad, NM 88220
Tel (575) 988-3199 Fax (575) 988-3199 www.EurofinsUS.com

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-916-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-916-1	890-916-2	890-916-3	890-916-4	890-916-5
Client Sample ID:	PH01	PH01A	PH02	PH02A	PH03
Depth:	1	2	1	2	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/08/2021 10:11	07/08/2021 10:13	07/08/2021 10:34	07/08/2021 10:37	07/08/2021 11:02

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/10/2021 11:25		07/10/2021 11:25		07/10/2021 11:25		07/10/2021 11:25		07/10/2021 11:25	
Analyzed:	07/12/2021 01:25		07/12/2021 01:46		07/12/2021 02:06		07/12/2021 02:26		07/12/2021 02:47	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00202 U	0.00202	<0.00200 U	0.00200	**0.00828**	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Toluene	<0.00202 U	0.00202	<0.00200 U	0.00200	**0.00700**	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Ethylbenzene	<0.00202 U	0.00202	<0.00200 U	0.00200	**0.0394**	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
m-Xylene & p-Xylene	<0.00404 U	0.00404	<0.00401 U	0.00401	**0.0259**	0.00399	<0.00402 U	0.00402	<0.00398 U	0.00398
o-Xylene	<0.00202 U	0.00202	<0.00200 U	0.00200	**0.00234**	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Xylenes, Total	<0.00404 U	0.00404	<0.00401 U	0.00401	**0.0282**	0.00399	<0.00402 U	0.00402	<0.00398 U	0.00398
Total BTEX	<0.00404 U	0.00404	<0.00401 U	0.00401	**0.0829**	0.00399	<0.00402 U	0.00402	<0.00398 U	0.00398

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

Prepared:	07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48	
Analyzed:	07/14/2021 14:36		07/14/2021 19:47		07/14/2021 15:59		07/14/2021 16:20		07/14/2021 16:40	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Total TPH	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/14/2021 19:37		07/14/2021 19:42		07/14/2021 19:48		07/14/2021 20:04		07/14/2021 11:53	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**1420**	5.03	**95.9**	5.04	**172**	5.00	**29.7**	4.98	**1620**	25.1

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-916-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-916-6	890-916-7	890-916-8	890-916-9	890-916-10
Client Sample ID:	PH03A	PH04	PH04A	PH05	PH05A
Depth:	2	1	2	1	2
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/08/2021 11:04	07/08/2021 12:07	07/08/2021 12:10	07/08/2021 12:22	07/08/2021 12:24

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/10/2021 11:25		07/10/2021 15:13		07/10/2021 15:13		07/10/2021 15:13		07/10/2021 15:13	
Analyzed:	07/12/2021 03:07		07/11/2021 00:21		07/11/2021 00:41		07/11/2021 01:02		07/11/2021 01:23	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00201 U	0.00201	<0.00200 U	0.00200
Toluene	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00201 U	0.00201	<0.00200 U	0.00200
Ethylbenzene	<0.00199 U	0.00199	<0.00200 U	0.00200	**0.00199**	0.00199	<0.00201 U	0.00201	<0.00200 U	0.00200
m-Xylene & p-Xylene	<0.00398 U	0.00398	<0.00401 U	0.00401	<0.00398 U	0.00398	<0.00402 U	0.00402	<0.00399 U	0.00399
o-Xylene	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00201 U	0.00201	<0.00200 U	0.00200
Xylenes, Total	<0.00398 U	0.00398	<0.00401 U	0.00401	<0.00398 U	0.00398	<0.00402 U	0.00402	<0.00399 U	0.00399
Total BTEX	<0.00398 U	0.00398	<0.00401 U	0.00401	<0.00398 U	0.00398	<0.00402 U	0.00402	<0.00399 U	0.00399

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

Prepared:	07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48		07/12/2021 13:48	
Analyzed:	07/14/2021 17:01		07/14/2021 17:22		07/14/2021 17:43		07/14/2021 18:03		07/14/2021 18:24	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Diesel Range Organics (Over C10-C28)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
OII Range Organics (Over C28-C36)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Total TPH	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/13/2021 08:36		07/13/2021 08:41		07/13/2021 08:47		07/13/2021 08:52		07/13/2021 09:09	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**56.0**	5.04	**240**	5.02	**88.8**	4.95	**790**	5.02	**109**	4.99

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-916-1
Project/Site: PLU North Frac Pond
SDG: 31403236.013.0129

Lab Sample ID:	890-916-11	890-916-12
Client Sample ID:	PH06	PH06A
Depth:	1	2
Matrix:	Solid	Solid
Date Collected:	07/08/2021 12:38	07/08/2021 12:40

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	07/10/2021 15:13		07/10/2021 15:13	
	Analyzed:	07/11/2021 01:43		07/11/2021 02:04	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00199 U	0.00199	<0.00198 U	0.00198
Toluene		<0.00199 U	0.00199	<0.00198 U	0.00198
Ethylbenzene		<0.00199 U	0.00199	<0.00198 U	0.00198
m-Xylene & p-Xylene		<0.00398 U	0.00398	<0.00397 U	0.00397
o-Xylene		<0.00199 U	0.00199	<0.00198 U	0.00198
Xylenes, Total		<0.00398 U	0.00398	<0.00397 U	0.00397
Total BTEX		<0.00398 U	0.00398	<0.00397 U	0.00397

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

	Prepared:	07/12/2021 13:48		07/12/2021 13:48	
	Analyzed:	07/14/2021 19:06		07/14/2021 19:27	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<50.0 U	50.0
Total TPH		<50.0 U	50.0	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	07/13/2021 20:25		07/13/2021 20:42	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**1360**	4.99	**145**	5.03

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ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-920-1
Laboratory Sample Delivery Group: 31403236.013.0129
Client Project/Site: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Dan Moir

JKramer

Authorized for release by:
7/16/2021 11:21:23 AM

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

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Laboratory Job ID: 890-920-1
SDG: 31403236.013.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-920-1
SDG: 31403236.013.0129

Job ID: 890-920-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-920-1

Receipt
The samples were received on 7/9/2021 5:08 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 1.4°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS07 (890-920-1) and SS08 (890-920-2).

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

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: SS07 Lab Sample ID: 890-920-1

Date Collected: 07/09/21 10:25 **Matrix: Solid**
Date Received: 07/09/21 17:08
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/13/21 14:47	07/13/21 23:40	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/13/21 14:47	07/13/21 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/13/21 14:47*	*07/13/21 23:40*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/13/21 14:47*	*07/13/21 23:40*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:16	1
Total TPH	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/14/21 14:16*	*07/16/21 04:16*	*1*
o-Terphenyl	*118*		*70 - 130*	*07/14/21 14:16*	*07/16/21 04:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7420**		49.8		mg/Kg			07/15/21 09:27	10

Client Sample ID: SS08 Lab Sample ID: 890-920-2

Date Collected: 07/09/21 10:27 **Matrix: Solid**
Date Received: 07/09/21 17:08
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/13/21 14:47	07/14/21 00:01	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/13/21 14:47	07/14/21 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/13/21 14:47*	*07/14/21 00:01*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/13/21 14:47*	*07/14/21 00:01*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-920-1
SDG: 31403236.013.0129

Client Sample ID: SS08

Date Collected: 07/09/21 10:27
Date Received: 07/09/21 17:08
Sample Depth: - 0.5

Lab Sample ID: 890-920-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:37	1
Total TPH	<49.9	U	49.9		mg/Kg		07/14/21 14:16	07/16/21 04:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/14/21 14:16*	*07/16/21 04:37*	*1*
o-Terphenyl	*108*		*70 - 130*	*07/14/21 14:16*	*07/16/21 04:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3010		25.2		mg/Kg			07/15/21 09:32	5

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-920-1	SS07	104	102
890-920-2	SS08	108	102
LCS 880-5105/1-A	Lab Control Sample	98	99
LCSD 880-5105/2-A	Lab Control Sample Dup	110	92
MB 880-5105/5-A	Method Blank	104	96

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-920-1	SS07	104	118
890-920-2	SS08	91	108
LCS 880-5191/2-A	Lab Control Sample	106	117
LCSD 880-5191/3-A	Lab Control Sample Dup	109	123
MB 880-5191/1-A	Method Blank	95	114

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-920-1
SDG: 31403236.013.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5105/5-A
Matrix: Solid
Analysis Batch: 5113

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5105

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/13/21 14:47	07/13/21 18:18	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/13/21 14:47	07/13/21 18:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/13/21 14:47*	*07/13/21 18:18*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/13/21 14:47*	*07/13/21 18:18*	*1*

Lab Sample ID: LCS 880-5105/1-A
Matrix: Solid
Analysis Batch: 5113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08695		mg/Kg		87	70 - 130		
Toluene			0.100	0.08904		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.09480		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1909		mg/Kg		95	70 - 130		
o-Xylene			0.100	0.09077		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-5105/2-A
Matrix: Solid
Analysis Batch: 5113

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07956		mg/Kg		80	70 - 130	9	35
Toluene			0.100	0.09252		mg/Kg		93	70 - 130	4	35
Ethylbenzene			0.100	0.1043		mg/Kg		104	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.2181		mg/Kg		109	70 - 130	13	35
o-Xylene			0.100	0.1051		mg/Kg		105	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-920-1
SDG: 31403236.013.0129

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

Lab Sample ID: MB 880-5191/1-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5191

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/14/21 14:16	07/15/21 22:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/14/21 14:16	07/15/21 22:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/14/21 14:16	07/15/21 22:01	1
Total TPH	<50.0	U	50.0		mg/Kg		07/14/21 14:16	07/15/21 22:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/14/21 14:16*	*07/15/21 22:01*	*1*
o-Terphenyl	*114*		*70 - 130*	*07/14/21 14:16*	*07/15/21 22:01*	*1*

Lab Sample ID: LCS 880-5191/2-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5191

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	778.2		mg/Kg		78	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	988.8		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-5191/3-A
Matrix: Solid
Analysis Batch: 5214

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5191

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	801.3		mg/Kg		80	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*123*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5080/1-A
Matrix: Solid
Analysis Batch: 5204

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/14/21 21:27	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-5080/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 5204

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	258.9		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-5080/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 5204

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	259.2		mg/Kg		104	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

GC VOA

Prep Batch: 5105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Total/NA	Solid	5035	
890-920-2	SS08	Total/NA	Solid	5035	
MB 880-5105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Total/NA	Solid	8021B	5105
890-920-2	SS08	Total/NA	Solid	8021B	5105
MB 880-5105/5-A	Method Blank	Total/NA	Solid	8021B	5105
LCS 880-5105/1-A	Lab Control Sample	Total/NA	Solid	8021B	5105
LCSD 880-5105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5105

GC Semi VOA

Prep Batch: 5191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Total/NA	Solid	8015NM Prep	
890-920-2	SS08	Total/NA	Solid	8015NM Prep	
MB 880-5191/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5191/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5191/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Total/NA	Solid	8015B NM	5191
890-920-2	SS08	Total/NA	Solid	8015B NM	5191
MB 880-5191/1-A	Method Blank	Total/NA	Solid	8015B NM	5191
LCS 880-5191/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5191
LCSD 880-5191/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5191

HPLC/IC

Leach Batch: 5080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Soluble	Solid	DI Leach	
890-920-2	SS08	Soluble	Solid	DI Leach	
MB 880-5080/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5080/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5080/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-920-1	SS07	Soluble	Solid	300.0	5080
890-920-2	SS08	Soluble	Solid	300.0	5080
MB 880-5080/1-A	Method Blank	Soluble	Solid	300.0	5080
LCS 880-5080/2-A	Lab Control Sample	Soluble	Solid	300.0	5080
LCSD 880-5080/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5080

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: SS07 Lab Sample ID: 890-920-1

Date Collected: 07/09/21 10:25 **Matrix: Solid**
Date Received: 07/09/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5105	07/13/21 14:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5113	07/13/21 23:40	MR	XEN MID
Total/NA	Prep	8015NM Prep			5191	07/14/21 14:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5214	07/16/21 04:16	AJ	XEN MID
Soluble	Leach	DI Leach			5080	07/12/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		10	5204	07/15/21 09:27	CH	XEN MID

Client Sample ID: SS08 Lab Sample ID: 890-920-2

Date Collected: 07/09/21 10:27 **Matrix: Solid**
Date Received: 07/09/21 17:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5105	07/13/21 14:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5113	07/14/21 00:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			5191	07/14/21 14:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5214	07/16/21 04:37	AJ	XEN MID
Soluble	Leach	DI Leach			5080	07/12/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		5	5204	07/15/21 09:32	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: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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: WSP USA Inc. Job ID: 890-920-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-920-1
SDG: 31403236.013.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-920-1	SS07	Solid	07/09/21 10:25	07/09/21 17:08	- 0.5
890-920-2	SS08	Solid	07/09/21 10:27	07/09/21 17:08	- 0.5

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 1 of 1

Work Order No: _____

7/16/2021

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU North Frac Pond	Turn Around	
Project Number:	31403236.013.0129	Routine	☒
P.O. Number:	CC: 2094031001	Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.6/1.4	Thermometer ID		
Received Intact:	(Yes) No	TNM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS07	S	7/9/2021	1025	0.5'	1	X	X	X
SS08	S	7/9/2021	1027	0.5'	1	X	X	X

890-920 Chain of Custody

Work Order Notes

API: 30-015-31687
IN: NAPP2116030736

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7.9.21 1705	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-920-1
SDG Number: 31403236.013.0129

Login Number: 920
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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.	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: WSP USA Inc.

Job Number: 890-920-1
SDG Number: 31403236.013.0129

Login Number: 920
List Number: 2
Creator: Lowe, Katie

List Source: Eurofins Xenco, Midland
List Creation: 07/13/21 02:49 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?	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, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-937-1
Laboratory Sample Delivery Group: 31403236.013.0129
Client Project/Site: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Kalei Jennings

JKramer

Authorized for release by:
7/20/2021 8:01:33 AM

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

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Laboratory Job ID: 890-937-1
SDG: 31403236.013.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Qualifiers

GC VOA

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

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-937-1
SDG: 31403236.013.0129

Job ID: 890-937-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-937-1

Receipt
The samples were received on 7/13/2021 1:31 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 1.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH07 (890-937-1), PH07A (890-937-2) and PH07B (890-937-3)

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: PH07A (890-937-2) and (MB 880-5145/5-A). 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: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: PH07 Lab Sample ID: 890-937-1

Date Collected: 07/12/21 14:31 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 14:13	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*07/14/21 09:47*	*07/15/21 14:13*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/14/21 09:47*	*07/15/21 14:13*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 02:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 02:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 02:42	1
Total TPH	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*07/14/21 14:00*	*07/18/21 02:42*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*07/14/21 14:00*	*07/18/21 02:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1900**		25.3		mg/Kg			07/19/21 16:54	5

Client Sample ID: PH07A Lab Sample ID: 890-937-2

Date Collected: 07/12/21 14:34 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0138**		0.00200		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
Toluene	**0.00938**		0.00200		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
Ethylbenzene	**0.111**		0.00200		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
m-Xylene & p-Xylene	**0.0568**		0.00399		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
o-Xylene	**0.0328**		0.00200		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
Xylenes, Total	**0.0896**		0.00399		mg/Kg		07/14/21 09:47	07/15/21 14:38	1
Total BTEX	**0.224**		0.00399		mg/Kg		07/14/21 09:47	07/15/21 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65299*	*S1+*	*70 - 130*	*07/14/21 09:47*	*07/15/21 14:38*	*1*
1,4-Difluorobenzene (Surr)	*54*	*S1-*	*70 - 130*	*07/14/21 09:47*	*07/15/21 14:38*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: PH07A
Lab Sample ID: 890-937-2
Date Collected: 07/12/21 14:34
Matrix: Solid
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 03:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 03:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 03:02	1
Total TPH	<49.9	U	49.9		mg/Kg		07/14/21 14:00	07/18/21 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*07/14/21 14:00*	*07/18/21 03:02*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*07/14/21 14:00*	*07/18/21 03:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**361**		5.01		mg/Kg			07/19/21 16:59	1

Client Sample ID: PH07B
Lab Sample ID: 890-937-3
Date Collected: 07/12/21 14:37
Matrix: Solid
Date Received: 07/13/21 13:31
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/14/21 09:47	07/15/21 15:03	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		07/14/21 09:47	07/15/21 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/14/21 09:47*	*07/15/21 15:03*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/14/21 09:47*	*07/15/21 15:03*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/14/21 14:00	07/18/21 03:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/14/21 14:00	07/18/21 03:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/14/21 14:00	07/18/21 03:23	1
Total TPH	<50.0	U	50.0		mg/Kg		07/14/21 14:00	07/18/21 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*07/14/21 14:00*	*07/18/21 03:23*	*1*
o-Terphenyl	*130*		*70 - 130*	*07/14/21 14:00*	*07/18/21 03:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**484**		5.05		mg/Kg			07/19/21 17:05	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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)										
890-937-1	PH07	117	107										
890-937-2	PH07A	65299 S1+	54 S1-										
890-937-3	PH07B	105	102										
LCS 880-5145/1-A	Lab Control Sample	97	108										
LCSD 880-5145/2-A	Lab Control Sample Dup	93	103										
MB 880-5145/5-A	Method Blank	64 S1-	87										

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)										
890-937-1	PH07	123	134 S1+										
890-937-2	PH07A	120	133 S1+										
890-937-3	PH07B	120	130										
LCS 880-5138/2-A	Lab Control Sample	110	108										
LCSD 880-5138/3-A	Lab Control Sample Dup	95	94										
MB 880-5138/1-A	Method Blank	91	100										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-937-1
SDG: 31403236.013.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5145/5-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5145

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*07/14/21 09:47*	*07/15/21 11:42*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/14/21 09:47*	*07/15/21 11:42*	*1*

Lab Sample ID: LCS 880-5145/1-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5145

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09288		mg/Kg		93	70 - 130		
Toluene			0.100	0.08881		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.1760		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.09177		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-5145/2-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5145

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08785		mg/Kg		88	70 - 130	6	35
Toluene			0.100	0.09379		mg/Kg		94	70 - 130	5	35
Ethylbenzene			0.100	0.09612		mg/Kg		96	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1682		mg/Kg		84	70 - 130	5	35
o-Xylene			0.100	0.08780		mg/Kg		88	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-937-1
SDG: 31403236.013.0129

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

Lab Sample ID: MB 880-5138/1-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5138

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/14/21 09:03	07/17/21 20:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/14/21 09:03	07/17/21 20:29	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/14/21 09:03	07/17/21 20:29	1
Total TPH	<50.0	U	50.0		mg/Kg		07/14/21 09:03	07/17/21 20:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/14/21 09:03*	*07/17/21 20:29*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/14/21 09:03*	*07/17/21 20:29*	*1*

Lab Sample ID: LCS 880-5138/2-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5138

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	893.9		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1068		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-5138/3-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5138

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	800.6		mg/Kg		80	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	917.1		mg/Kg		92	70 - 130	15	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5282/1-A
Matrix: Solid
Analysis Batch: 5390

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/19/21 14:32	1

QC Sample Results

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-5282/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 5390

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	247.9		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-5282/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 5390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	248.1		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

GC VOA

Prep Batch: 5145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Total/NA	Solid	5035	
890-937-2	PH07A	Total/NA	Solid	5035	
890-937-3	PH07B	Total/NA	Solid	5035	
MB 880-5145/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5145/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5145/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Total/NA	Solid	8021B	5145
890-937-2	PH07A	Total/NA	Solid	8021B	5145
890-937-3	PH07B	Total/NA	Solid	8021B	5145
MB 880-5145/5-A	Method Blank	Total/NA	Solid	8021B	5145
LCS 880-5145/1-A	Lab Control Sample	Total/NA	Solid	8021B	5145
LCSD 880-5145/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5145

GC Semi VOA

Prep Batch: 5138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Total/NA	Solid	8015NM Prep	
890-937-2	PH07A	Total/NA	Solid	8015NM Prep	
890-937-3	PH07B	Total/NA	Solid	8015NM Prep	
MB 880-5138/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5138/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5138/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Total/NA	Solid	8015B NM	5138
890-937-2	PH07A	Total/NA	Solid	8015B NM	5138
890-937-3	PH07B	Total/NA	Solid	8015B NM	5138
MB 880-5138/1-A	Method Blank	Total/NA	Solid	8015B NM	5138
LCS 880-5138/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5138
LCSD 880-5138/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5138

HPLC/IC

Leach Batch: 5282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Soluble	Solid	DI Leach	
890-937-2	PH07A	Soluble	Solid	DI Leach	
890-937-3	PH07B	Soluble	Solid	DI Leach	
MB 880-5282/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5282/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5282/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-937-1	PH07	Soluble	Solid	300.0	5282
890-937-2	PH07A	Soluble	Solid	300.0	5282
890-937-3	PH07B	Soluble	Solid	300.0	5282

QC Association Summary

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

HPLC/IC (Continued)

Analysis Batch: 5390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5282/1-A	Method Blank	Soluble	Solid	300.0	5282
LCS 880-5282/2-A	Lab Control Sample	Soluble	Solid	300.0	5282
LCSD 880-5282/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5282

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: PH07 Lab Sample ID: 890-937-1

Date Collected: 07/12/21 14:31 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 14:13	MR	XEN MID
Total/NA	Prep	8015NM Prep			5138	07/14/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/18/21 02:42	AJ	XEN MID
Soluble	Leach	DI Leach			5282	07/16/21 12:09	CH	XEN MID
Soluble	Analysis	300.0		5	5390	07/19/21 16:54	CH	XEN MID

Client Sample ID: PH07A Lab Sample ID: 890-937-2

Date Collected: 07/12/21 14:34 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 14:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			5138	07/14/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/18/21 03:02	AJ	XEN MID
Soluble	Leach	DI Leach			5282	07/16/21 12:09	CH	XEN MID
Soluble	Analysis	300.0		1	5390	07/19/21 16:59	CH	XEN MID

Client Sample ID: PH07B Lab Sample ID: 890-937-3

Date Collected: 07/12/21 14:37 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 15:03	MR	XEN MID
Total/NA	Prep	8015NM Prep			5138	07/14/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/18/21 03:23	AJ	XEN MID
Soluble	Leach	DI Leach			5282	07/16/21 12:09	CH	XEN MID
Soluble	Analysis	300.0		1	5390	07/19/21 17:05	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: WSP USA Inc. Job ID: 890-937-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-937-1
SDG: 31403236.013.0129

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-937-1
SDG: 31403236.013.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-937-1	PH07	Solid	07/12/21 14:31	07/13/21 13:31	- 0.5
890-937-2	PH07A	Solid	07/12/21 14:34	07/13/21 13:31	- 1
890-937-3	PH07B	Solid	07/12/21 14:37	07/13/21 13:31	- 2

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

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Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU North Frac Pond	Turn Around	
Project Number:	31403236.013.0129	Routine	☒
P.O. Number:	CC: 2094031001	Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	IR-007
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

890-937 Chain of Custody

Work Order Notes

IN: NAPP2116030736
API: 30-015-31687

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH07	S	7/12/2021	1431	0.5'	1	X	X	X	
PH07A	S	7/12/2021	1434	1'	1	X	X	X	
PH07B	S	7/12/2021	1437	2'	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7-13 21:33	2		
3			4		
5			6		

Revised Date 051418 Rev 2018.1

Eurofins Xenco, Carlsbad
1089 N Canal St
Carlsbad, NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-300 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-937-1
Address: 1211 W Florida Ave	Due Date Requested: 7/19/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU North Frac Pond	Project #: 89000004			
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)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
PH07 (890-937-1)	7/12/21	14 31 Mountain		Solid			X	X	X	1	
PH07A (890-937-2)	7/12/21	14 34 Mountain		Solid			X	X	X	1	
PH07B (890-937-3)	7/12/21	14 37 Mountain		Solid			X	X	X	1	

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:

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
Cleo Arch 7 13 21				7-14-21 11:30 a.m	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-937-1
SDG Number: 31403236.013.0129

Login Number: 937
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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.	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: WSP USA Inc.

Job Number: 890-937-1
SDG Number: 31403236.013.0129

Login Number: 937
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/14/21 11:15 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, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-938-1
Laboratory Sample Delivery Group: 31403236.013.0129
Client Project/Site: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Dan Moir

JKramer

Authorized for release by:
7/20/2021 8:03:20 AM

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

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Laboratory Job ID: 890-938-1
SDG: 31403236.013.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Job ID: 890-938-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-938-1

Receipt
The samples were received on 7/13/2021 1:31 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 1.0°C

GC VOA
Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-5187 and analytical batch 880-5148 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-5145/5-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-5206 recovered above the upper control limit for Ethylbenzene and Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FS02 (890-938-2) and (CCV 880-5206/51).

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: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS01 Lab Sample ID: 890-938-1

Date Collected: 07/12/21 12:27 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/15/21 15:29	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/15/21 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*07/14/21 09:47*	*07/15/21 15:29*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/14/21 09:47*	*07/15/21 15:29*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/15/21 08:43	07/17/21 14:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/15/21 08:43	07/17/21 14:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/15/21 08:43	07/17/21 14:12	1
Total TPH	<49.8	U	49.8		mg/Kg		07/15/21 08:43	07/17/21 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:12*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**506**		5.00		mg/Kg			07/19/21 17:10	1

Client Sample ID: FS02 Lab Sample ID: 890-938-2

Date Collected: 07/12/21 12:33 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/21 13:15	07/16/21 10:50	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/14/21 13:15	07/16/21 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*07/14/21 13:15*	*07/16/21 10:50*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/14/21 13:15*	*07/16/21 10:50*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS02 Lab Sample ID: 890-938-2

Date Collected: 07/12/21 12:33 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/15/21 08:43	07/17/21 14:33	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/15/21 08:43	07/17/21 14:33	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/15/21 08:43	07/17/21 14:33	1
Total TPH	<49.7	U	49.7		mg/Kg		07/15/21 08:43	07/17/21 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:33*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**99.3**		4.98		mg/Kg			07/19/21 17:16	1

Client Sample ID: FS03 Lab Sample ID: 890-938-3

Date Collected: 07/12/21 12:36 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/16/21 01:45	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/16/21 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/14/21 09:47*	*07/16/21 01:45*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*07/14/21 09:47*	*07/16/21 01:45*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 14:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 14:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 14:54	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:54*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/15/21 08:43*	*07/17/21 14:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**530**	**F1**	4.96		mg/Kg			07/17/21 14:05	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS04 Lab Sample ID: 890-938-4

Date Collected: 07/12/21 12:38 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/16/21 02:11	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		07/14/21 09:47	07/16/21 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*07/14/21 09:47*	*07/16/21 02:11*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/21 09:47*	*07/16/21 02:11*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:15	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:15*	*1*
o-Terphenyl	*98*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**413**		4.95		mg/Kg			07/17/21 14:22	1

Client Sample ID: FS05 Lab Sample ID: 890-938-5

Date Collected: 07/12/21 12:41 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 18:26	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/14/21 09:47*	*07/15/21 18:26*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/14/21 09:47*	*07/15/21 18:26*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS05 Lab Sample ID: 890-938-5

Date Collected: 07/12/21 12:41 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:36	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:36*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**250**		5.03		mg/Kg			07/17/21 14:27	1

Client Sample ID: FS06 Lab Sample ID: 890-938-6

Date Collected: 07/12/21 14:16 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/21 09:47	07/15/21 18:52	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/14/21 09:47	07/15/21 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/14/21 09:47*	*07/15/21 18:52*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*07/14/21 09:47*	*07/15/21 18:52*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 15:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 15:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 15:57	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:57*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/15/21 08:43*	*07/17/21 15:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**298**		5.05		mg/Kg			07/17/21 14:33	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS07

Lab Sample ID: 890-938-7
Matrix: Solid
Date Collected: 07/12/21 14:19
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:17	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*07/14/21 09:47*	*07/15/21 19:17*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*07/14/21 09:47*	*07/15/21 19:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 16:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 16:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 16:39	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/15/21 08:43*	*07/17/21 16:39*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/15/21 08:43*	*07/17/21 16:39*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**382**		5.05		mg/Kg			07/17/21 14:38	1

Client Sample ID: FS08

Lab Sample ID: 890-938-8
Matrix: Solid
Date Collected: 07/12/21 14:22
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:43	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/14/21 09:47	07/15/21 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/14/21 09:47*	*07/15/21 19:43*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*07/14/21 09:47*	*07/15/21 19:43*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS08 Lab Sample ID: 890-938-8

Date Collected: 07/12/21 14:22 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 17:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 17:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 17:00	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:00*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**520**		5.01		mg/Kg			07/17/21 14:54	1

Client Sample ID: FS09 Lab Sample ID: 890-938-9

Date Collected: 07/12/21 14:25 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/14/21 09:47	07/15/21 20:08	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		07/14/21 09:47	07/15/21 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:08*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:21	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:21*	*1*
o-Terphenyl	*118*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		25.0		mg/Kg			07/18/21 20:34	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS10

Lab Sample ID: 890-938-10
Matrix: Solid
Date Collected: 07/12/21 14:38
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/21 09:47	07/15/21 20:34	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/14/21 09:47	07/15/21 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:41	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:41*	*1*
o-Terphenyl	*115*		*70 - 130*	*07/15/21 08:43*	*07/17/21 17:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**548**		5.00		mg/Kg			07/17/21 15:05	1

Client Sample ID: FS11

Lab Sample ID: 890-938-11
Matrix: Solid
Date Collected: 07/12/21 14:31
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 20:59	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/14/21 09:47	07/15/21 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:59*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*07/14/21 09:47*	*07/15/21 20:59*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS11 Lab Sample ID: 890-938-11

Date Collected: 07/12/21 14:31 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 18:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 18:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 18:02	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:02*	*1*
o-Terphenyl	*114*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:02*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**876**		5.04		mg/Kg			07/17/21 15:11	1

Client Sample ID: FS12 Lab Sample ID: 890-938-12

Date Collected: 07/12/21 14:34 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/14/21 09:47	07/15/21 21:25	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/14/21 09:47	07/15/21 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/14/21 09:47*	*07/15/21 21:25*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/21 09:47*	*07/15/21 21:25*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:23	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:23*	*1*
o-Terphenyl	*130*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:23*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**212**		5.03		mg/Kg			07/17/21 15:16	1

Client Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS13 Lab Sample ID: 890-938-13

Date Collected: 07/12/21 14:37 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/21 13:09	07/15/21 05:46	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/14/21 13:09	07/15/21 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/14/21 13:09*	*07/15/21 05:46*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/14/21 13:09*	*07/15/21 05:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:44	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:44*	*1*
o-Terphenyl	*109*		*70 - 130*	*07/15/21 08:43*	*07/17/21 18:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1530**		25.0		mg/Kg			07/18/21 20:40	5

Client Sample ID: FS14 Lab Sample ID: 890-938-14

Date Collected: 07/12/21 14:40 **Matrix: Solid**
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:06	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:06*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:06*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS14

Lab Sample ID: 890-938-14
Matrix: Solid
Date Collected: 07/12/21 14:40
Date Received: 07/13/21 13:31
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:05	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:05*	*1*
o-Terphenyl	*101*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1260**		5.00		mg/Kg			07/17/21 15:38	1

Client Sample ID: FS15

Lab Sample ID: 890-938-15
Matrix: Solid
Date Collected: 07/12/21 14:43
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:27	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/14/21 13:09	07/15/21 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:27*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:27*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:26	1
Total TPH	<49.9	U	49.9		mg/Kg		07/15/21 08:43	07/17/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:26*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**195**		5.00		mg/Kg			07/17/21 15:44	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS16

Lab Sample ID: 890-938-16
Matrix: Solid
Date Collected: 07/12/21 14:46
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/21 13:09	07/15/21 06:47	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/14/21 13:09	07/15/21 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:47*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/14/21 13:09*	*07/15/21 06:47*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 19:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 19:47	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:47*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/15/21 08:43*	*07/17/21 19:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**350**		5.00		mg/Kg			07/17/21 16:00	1

Client Sample ID: FS17

Lab Sample ID: 890-938-17
Matrix: Solid
Date Collected: 07/12/21 15:50
Date Received: 07/13/21 13:31
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/21 13:09	07/15/21 07:08	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/14/21 13:09	07/15/21 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*07/14/21 13:09*	*07/15/21 07:08*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/14/21 13:09*	*07/15/21 07:08*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS17

Date Collected: 07/12/21 15:50
Date Received: 07/13/21 13:31
Sample Depth: - 1

Lab Sample ID: 890-938-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/19/21 03:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/19/21 03:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/19/21 03:26	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/19/21 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*07/15/21 15:36*	*07/19/21 03:26*	*1*
o-Terphenyl	*122*		*70 - 130*	*07/15/21 15:36*	*07/19/21 03:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**507**		5.04		mg/Kg			07/17/21 16:06	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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)
890-938-1	FS01	111	101
890-938-2	FS02	114	101
890-938-3	FS03	97	94
890-938-4	FS04	94	96
890-938-5	FS05	103	92
890-938-6	FS06	98	88
890-938-7	FS07	95	89
890-938-8	FS08	112	105
890-938-9	FS09	88	84
890-938-10	FS10	108	102
890-938-11	FS11	110	105
890-938-12	FS12	98	96
890-938-13	FS13	106	99
890-938-13 MS	FS13	106	99
890-938-13 MSD	FS13	104	100
890-938-14	FS14	110	102
890-938-15	FS15	108	102
890-938-16	FS16	110	103
890-938-17	FS17	113	100
LCS 880-5145/1-A	Lab Control Sample	97	108
LCS 880-5187/1-A	Lab Control Sample	105	99
LCS 880-5188/1-A	Lab Control Sample	87	92
LCSD 880-5145/2-A	Lab Control Sample Dup	93	103
LCSD 880-5187/2-A	Lab Control Sample Dup	104	98
LCSD 880-5188/2-A	Lab Control Sample Dup	77	115
MB 880-5121/5-A	Method Blank	103	98
MB 880-5145/5-A	Method Blank	64 S1-	87
MB 880-5187/5-A	Method Blank	104	94
MB 880-5188/5-A	Method Blank	66 S1-	85

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)
890-938-1	FS01	97	106
890-938-2	FS02	93	102
890-938-3	FS03	94	102
890-938-4	FS04	90	98
890-938-5	FS05	111	119
890-938-6	FS06	95	100
890-938-7	FS07	110	119
890-938-8	FS08	93	100
890-938-9	FS09	109	118
890-938-10	FS10	107	115

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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)								
890-938-11	FS11	108	114								
890-938-12	FS12	119	130								
890-938-13	FS13	102	109								
890-938-14	FS14	97	101								
890-938-15	FS15	108	113								
890-938-16	FS16	92	95								
890-938-17	FS17	109	122								
LCS 880-5207/2-A	Lab Control Sample	93	93								
LCS 880-5244/2-A	Lab Control Sample	102	98								
LCSD 880-5207/3-A	Lab Control Sample Dup	108	108								
LCSD 880-5244/3-A	Lab Control Sample Dup	104	97								
MB 880-5207/1-A	Method Blank	102	114								
MB 880-5244/1-A	Method Blank	106	122								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5121/5-A
Matrix: Solid
Analysis Batch: 5148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5121

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/13/21 16:33	07/14/21 17:44	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/13/21 16:33	07/14/21 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/13/21 16:33*	*07/14/21 17:44*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/13/21 16:33*	*07/14/21 17:44*	*1*

Lab Sample ID: MB 880-5145/5-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5145

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/14/21 09:47	07/15/21 11:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*07/14/21 09:47*	*07/15/21 11:42*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/14/21 09:47*	*07/15/21 11:42*	*1*

Lab Sample ID: LCS 880-5145/1-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5145

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09288		mg/Kg		93	70 - 130		
Toluene			0.100	0.08881		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.1006		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.1760		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.09177		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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

Lab Sample ID: LCSD 880-5145/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5206 — **Prep Batch: 5145**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08785		mg/Kg		88	70 - 130	6	35
Toluene			0.100	0.09379		mg/Kg		94	70 - 130	5	35
Ethylbenzene			0.100	0.09612		mg/Kg		96	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1682		mg/Kg		84	70 - 130	5	35
o-Xylene			0.100	0.08780		mg/Kg		88	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 880-5187/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5148 — **Prep Batch: 5187**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/21 13:09	07/15/21 05:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/14/21 13:09	07/15/21 05:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/14/21 13:09*	*07/15/21 05:17*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*07/14/21 13:09*	*07/15/21 05:17*	*1*

Lab Sample ID: LCS 880-5187/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5148 — **Prep Batch: 5187**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.100	0.07998		mg/Kg		80	70 - 130
Toluene			0.100	0.07834		mg/Kg		78	70 - 130
Ethylbenzene			0.100	0.08293		mg/Kg		83	70 - 130
m-Xylene & p-Xylene			0.200	0.1662		mg/Kg		83	70 - 130
o-Xylene			0.100	0.08224		mg/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-5187/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 5148 — **Prep Batch: 5187**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08697		mg/Kg		87	70 - 130	8	35

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QC Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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

Lab Sample ID: LCSD 880-5187/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 5148 **Prep Batch: 5187**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.08529		mg/Kg		85	70 - 130	8	35
Ethylbenzene			0.100	0.09055		mg/Kg		91	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1796		mg/Kg		90	70 - 130	8	35
o-Xylene			0.100	0.08746		mg/Kg		87	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-938-13 MS **Client Sample ID: FS13**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 5148 **Prep Batch: 5187**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0996	0.06608	F1	mg/Kg		66	70 - 130
Toluene	<0.00200	U F1	0.0996	0.06675	F1	mg/Kg		67	70 - 130
Ethylbenzene	<0.00200	U	0.0996	0.07122		mg/Kg		72	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.199	0.1434		mg/Kg		72	70 - 130
o-Xylene	<0.00200	U	0.0996	0.07055		mg/Kg		71	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-938-13 MSD **Client Sample ID: FS13**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 5148 **Prep Batch: 5187**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.07759		mg/Kg		77	70 - 130	16	35
Toluene	<0.00200	U F1	0.101	0.07762		mg/Kg		77	70 - 130	15	35
Ethylbenzene	<0.00200	U	0.101	0.08233		mg/Kg		82	70 - 130	14	35
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1649		mg/Kg		82	70 - 130	14	35
o-Xylene	<0.00200	U	0.101	0.07935		mg/Kg		79	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 880-5188/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 5206 **Prep Batch: 5188**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:15	07/16/21 00:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:15	07/16/21 00:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:15	07/16/21 00:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/21 13:15	07/16/21 00:52	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

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

Lab Sample ID: MB 880-5188/5-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5188

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/21 13:15	07/16/21 00:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/21 13:15	07/16/21 00:52	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/14/21 13:15	07/16/21 00:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*07/14/21 13:15*	*07/16/21 00:52*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*07/14/21 13:15*	*07/16/21 00:52*	*1*

Lab Sample ID: LCS 880-5188/1-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5188

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07647		mg/Kg		76	70 - 130		
Toluene			0.100	0.08453		mg/Kg		85	70 - 130		
Ethylbenzene			0.100	0.08718		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene			0.200	0.1529		mg/Kg		76	70 - 130		
o-Xylene			0.100	0.07942		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-5188/2-A
Matrix: Solid
Analysis Batch: 5206

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5188

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.07448		mg/Kg		74	70 - 130	3	35
Toluene			0.100	0.07893		mg/Kg		79	70 - 130	7	35
Ethylbenzene			0.100	0.09042		mg/Kg		90	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1569		mg/Kg		78	70 - 130	3	35
o-Xylene			0.100	0.08095		mg/Kg		81	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

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

Lab Sample ID: MB 880-5207/1-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5207

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 11:04	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

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

Lab Sample ID: MB 880-5207/1-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5207

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 11:04	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 08:43	07/17/21 11:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*07/15/21 08:43*	*07/17/21 11:04*	*1*
o-Terphenyl	*114*		*70 - 130*	*07/15/21 08:43*	*07/17/21 11:04*	*1*

Lab Sample ID: LCS 880-5207/2-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5207

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	767.7		mg/Kg		77	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	911.5		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-5207/3-A
Matrix: Solid
Analysis Batch: 5321

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5207

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	896.2		mg/Kg		90	70 - 130	15	20
Diesel Range Organics (Over C10-C28)			1000	1041		mg/Kg		104	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: MB 880-5244/1-A
Matrix: Solid
Analysis Batch: 5327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5244

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/18/21 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/18/21 21:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/18/21 21:34	1
Total TPH	<50.0	U	50.0		mg/Kg		07/15/21 15:36	07/18/21 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*07/15/21 15:36*	*07/18/21 21:34*	*1*

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

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

Lab Sample ID: MB 880-5244/1-A
Matrix: Solid
Analysis Batch: 5327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5244

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	122		70 - 130	07/15/21 15:36	07/18/21 21:34	1

Lab Sample ID: LCS 880-5244/2-A
Matrix: Solid
Analysis Batch: 5327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5244

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	907.6		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	938.5		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-5244/3-A
Matrix: Solid
Analysis Batch: 5327

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5244

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	901.9		mg/Kg		90	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	939.4		mg/Kg		94	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5281/1-A
Matrix: Solid
Analysis Batch: 5330

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			07/17/21 13:49	1

Lab Sample ID: LCS 880-5281/2-A
Matrix: Solid
Analysis Batch: 5330

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.5		mg/Kg		99	90 - 110

QC Sample Results

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-5281/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5330

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	246.1		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-938-3 MS — **Client Sample ID: FS03**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	530	F1	248	748.5	F1	mg/Kg		88	90 - 110

Lab Sample ID: 890-938-3 MSD — **Client Sample ID: FS03**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5330

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	530	F1	248	746.1	F1	mg/Kg		87	90 - 110	0	20

Lab Sample ID: 890-938-13 MS — **Client Sample ID: FS13**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1530		1250	2831		mg/Kg		104	90 - 110

Lab Sample ID: 890-938-13 MSD — **Client Sample ID: FS13**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5330

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1530		1250	2831		mg/Kg		104	90 - 110	0	20

Lab Sample ID: MB 880-5282/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5390

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/19/21 14:32	1

Lab Sample ID: LCS 880-5282/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5390

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	247.9		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-5282/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 5390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	248.1		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

GC VOA

Prep Batch: 5121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5121/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 5145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Total/NA	Solid	5035	
890-938-3	FS03	Total/NA	Solid	5035	
890-938-4	FS04	Total/NA	Solid	5035	
890-938-5	FS05	Total/NA	Solid	5035	
890-938-6	FS06	Total/NA	Solid	5035	
890-938-7	FS07	Total/NA	Solid	5035	
890-938-8	FS08	Total/NA	Solid	5035	
890-938-9	FS09	Total/NA	Solid	5035	
890-938-10	FS10	Total/NA	Solid	5035	
890-938-11	FS11	Total/NA	Solid	5035	
890-938-12	FS12	Total/NA	Solid	5035	
MB 880-5145/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5145/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5145/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-13	FS13	Total/NA	Solid	8021B	5187
890-938-14	FS14	Total/NA	Solid	8021B	5187
890-938-15	FS15	Total/NA	Solid	8021B	5187
890-938-16	FS16	Total/NA	Solid	8021B	5187
890-938-17	FS17	Total/NA	Solid	8021B	5187
MB 880-5121/5-A	Method Blank	Total/NA	Solid	8021B	5121
MB 880-5187/5-A	Method Blank	Total/NA	Solid	8021B	5187
LCS 880-5187/1-A	Lab Control Sample	Total/NA	Solid	8021B	5187
LCSD 880-5187/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5187
890-938-13 MS	FS13	Total/NA	Solid	8021B	5187
890-938-13 MSD	FS13	Total/NA	Solid	8021B	5187

Prep Batch: 5187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-13	FS13	Total/NA	Solid	5035	
890-938-14	FS14	Total/NA	Solid	5035	
890-938-15	FS15	Total/NA	Solid	5035	
890-938-16	FS16	Total/NA	Solid	5035	
890-938-17	FS17	Total/NA	Solid	5035	
MB 880-5187/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5187/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5187/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-938-13 MS	FS13	Total/NA	Solid	5035	
890-938-13 MSD	FS13	Total/NA	Solid	5035	

Prep Batch: 5188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-2	FS02	Total/NA	Solid	5035	
MB 880-5188/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5188/1-A	Lab Control Sample	Total/NA	Solid	5035	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

GC VOA (Continued)

Prep Batch: 5188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-5188/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Total/NA	Solid	8021B	5145
890-938-2	FS02	Total/NA	Solid	8021B	5188
890-938-3	FS03	Total/NA	Solid	8021B	5145
890-938-4	FS04	Total/NA	Solid	8021B	5145
890-938-5	FS05	Total/NA	Solid	8021B	5145
890-938-6	FS06	Total/NA	Solid	8021B	5145
890-938-7	FS07	Total/NA	Solid	8021B	5145
890-938-8	FS08	Total/NA	Solid	8021B	5145
890-938-9	FS09	Total/NA	Solid	8021B	5145
890-938-10	FS10	Total/NA	Solid	8021B	5145
890-938-11	FS11	Total/NA	Solid	8021B	5145
890-938-12	FS12	Total/NA	Solid	8021B	5145
MB 880-5145/5-A	Method Blank	Total/NA	Solid	8021B	5145
MB 880-5188/5-A	Method Blank	Total/NA	Solid	8021B	5188
LCS 880-5145/1-A	Lab Control Sample	Total/NA	Solid	8021B	5145
LCS 880-5188/1-A	Lab Control Sample	Total/NA	Solid	8021B	5188
LCSD 880-5145/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5145
LCSD 880-5188/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5188

GC Semi VOA

Prep Batch: 5207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Total/NA	Solid	8015NM Prep	
890-938-2	FS02	Total/NA	Solid	8015NM Prep	
890-938-3	FS03	Total/NA	Solid	8015NM Prep	
890-938-4	FS04	Total/NA	Solid	8015NM Prep	
890-938-5	FS05	Total/NA	Solid	8015NM Prep	
890-938-6	FS06	Total/NA	Solid	8015NM Prep	
890-938-7	FS07	Total/NA	Solid	8015NM Prep	
890-938-8	FS08	Total/NA	Solid	8015NM Prep	
890-938-9	FS09	Total/NA	Solid	8015NM Prep	
890-938-10	FS10	Total/NA	Solid	8015NM Prep	
890-938-11	FS11	Total/NA	Solid	8015NM Prep	
890-938-12	FS12	Total/NA	Solid	8015NM Prep	
890-938-13	FS13	Total/NA	Solid	8015NM Prep	
890-938-14	FS14	Total/NA	Solid	8015NM Prep	
890-938-15	FS15	Total/NA	Solid	8015NM Prep	
890-938-16	FS16	Total/NA	Solid	8015NM Prep	
MB 880-5207/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5207/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5207/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 5244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-17	FS17	Total/NA	Solid	8015NM Prep	
MB 880-5244/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

GC Semi VOA (Continued)

Prep Batch: 5244 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-5244/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5244/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Total/NA	Solid	8015B NM	5207
890-938-2	FS02	Total/NA	Solid	8015B NM	5207
890-938-3	FS03	Total/NA	Solid	8015B NM	5207
890-938-4	FS04	Total/NA	Solid	8015B NM	5207
890-938-5	FS05	Total/NA	Solid	8015B NM	5207
890-938-6	FS06	Total/NA	Solid	8015B NM	5207
890-938-7	FS07	Total/NA	Solid	8015B NM	5207
890-938-8	FS08	Total/NA	Solid	8015B NM	5207
890-938-9	FS09	Total/NA	Solid	8015B NM	5207
890-938-10	FS10	Total/NA	Solid	8015B NM	5207
890-938-11	FS11	Total/NA	Solid	8015B NM	5207
890-938-12	FS12	Total/NA	Solid	8015B NM	5207
890-938-13	FS13	Total/NA	Solid	8015B NM	5207
890-938-14	FS14	Total/NA	Solid	8015B NM	5207
890-938-15	FS15	Total/NA	Solid	8015B NM	5207
890-938-16	FS16	Total/NA	Solid	8015B NM	5207
MB 880-5207/1-A	Method Blank	Total/NA	Solid	8015B NM	5207
LCS 880-5207/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5207
LCSD 880-5207/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5207

Analysis Batch: 5327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-17	FS17	Total/NA	Solid	8015B NM	5244
MB 880-5244/1-A	Method Blank	Total/NA	Solid	8015B NM	5244
LCS 880-5244/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5244
LCSD 880-5244/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5244

HPLC/IC

Leach Batch: 5281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-3	FS03	Soluble	Solid	DI Leach	
890-938-4	FS04	Soluble	Solid	DI Leach	
890-938-5	FS05	Soluble	Solid	DI Leach	
890-938-6	FS06	Soluble	Solid	DI Leach	
890-938-7	FS07	Soluble	Solid	DI Leach	
890-938-8	FS08	Soluble	Solid	DI Leach	
890-938-9	FS09	Soluble	Solid	DI Leach	
890-938-10	FS10	Soluble	Solid	DI Leach	
890-938-11	FS11	Soluble	Solid	DI Leach	
890-938-12	FS12	Soluble	Solid	DI Leach	
890-938-13	FS13	Soluble	Solid	DI Leach	
890-938-14	FS14	Soluble	Solid	DI Leach	
890-938-15	FS15	Soluble	Solid	DI Leach	
890-938-16	FS16	Soluble	Solid	DI Leach	
890-938-17	FS17	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

HPLC/IC (Continued)

Leach Batch: 5281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5281/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5281/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5281/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-938-3 MS	FS03	Soluble	Solid	DI Leach	
890-938-3 MSD	FS03	Soluble	Solid	DI Leach	
890-938-13 MS	FS13	Soluble	Solid	DI Leach	
890-938-13 MSD	FS13	Soluble	Solid	DI Leach	

Leach Batch: 5282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Soluble	Solid	DI Leach	
890-938-2	FS02	Soluble	Solid	DI Leach	
MB 880-5282/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5282/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5282/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-3	FS03	Soluble	Solid	300.0	5281
890-938-4	FS04	Soluble	Solid	300.0	5281
890-938-5	FS05	Soluble	Solid	300.0	5281
890-938-6	FS06	Soluble	Solid	300.0	5281
890-938-7	FS07	Soluble	Solid	300.0	5281
890-938-8	FS08	Soluble	Solid	300.0	5281
890-938-9	FS09	Soluble	Solid	300.0	5281
890-938-10	FS10	Soluble	Solid	300.0	5281
890-938-11	FS11	Soluble	Solid	300.0	5281
890-938-12	FS12	Soluble	Solid	300.0	5281
890-938-13	FS13	Soluble	Solid	300.0	5281
890-938-14	FS14	Soluble	Solid	300.0	5281
890-938-15	FS15	Soluble	Solid	300.0	5281
890-938-16	FS16	Soluble	Solid	300.0	5281
890-938-17	FS17	Soluble	Solid	300.0	5281
MB 880-5281/1-A	Method Blank	Soluble	Solid	300.0	5281
LCS 880-5281/2-A	Lab Control Sample	Soluble	Solid	300.0	5281
LCSD 880-5281/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5281
890-938-3 MS	FS03	Soluble	Solid	300.0	5281
890-938-3 MSD	FS03	Soluble	Solid	300.0	5281
890-938-13 MS	FS13	Soluble	Solid	300.0	5281
890-938-13 MSD	FS13	Soluble	Solid	300.0	5281

Analysis Batch: 5390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-938-1	FS01	Soluble	Solid	300.0	5282
890-938-2	FS02	Soluble	Solid	300.0	5282
MB 880-5282/1-A	Method Blank	Soluble	Solid	300.0	5282
LCS 880-5282/2-A	Lab Control Sample	Soluble	Solid	300.0	5282
LCSD 880-5282/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5282

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS01 Lab Sample ID: 890-938-1

Date Collected: 07/12/21 12:27 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 15:29	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 14:12	AJ	XEN MID
Soluble	Leach	DI Leach			5282	07/16/21 12:09	CH	XEN MID
Soluble	Analysis	300.0		1	5390	07/19/21 17:10	CH	XEN MID

Client Sample ID: FS02 Lab Sample ID: 890-938-2

Date Collected: 07/12/21 12:33 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5188	07/14/21 13:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5206	07/16/21 10:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 14:33	AJ	XEN MID
Soluble	Leach	DI Leach			5282	07/16/21 12:09	CH	XEN MID
Soluble	Analysis	300.0		1	5390	07/19/21 17:16	CH	XEN MID

Client Sample ID: FS03 Lab Sample ID: 890-938-3

Date Collected: 07/12/21 12:36 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/16/21 01:45	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:07	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:05	CH	XEN MID

Client Sample ID: FS04 Lab Sample ID: 890-938-4

Date Collected: 07/12/21 12:38 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/16/21 02:11	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 15:15	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:07	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:22	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS05 Lab Sample ID: 890-938-5

Date Collected: 07/12/21 12:41 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 18:26	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 15:36	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:27	CH	XEN MID

Client Sample ID: FS06 Lab Sample ID: 890-938-6

Date Collected: 07/12/21 14:16 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 18:52	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 15:57	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:33	CH	XEN MID

Client Sample ID: FS07 Lab Sample ID: 890-938-7

Date Collected: 07/12/21 14:19 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 19:17	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 16:39	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:38	CH	XEN MID

Client Sample ID: FS08 Lab Sample ID: 890-938-8

Date Collected: 07/12/21 14:22 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 19:43	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 17:00	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 14:54	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS09 Lab Sample ID: 890-938-9

Date Collected: 07/12/21 14:25 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 20:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 17:21	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		5	5330	07/18/21 20:34	CH	XEN MID

Client Sample ID: FS10 Lab Sample ID: 890-938-10

Date Collected: 07/12/21 14:38 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 20:34	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 17:41	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 15:05	CH	XEN MID

Client Sample ID: FS11 Lab Sample ID: 890-938-11

Date Collected: 07/12/21 14:31 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 20:59	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 18:02	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 15:11	CH	XEN MID

Client Sample ID: FS12 Lab Sample ID: 890-938-12

Date Collected: 07/12/21 14:34 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5145	07/14/21 09:47	MR	XEN MID
Total/NA	Analysis	8021B		1	5206	07/15/21 21:25	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 18:23	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 15:16	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

Client Sample ID: FS13 Lab Sample ID: 890-938-13

Date Collected: 07/12/21 14:37 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5187	07/14/21 13:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5148	07/15/21 05:46	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 18:44	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		5	5330	07/18/21 20:40	CH	XEN MID

Client Sample ID: FS14 Lab Sample ID: 890-938-14

Date Collected: 07/12/21 14:40 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5187	07/14/21 13:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5148	07/15/21 06:06	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 19:05	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 15:38	CH	XEN MID

Client Sample ID: FS15 Lab Sample ID: 890-938-15

Date Collected: 07/12/21 14:43 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5187	07/14/21 13:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5148	07/15/21 06:27	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 15:44	CH	XEN MID

Client Sample ID: FS16 Lab Sample ID: 890-938-16

Date Collected: 07/12/21 14:46 **Matrix: Solid**
Date Received: 07/13/21 13:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5187	07/14/21 13:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5148	07/15/21 06:47	MR	XEN MID
Total/NA	Prep	8015NM Prep			5207	07/15/21 08:43	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5321	07/17/21 19:47	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 16:00	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Client Sample ID: FS17

Date Collected: 07/12/21 15:50
Date Received: 07/13/21 13:31

Lab Sample ID: 890-938-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5187	07/14/21 13:09	MR	XEN MID
Total/NA	Analysis	8021B		1	5148	07/15/21 07:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			5244	07/15/21 15:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5327	07/19/21 03:26	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 16:06	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: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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: WSP USA Inc. Job ID: 890-938-1
Project/Site: PLU North Frac Pond SDG: 31403236.013.0129

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: WSP USA Inc.
Project/Site: PLU North Frac Pond

Job ID: 890-938-1
SDG: 31403236.013.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-938-1	FS01	Solid	07/12/21 12:27	07/13/21 13:31	- 1
890-938-2	FS02	Solid	07/12/21 12:33	07/13/21 13:31	- 1
890-938-3	FS03	Solid	07/12/21 12:36	07/13/21 13:31	- 1
890-938-4	FS04	Solid	07/12/21 12:38	07/13/21 13:31	- 1
890-938-5	FS05	Solid	07/12/21 12:41	07/13/21 13:31	- 1
890-938-6	FS06	Solid	07/12/21 14:16	07/13/21 13:31	- 1
890-938-7	FS07	Solid	07/12/21 14:19	07/13/21 13:31	- 1
890-938-8	FS08	Solid	07/12/21 14:22	07/13/21 13:31	- 1
890-938-9	FS09	Solid	07/12/21 14:25	07/13/21 13:31	- 1
890-938-10	FS10	Solid	07/12/21 14:38	07/13/21 13:31	- 1
890-938-11	FS11	Solid	07/12/21 14:31	07/13/21 13:31	- 1
890-938-12	FS12	Solid	07/12/21 14:34	07/13/21 13:31	- 1
890-938-13	FS13	Solid	07/12/21 14:37	07/13/21 13:31	- 1
890-938-14	FS14	Solid	07/12/21 14:40	07/13/21 13:31	- 1
890-938-15	FS15	Solid	07/12/21 14:43	07/13/21 13:31	- 1
890-938-16	FS16	Solid	07/12/21 14:46	07/13/21 13:31	- 1
890-938-17	FS17	Solid	07/12/21 15:50	07/13/21 13:31	- 1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU North Frac Pond	Turn Around	
Project Number:	31403236.013.0129	Routine	☒
P.O. Number:	CC: 2094031001	Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2/1.0	Thermometer ID	CWM-07
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

890-938 Chain of Custody

Work Order Notes

IN: NAPP2116030736
API: 30-015-31687

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
FS01	S	7/12/2021	1227	1'	1	X	X	X	
FS02	S	7/12/2021	1233	1'	1	X	X	X	
FS03	S	7/12/2021	1236	1'	1	X	X	X	
FS04	S	7/12/2021	1238	1'	1	X	X	X	
FS05	S	7/12/2021	1241	1'	1	X	X	X	
FS06	S	7/12/2021	1416	1'	1	X	X	X	
FS07	S	7/12/2021	1419	1'	1	X	X	X	
FS08	S	7/12/2021	1422	1'	1	X	X	X	
FS09	S	7/12/2021	1425	1'	1	X	X	X	
FS10	S	7/12/2021	1428	1'	1	X	X	X	

Total 200.7 / 6010 **200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7-13-21 1331	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Chain of Custody

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)

www.xenco.com Page 2 of 2

Work Order No: _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849 Email:	luis.delval@wsp.com; kalei.jennings@wsp.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐
State of Project:
Reporting:Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU North Frac Pond	Turn Around	
Project Number:	31403236.013.0129	Routine	☒
P.O. Number:	CC: 2094031001	Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	~~Yes~~ No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes ~~No~~ N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (ERA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS11	S	7/12/2021	1431	1'	1	X	X	X
FS12	S	7/12/2021	1434	1'	1	X	X	X
FS13	S	7/12/2021	1437	1'	1	X	X	X
FS14	S	7/12/2021	1440	1'	1	X	X	X
FS15	S	7/12/2021	1443	1'	1	X	X	X
FS16	S	7/12/2021	1446	1'	1	X	X	X
FS17	S	7/12/2021	1550	1'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

IN: NAPP2116030736
API: 30-015-31687

TAT starts the day recevied by the ~~lab, if received by 4:30pm~~

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7-13-21 1331	2		
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-938-1
SDG Number: 31403236.013.0129

Login Number: 938
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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.	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: WSP USA Inc.

Job Number: 890-938-1
SDG Number: 31403236.013.0129

Login Number: 938
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/14/21 11:19 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.	False	
COC is filled out in ink and legible.	False	
COC is filled out with all pertinent information.	False	
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

Job Number: 890-949-1

SDG Number: 31403236.013.0129

Job Description: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, TX 75207

Attention: Kalei Jennings

Approved for release.
Jessica Kramer
Project Manager
7/21/2021 4:08 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
07/21/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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.

Eurofins Xenco, Carlsbad
1089 N Canal St., Carlsbad, NM 88220
Tel (575) 988-3199 Fax (575) 988-3199 www.EurofinsUS.com

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-949-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-949-1	890-949-2	890-949-3	890-949-4	890-949-5
Client Sample ID:	PH08	PH08A	PH08B	PH09	PH09A
Depth:	0.5	1	2	0.5	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/14/2021 10:33	07/14/2021 10:38	07/14/2021 10:41	07/14/2021 11:03	07/14/2021 11:05

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/18/2021 12:24		07/18/2021 12:24		07/18/2021 12:24		07/18/2021 12:24		07/19/2021 09:25	
Analyzed:	07/19/2021 10:20		07/19/2021 10:41		07/19/2021 11:01		07/19/2021 11:22		07/20/2021 10:08	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00201 U	0.00201	<0.00199 U	0.00199	**0.00753**	0.00200	<0.00200 U	0.00200	<0.00201 U	0.00201
Toluene		<0.00201 U	0.00201	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00201 U	0.00201
Ethylbenzene		<0.00201 U	0.00201	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00201 U	0.00201
m-Xylene & p-Xylene		<0.00402 U	0.00402	<0.00398 U	0.00398	<0.00401 U	0.00401	<0.00401 U	0.00401	<0.00402 U	0.00402
o-Xylene		<0.00201 U	0.00201	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00201 U	0.00201
Xylenes, Total		<0.00402 U	0.00402	<0.00398 U	0.00398	<0.00401 U	0.00401	<0.00401 U	0.00401	<0.00402 U	0.00402
Total BTEX		<0.00402 U	0.00402	<0.00398 U	0.00398	**0.00753**	0.00401	<0.00401 U	0.00401	<0.00402 U	0.00402

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

Prepared:	07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53	
Analyzed:	07/19/2021 16:19		07/19/2021 16:40		07/19/2021 17:00		07/19/2021 17:21		07/19/2021 18:03	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<49.9 U *-	49.9	<50.0 U *-	50.0	<50.0 U *-	50.0	<49.9 U *-	49.9	<50.0 U *-	50.0
Diesel Range Organics (Over C10-C28)		<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<50.0 U	50.0
Total TPH		<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/19/2021 18:27		07/20/2021 17:57		07/20/2021 18:13		07/20/2021 18:19		07/20/2021 18:24	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**1860**	25.0	**476**	5.04	**67.2**	4.99	**994**	4.96	**157**	4.96

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-949-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-949-6	890-949-7	890-949-8	890-949-9	890-949-10
Client Sample ID:	PH09B	PH10	PH10A	PH10B	PH11
Depth:	2	0.5	1	2	0.5
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/14/2021 11:07	07/14/2021 12:10	07/14/2021 12:13	07/14/2021 12:16	07/14/2021 12:45

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 09:25		07/19/2021 09:25		07/19/2021 09:25		07/19/2021 09:25		07/19/2021 09:31	
Analyzed:	07/20/2021 10:29		07/20/2021 10:50		07/20/2021 11:10		07/20/2021 11:31		07/19/2021 16:15	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00198 U	0.00198	<0.00198 U F1 F2	0.00198
Toluene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00198 U	0.00198	<0.00198 U	0.00198
Ethylbenzene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00198 U	0.00198	<0.00198 U	0.00198
m-Xylene & p-Xylene	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00404 U	0.00404	<0.00397 U	0.00397	<0.00396 U	0.00396
o-Xylene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00202 U	0.00202	<0.00198 U	0.00198	<0.00198 U	0.00198
Xylenes, Total	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00404 U	0.00404	<0.00397 U	0.00397	<0.00396 U	0.00396
Total BTEX	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00404 U	0.00404	<0.00397 U	0.00397	<0.00396 U	0.00396

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

Prepared:	07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53		07/16/2021 11:53	
Analyzed:	07/19/2021 18:23		07/19/2021 18:44		07/19/2021 19:05		07/19/2021 19:26		07/19/2021 19:47	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U *-	50.0	<49.9 U *-	49.9	<49.9 U *-	49.9	<49.9 U *-	49.9	<50.0 U *-	50.0
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
Total TPH	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/20/2021 18:29		07/20/2021 18:46		07/20/2021 18:51		07/20/2021 18:57		07/20/2021 19:02	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**55.6**	4.99	**235**	5.05	**84.1**	5.03	**60.3**	5.02	**2120**	25.0

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-949-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-949-11	890-949-12
Client Sample ID:	PH11A	PH11B
Depth:	1	2
Matrix:	Solid	Solid
Date Collected:	07/14/2021 12:48	07/14/2021 12:51

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	07/19/2021 09:31		07/19/2021 09:31	
	Analyzed:	07/19/2021 16:35		07/19/2021 16:56	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00200 U	0.00200	<0.00200 U	0.00200
Toluene		<0.00200 U	0.00200	<0.00200 U	0.00200
Ethylbenzene		<0.00200 U	0.00200	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00399 U	0.00399	<0.00399 U	0.00399
o-Xylene		<0.00200 U	0.00200	<0.00200 U	0.00200
Xylenes, Total		<0.00399 U	0.00399	<0.00399 U	0.00399
Total BTEX		<0.00399 U	0.00399	<0.00399 U	0.00399

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

	Prepared:	07/16/2021 11:53		07/16/2021 11:53	
	Analyzed:	07/19/2021 20:07		07/19/2021 20:28	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U *-	50.0	<49.9 U *-	49.9
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<49.9 U	49.9
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<49.9 U	49.9
Total TPH		<50.0 U	50.0	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	07/20/2021 19:08		07/20/2021 19:13	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**79.4**	4.98	**164**	4.95

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ANALYTICAL REPORT

Job Number: 890-959-1

SDG Number: 31403236.013.0129

Job Description: PLU North Frac Pond

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, TX 75207

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
7/26/2021 10:55 AM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
07/26/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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.

Eurofins Xenco, Carlsbad
1089 N Canal St., Carlsbad, NM 88220
Tel (575) 988-3199 Fax (575) 988-3199 www.EurofinsUS.com

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-1	890-959-2	890-959-3	890-959-4	890-959-5
Client Sample ID:	FS18	FS19	FS20	FS21	FS22
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 10:44	07/15/2021 10:47	07/15/2021 10:50	07/15/2021 10:53	07/15/2021 10:56

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30	
Analyzed:	07/20/2021 04:53		07/20/2021 05:14		07/20/2021 05:34		07/20/2021 05:54		07/20/2021 06:15	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00202 U	0.00202	<0.00200 U	0.00200
Toluene	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00202 U	0.00202	<0.00200 U	0.00200
Ethylbenzene	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00202 U	0.00202	<0.00200 U	0.00200
m-Xylene & p-Xylene	<0.00401 U	0.00401	<0.00399 U	0.00399	<0.00398 U	0.00398	<0.00403 U	0.00403	<0.00401 U	0.00401
o-Xylene	<0.00200 U	0.00200	<0.00200 U	0.00200	<0.00199 U	0.00199	<0.00202 U	0.00202	<0.00200 U	0.00200
Xylenes, Total	<0.00401 U	0.00401	<0.00399 U	0.00399	<0.00398 U	0.00398	<0.00403 U	0.00403	<0.00401 U	0.00401
Total BTEX	<0.00401 U	0.00401	<0.00399 U	0.00399	<0.00398 U	0.00398	<0.00403 U	0.00403	<0.00401 U	0.00401

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

Prepared:	07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44	
Analyzed:	07/23/2021 14:19		07/23/2021 15:22		07/23/2021 15:43		07/23/2021 16:04		07/23/2021 16:25	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U *-	50.0	<49.8 U *-	49.8	<50.0 U *-	50.0	<50.0 U *-	50.0	<49.8 U *-	49.8
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Total TPH	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 18:12		07/21/2021 18:28		07/21/2021 18:34		07/21/2021 18:39		07/21/2021 18:44	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**1150**	4.99	**513**	5.02	**1270**	5.00	**201**	5.05	**207**	5.01

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-6	890-959-7	890-959-8	890-959-9	890-959-10
Client Sample ID:	FS23	FS24	FS25	FS26	FS27
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 10:59	07/15/2021 11:02	07/15/2021 11:25	07/15/2021 11:28	07/15/2021 11:31

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30	
Analyzed:	07/20/2021 06:35		07/20/2021 06:56		07/20/2021 07:16		07/20/2021 07:37		07/20/2021 07:57	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00202 U	0.00202	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200
Toluene		<0.00202 U	0.00202	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200
Ethylbenzene		<0.00202 U	0.00202	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00404 U	0.00404	<0.00399 U	0.00399	<0.00397 U	0.00397	<0.00400 U	0.00400	<0.00400 U	0.00400
o-Xylene		<0.00202 U	0.00202	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00200 U	0.00200
Xylenes, Total		<0.00404 U	0.00404	<0.00399 U	0.00399	<0.00397 U	0.00397	<0.00400 U	0.00400	<0.00400 U	0.00400
Total BTEX		<0.00404 U	0.00404	<0.00399 U	0.00399	<0.00397 U	0.00397	<0.00400 U	0.00400	<0.00400 U	0.00400

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

Prepared:	07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44	
Analyzed:	07/23/2021 16:46		07/23/2021 17:07		07/23/2021 17:28		07/23/2021 17:49		07/23/2021 18:10	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<49.7 U *-	49.7	<49.9 U *-	49.9	<50.0 U *-	50.0	<50.0 U *-	50.0	<49.9 U *-	49.9
Diesel Range Organics (Over C10-C28)		<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
OII Range Organics (Over C28-C36)		<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Total TPH		<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 18:50		07/21/2021 18:55		07/21/2021 19:01		07/21/2021 19:44		07/21/2021 20:00	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**250**	5.05	**121**	5.00	**1430**	4.98	**942 F1**	5.03	**506**	4.99

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-11	890-959-12	890-959-13	890-959-14	890-959-15
Client Sample ID:	FS28	FS29	FS30	FS31	FS32
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 11:34	07/15/2021 11:37	07/15/2021 11:40	07/15/2021 11:43	07/15/2021 11:46

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30	
Analyzed:	07/20/2021 09:46		07/20/2021 10:07		07/20/2021 10:27		07/20/2021 10:48		07/20/2021 11:08	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Toluene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Ethylbenzene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
m-Xylene & p-Xylene	<0.00398 U	0.00398	<0.00396 U	0.00396	<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404
o-Xylene	<0.00199 U	0.00199	<0.00198 U	0.00198	**0.00243**	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Xylenes, Total	<0.00398 U	0.00398	<0.00396 U	0.00396	<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404
Total BTEX	<0.00398 U	0.00398	<0.00396 U	0.00396	<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404

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

Prepared:	07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44	
Analyzed:	07/23/2021 18:51		07/23/2021 19:12		07/23/2021 19:33		07/23/2021 19:54		07/23/2021 20:15	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U *-	50.0	<50.0 U *-	50.0	<49.9 U *-	49.9	<49.9 U *-	49.9	<49.9 U *-	49.9
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9
Total TPH	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 20:05		07/21/2021 20:11		07/21/2021 20:16		07/21/2021 20:32		07/21/2021 20:38	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**134**	4.96	**298**	5.00	**90.6**	4.98	**129**	5.04	**340**	5.03

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-959-1
Project/Site: PLU North Frac Pond
SDG: 31403236.013.0129

Lab Sample ID:	890-959-16	890-959-17	890-959-18	890-959-19	890-959-20
Client Sample ID:	FS33	FS34	FS35	FS36	FS37
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 11:49	07/15/2021 11:52	07/15/2021 11:55	07/15/2021 12:16	07/15/2021 12:18

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30		07/19/2021 11:30	
Analyzed:	07/20/2021 11:29		07/20/2021 11:49		07/20/2021 12:09		07/20/2021 12:30		07/20/2021 12:50	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00201 U	0.00201
Toluene		<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00201 U	0.00201
Ethylbenzene		<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00201 U	0.00201
m-Xylene & p-Xylene		<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00402 U	0.00402
o-Xylene		<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00201 U	0.00201
Xylenes, Total		<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00402 U	0.00402
Total BTEX		<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00402 U	0.00402

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

Prepared:	07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44		07/19/2021 15:44	
Analyzed:	07/23/2021 20:36		07/23/2021 20:57		07/23/2021 21:18		07/23/2021 21:39		07/23/2021 22:00	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U *-	50.0	<50.0 U *-	50.0	<49.9 U *-	49.9	<49.9 U *-	49.9	<50.0 U *-	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
Total TPH		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 20:43		07/21/2021 20:48		07/21/2021 20:54		07/21/2021 20:59		07/21/2021 21:15	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**223**	4.99	**539**	5.04	**352**	4.98	**358**	4.98	**146**	5.00

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-21	890-959-22	890-959-23	890-959-24	890-959-25
Client Sample ID:	FS38	FS39	FS40	FS41	FS42
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 12:20	07/15/2021 13:17	07/15/2021 13:20	07/15/2021 13:23	07/15/2021 13:26

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36	
Analyzed:	07/20/2021 05:56		07/20/2021 06:22		07/20/2021 06:48		07/20/2021 07:14		07/20/2021 07:40	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00200 U	0.00200
Toluene	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00200 U	0.00200
Ethylbenzene	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00200 U	0.00200
m-Xylene & p-Xylene	<0.00397 U	0.00397	<0.00396 U	0.00396	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00401 U	0.00401
o-Xylene	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00198 U	0.00198	<0.00199 U	0.00199	<0.00200 U	0.00200
Xylenes, Total	<0.00397 U	0.00397	<0.00396 U	0.00396	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00401 U	0.00401
Total BTEX	<0.00397 U	0.00397	<0.00396 U	0.00396	<0.00396 U	0.00396	<0.00398 U	0.00398	<0.00401 U	0.00401

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

Prepared:	07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22	
Analyzed:	07/24/2021 10:27		07/24/2021 11:30		07/24/2021 11:51		07/24/2021 12:12		07/24/2021 12:33	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Total TPH	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 21:21		07/21/2021 21:37		07/21/2021 21:42		07/21/2021 21:48		07/21/2021 21:53	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**133**	5.02	**91.9**	4.98	**17.5**	5.03	**15.0**	4.99	**25.5**	5.03

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-26	890-959-27	890-959-28	890-959-29	890-959-30
Client Sample ID:	FS43	FS44	FS45	FS46	FS47
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 13:29	07/15/2021 13:32	07/15/2021 13:35	07/15/2021 13:38	07/15/2021 13:41

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36	
Analyzed:	07/20/2021 08:06		07/20/2021 08:33		07/20/2021 08:59		07/20/2021 09:25		07/20/2021 09:51	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200
Toluene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200
Ethylbenzene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200
m-Xylene & p-Xylene	<0.00399 U	0.00399	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00401 U	0.00401
o-Xylene	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200
Xylenes, Total	<0.00399 U	0.00399	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00401 U	0.00401
Total BTEX	<0.00399 U	0.00399	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00401 U	0.00401

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

Prepared:	07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22	
Analyzed:	07/24/2021 12:54		07/24/2021 13:15		07/24/2021 13:36		07/24/2021 13:57		07/24/2021 14:18	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Diesel Range Organics (Over C10-C28)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
OII Range Organics (Over C28-C36)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Total TPH	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 21:58		07/21/2021 22:04		07/21/2021 22:09		07/21/2021 23:13		07/21/2021 23:30	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**74.8**	5.04	**102**	5.02	**111**	4.98	**237**	4.98	**168**	5.02

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-31	890-959-32	890-959-33	890-959-34	890-959-35
Client Sample ID:	FS48	FS49	FS50	FS51	FS52
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 13:57	07/15/2021 14:00	07/15/2021 14:03	07/15/2021 14:06	07/15/2021 14:09

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36	
Analyzed:	07/20/2021 11:37		07/20/2021 12:03		07/20/2021 12:28		07/20/2021 12:53		07/20/2021 13:18	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00201 U	0.00201	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00201 U	0.00201
Toluene		<0.00201 U	0.00201	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00201 U	0.00201
Ethylbenzene		<0.00201 U	0.00201	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00201 U	0.00201
m-Xylene & p-Xylene		<0.00402 U	0.00402	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00402 U	0.00402
o-Xylene		**0.00222**	0.00201	<0.00200 U	0.00200	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00201 U	0.00201
Xylenes, Total		<0.00402 U	0.00402	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00402 U	0.00402
Total BTEX		<0.00402 U	0.00402	<0.00401 U	0.00401	<0.00403 U	0.00403	<0.00398 U	0.00398	<0.00402 U	0.00402

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

Prepared:	07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22	
Analyzed:	07/24/2021 15:00		07/24/2021 15:21		07/24/2021 15:42		07/24/2021 16:03		07/24/2021 16:24	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9
Total TPH		<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/21/2021 23:35		07/21/2021 23:40		07/21/2021 23:46		07/22/2021 00:02		07/22/2021 00:07	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**111**	4.97	**444**	4.95	**262**	5.04	**146**	4.97	**83.5**	4.99

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-959-1
Project/Site: PLU North Frac Pond
SDG: 31403236.013.0129

Lab Sample ID:	890-959-36	890-959-37	890-959-38	890-959-39	890-959-40
Client Sample ID:	FS53	FS54	FS55	FS56	FS57
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 14:12	07/15/2021 14:21	07/15/2021 14:28	07/15/2021 14:32	07/15/2021 14:35

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36		07/19/2021 11:36	
Analyzed:	07/20/2021 13:44		07/20/2021 14:09		07/20/2021 14:34		07/20/2021 15:00		07/20/2021 15:25	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00198 U	0.00198
Toluene	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00198 U	0.00198
Ethylbenzene	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00198 U	0.00198
m-Xylene & p-Xylene	<0.00399 U	0.00399	<0.00402 U	0.00402	<0.00404 U	0.00404	<0.00398 U	0.00398	<0.00396 U	0.00396
o-Xylene	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00202 U	0.00202	<0.00199 U	0.00199	<0.00198 U	0.00198
Xylenes, Total	<0.00399 U	0.00399	<0.00402 U	0.00402	<0.00404 U	0.00404	<0.00398 U	0.00398	<0.00396 U	0.00396
Total BTEX	<0.00399 U	0.00399	<0.00402 U	0.00402	<0.00404 U	0.00404	<0.00398 U	0.00398	<0.00396 U	0.00396

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

Prepared:	07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22		07/20/2021 09:22	
Analyzed:	07/24/2021 16:45		07/24/2021 17:06		07/24/2021 17:27		07/24/2021 17:48		07/24/2021 18:09	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0
Total TPH	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9	<49.9 U	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/22/2021 00:13		07/22/2021 00:18		07/22/2021 00:23		07/22/2021 00:29		07/22/2021 00:45	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**347**	5.04	**1140**	5.02	**881**	4.96	**936 F1**	5.00	**97.2**	4.95

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-959-1
Project/Site: PLU North Frac Pond
SDG: 31403236.013.0129

Lab Sample ID:	890-959-41	890-959-42	890-959-43	890-959-44	890-959-45
Client Sample ID:	FS58	FS59	FS60	FS61	FS62
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 14:38	07/15/2021 14:41	07/15/2021 14:42	07/15/2021 14:44	07/15/2021 14:46

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38	
Analyzed:	07/20/2021 14:59		07/20/2021 15:19		07/20/2021 15:40		07/20/2021 16:00		07/20/2021 16:20	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199
Toluene	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199
Ethylbenzene	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199
m-Xylene & p-Xylene	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398
o-Xylene	<0.00199 U	0.00199	<0.00199 U	0.00199	<0.00200 U	0.00200	<0.00198 U	0.00198	<0.00199 U	0.00199
Xylenes, Total	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398
Total BTEX	<0.00398 U	0.00398	<0.00398 U	0.00398	<0.00400 U	0.00400	<0.00396 U	0.00396	<0.00398 U	0.00398

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

Prepared:	07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45	
Analyzed:	07/25/2021 12:29		07/25/2021 13:34		07/25/2021 13:55		07/25/2021 14:16		07/25/2021 14:37	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Diesel Range Organics (Over C10-C28)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
OII Range Organics (Over C28-C36)	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8
Total TPH	<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0	<50.0 U	50.0	<49.8 U	49.8

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/22/2021 00:50		07/22/2021 01:07		07/22/2021 01:12		07/22/2021 01:17		07/22/2021 01:23	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**481**	4.96	**300**	4.97	**83.2**	5.00	**347**	4.95	**901**	4.98

Client Sample Result Summary

Client: WSP USA Inc.

Job ID: 890-959-1

Project/Site: PLU North Frac Pond

SDG: 31403236.013.0129

Lab Sample ID:	890-959-46	890-959-47	890-959-48	890-959-49	890-959-50
Client Sample ID:	FS63	FS64	FS65	FS66	FS67
Depth:	1	1	1	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	07/15/2021 14:49	07/15/2021 14:51	07/15/2021 14:52	07/15/2021 15:02	07/15/2021 15:05

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38		07/19/2021 11:38	
Analyzed:	07/20/2021 16:41		07/20/2021 17:01		07/20/2021 17:22		07/20/2021 17:42		07/20/2021 18:02	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00199 U	0.00199
Toluene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00199 U	0.00199
Ethylbenzene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00199 U	0.00199
m-Xylene & p-Xylene	<0.00398 U	0.00398	<0.00397 U	0.00397	<0.00402 U	0.00402	<0.00397 U	0.00397	<0.00398 U	0.00398
o-Xylene	<0.00199 U	0.00199	<0.00198 U	0.00198	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00199 U	0.00199
Xylenes, Total	<0.00398 U	0.00398	<0.00397 U	0.00397	<0.00402 U	0.00402	<0.00397 U	0.00397	<0.00398 U	0.00398
Total BTEX	<0.00398 U	0.00398	<0.00397 U	0.00397	<0.00402 U	0.00402	<0.00397 U	0.00397	<0.00398 U	0.00398

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

Prepared:	07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45		07/20/2021 09:45	
Analyzed:	07/25/2021 14:58		07/25/2021 15:19		07/25/2021 15:40		07/25/2021 16:01		07/25/2021 16:22	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Diesel Range Organics (Over C10-C28)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
OII Range Organics (Over C28-C36)	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9
Total TPH	<49.7 U	49.7	<49.9 U	49.9	<50.0 U	50.0	<50.0 U	50.0	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	07/22/2021 01:28		07/22/2021 01:33		07/22/2021 01:39		07/22/2021 07:24		07/22/2021 07:29	
Analyte	**Unit/RL:** mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**729**	5.02	**265**	5.02	**140**	5.02	**10.4**	5.04	**234**	5.02

Client Sample Result Summary

Client: WSP USA Inc.
Job ID: 890-959-1
Project/Site: PLU North Frac Pond
SDG: 31403236.013.0129

Lab Sample ID: 890-959-51
Client Sample ID: FS68
Depth: 1
Matrix: Solid
Date Collected: 07/15/2021 15:10

Method: 8021B - Volatile Organic Compounds (GC)

Prepared: 07/19/2021 11:38
Analyzed: 07/20/2021 19:23

Analyte	Unit/RL:	mg/Kg	RL
Benzene		<0.00200 U	0.00200
Toluene		<0.00200 U	0.00200
Ethylbenzene		<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00401 U	0.00401
o-Xylene		<0.00200 U	0.00200
Xylenes, Total		<0.00401 U	0.00401
Total BTEX		<0.00401 U	0.00401

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

Prepared: 07/20/2021 09:45
Analyzed: 07/25/2021 17:04

Analyte	Unit/RL:	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0
Total TPH		<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:
Analyzed: 07/22/2021 07:34

Analyte	Unit/RL:	mg/Kg	RL
Chloride		**128**	5.00

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 44303

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 44303
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2116030736 POKER LAKE UNIT NORTH FRAC POND, thank you. This closure is approved.	11/22/2021