

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	NAPP2110460622
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 32.20931 Longitude -103.82868
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 13 DTD 108H	Site Type Production Well
Date Release Discovered 03/31/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
A	24	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Frac Fluid	24 BBLS	19 BBLS

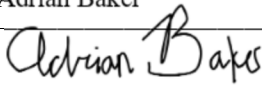
Cause of Release A mechanical failure during fracing caused fluid to spill both into containment and onto ground. A vac truck recovered standing fluids. A third-party contractor has been retained for remediation activities.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 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: <u>Adrian Baker</u>	Title: <u>SSHE Coordinator</u>
Signature: <u></u>	Date: <u>4/14/21</u>
email: <u>adrian.baker@exxonmobil.com</u>	Telephone: <u>432-221-7331</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>5/7/2021</u>

NAPP2110460622

Location:	PLU 13 DTD 108H	
Spill Date:	3/31/2021	
Area 1		
Approximate Area =	106.68	cu.ft.
VOLUME OF LEAK		
Total Frac Fluid =	19.00	bbls
Area 2		
Approximate Area =	5612.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Frac Fluid =	5.00	bbls
TOTAL VOLUME OF LEAK		
Total Frac Fluid =	24.00	bbls
TOTAL VOLUME RECOVERED		
Total Frac Fluid =	19.00	bbls

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Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

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

Printed Name: Adrian Baker Title: SSHE CoordinatorSignature: Adrian Baker Date: 06/29/2021email: adrian.baker@exxonmobil.com Telephone: 432-221-7331**OCD Only**

Received by: _____ Date: _____

Incident ID	NAPP2110460622
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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

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Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 06/29/2021

email: adrian.baker@exxonmobil.com Telephone: 432-221-7331

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: _____

Incident ID	NAPP2110460622
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Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 06/29/2021

email: adrian.baker@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 8/27/2021

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: 8/27/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced



WSP USA

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

June 29, 2021

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

**RE: Closure Request
PLU 13 DTD 108H
Incident Number NAPP2110460622
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), is pleased to present the following Closure Request detailing site assessment, soil sampling, and excavation activities at the Poker Lake Unit (PLU) 13 Dog Town Draw (DTD) 108H (Site) in Unit A, Section 24, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of frac fluid at the Site. Based on the excavation activities and results of the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2110460622.

RELEASE BACKGROUND

On March 31, 2021, a mechanical failure during frac operations caused the release of 24 barrels (bbls) of frac fluid into containment and onto the well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, approximately 19 bbls of fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) by submitting a Release Notification and Corrective Action Form (Form C-141) on April 14, 2021 and was assigned Incident Number NAPP2110460622.

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 estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) C-04483, located approximately 0.20 miles west of the Site. The groundwater well has a reported depth to groundwater greater than 100 feet bgs and a total depth of 109 feet bgs; depth to water was last measured in November 2020. Ground surface elevation at water well C-04483 is 3,463



feet above mean sea level (amsl), which is approximately 15 feet lower in elevation than the Site. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an unnamed dry wash, located approximately 565 feet west-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 May 10, 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 four preliminary assessment soil samples (SS01 through SS04) within the release extent, at a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent, preliminary and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) and are presented on Figure 2.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, and 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 Xenco 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 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS01 and SS04. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation activities were scheduled to assess the presence or absence of impacts to soil in the subsurface.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

On May 24, 2021, WSP personnel were at the Site to oversee delineation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples. Boreholes BH01 through BH04 were advanced via hand auger to a depth of 1 foot bgs at the locations of SS01 through SS04, respectively. Delineation soil samples were collected from each borehole at a depth of 1 foot bgs. Deeper samples could not be obtained due to auger refusal. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each borehole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil sample locations are presented on Figure 2. 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 visit. A photographic log is included in Attachment 3.

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in delineation soil samples BH01, BH03 and BH04. Laboratory analytical results for BH02 indicated that benzene, BTEX and chloride concentrations were compliant with the Closure Criteria but TPH-GRO/TPH-DRO and TPH exceeded Closure Criteria. Based on field screening activities and laboratory analytical results for BH02, excavation activities were warranted to remove the impacted soil.

On June 9, 2021, WSP personnel returned to the Site to complete vertical delineation and remove impacted soil. Vertical delineation and excavation activities were performed using track-mounted backhoe and transport vehicles. WSP personnel advanced a pothole (PH01), shown in Figure 2, near the location of BH02 and screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, at depths of 2 feet and 4 feet bgs. Based on field screening results, soil was excavated to a depth of approximately 1.5 feet bgs in an area of approximately 256 feet surrounding the BH02/PH01 location. Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor of the excavation. 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. Confirmation soil samples FS01 and FS02 were collected from the floor of the excavation at an approximate depth of 1.5 feet bgs. Due to the shallow depth of the excavation, the floor samples were also representative of the excavation sidewalls. The excavation soil



samples were collected, handled, and analyzed as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 256 square feet. A total of approximately 15 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After the completion of confirmation sampling, the excavation was secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS04 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Laboratory analytical results for the delineation soil samples collected from boreholes BH01, BH03, BH04 and PH01 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the delineation soil sample BH02 indicated that TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria.

Laboratory analytical results for excavation floor samples FS01 and FS02 collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the March 31, 2021 release of frac fluid. Based on the laboratory analytical results for the delineation soil samples, impacted soil was excavated. Laboratory analytical results for excavation soil samples collected from the final excavation extent indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Results from excavation confirmation samples concluded that all impacted soil was removed. Based on the excavation 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 this Site. As such, XTO respectfully requests NFA for Incident Number NAPP2110460622.



District II
Page 5

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

Sincerely,

WSP USA Inc.

A handwritten signature in black ink, appearing to read 'Jeremy Hill'.

Jeremy Hill
Environmental Scientist

A handwritten signature in black ink, appearing to read 'Ashley L. Ager'.

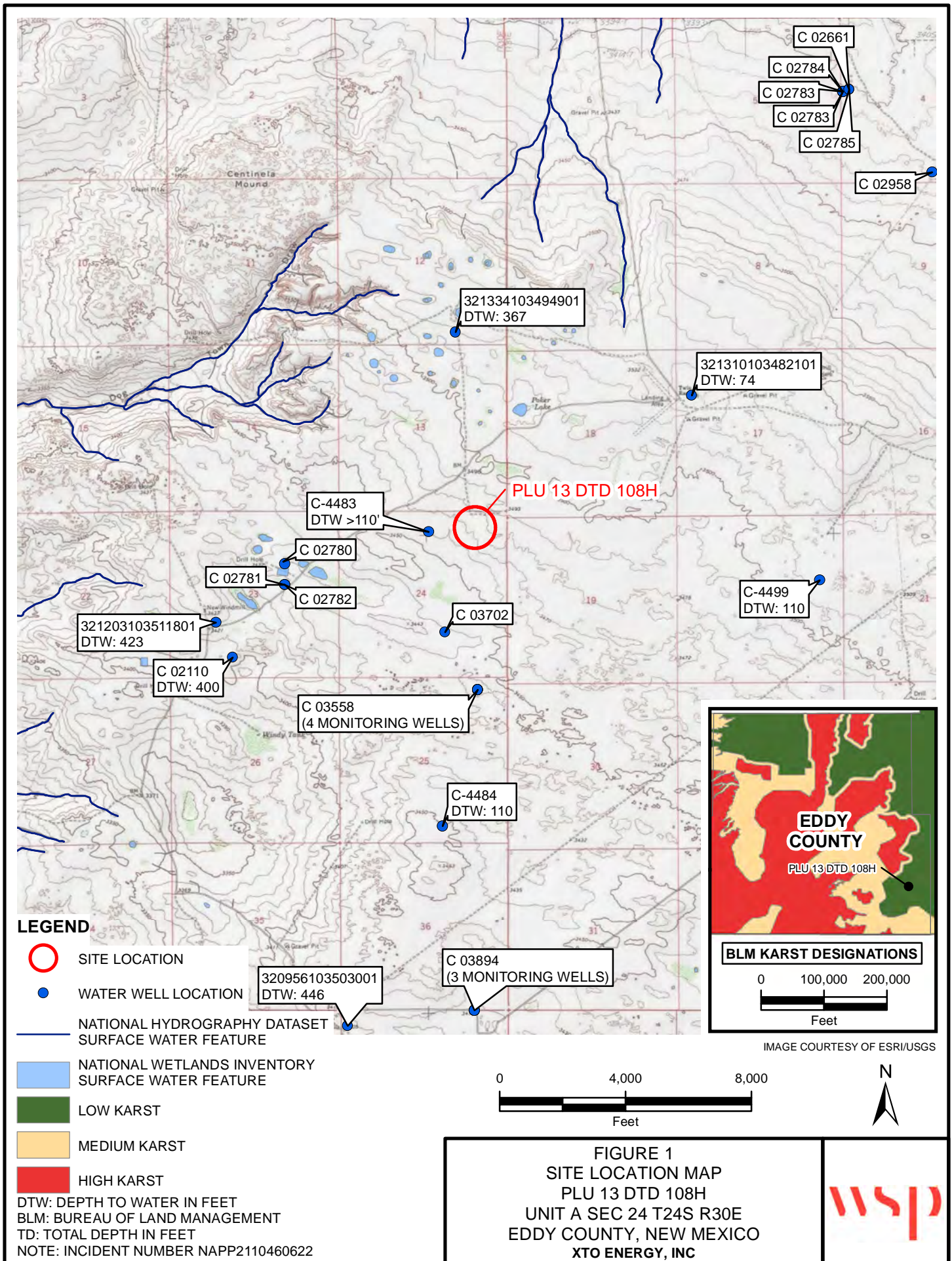
Ashley L. Ager, P.G.
Managing Director, Geologist

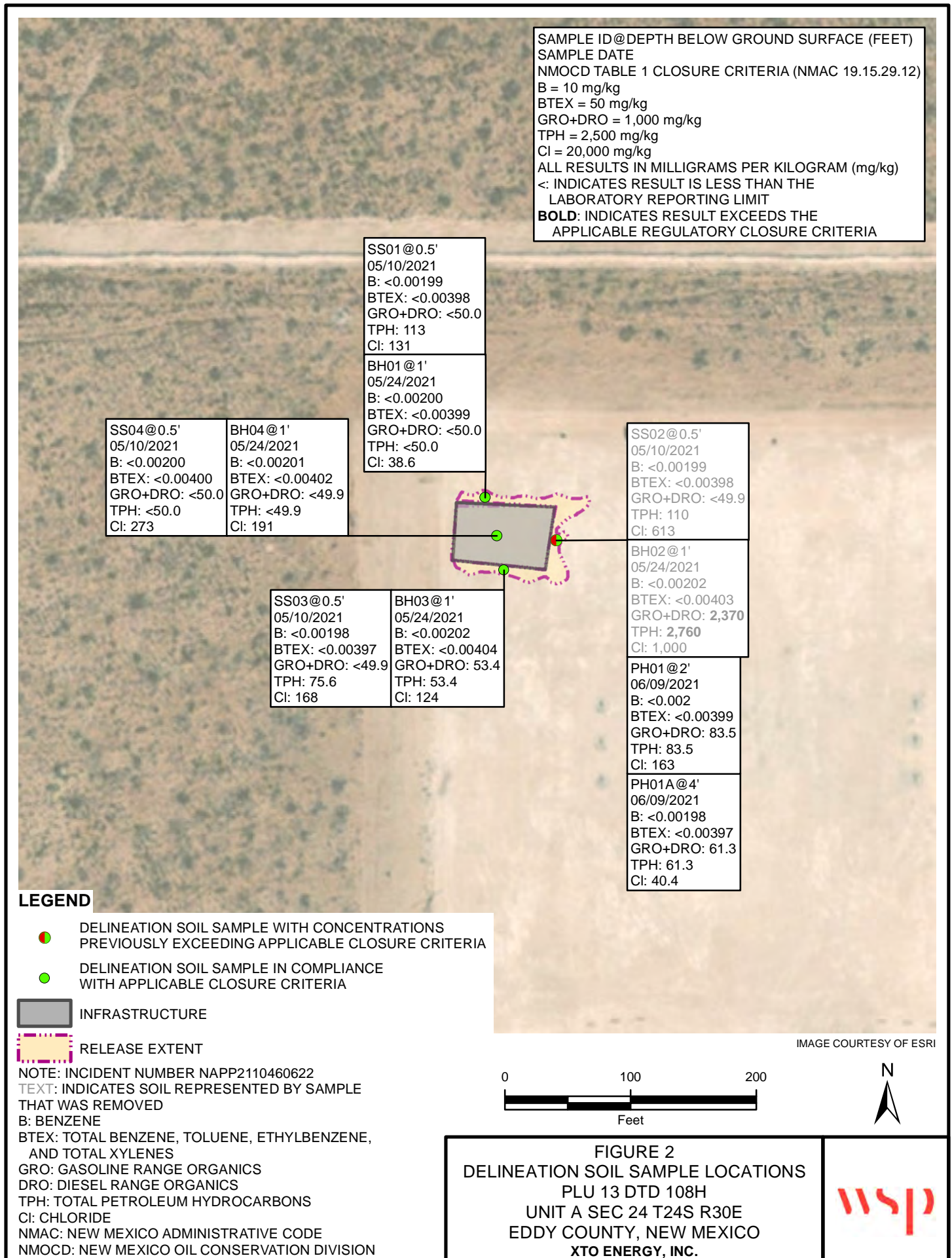
cc: Kyle Littrell, XTO
Bureau of Land Management

Attachments:

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

FIGURES





SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 SAMPLE DATE
 NMOCD TABLE 1 CLOSURE CRITERIA (NMAC 19.15.29.12)
 B = 10 mg/kg
 BTEX = 50 mg/kg
 GRO+DRO = 1,000 mg/kg
 TPH = 2,500 mg/kg
 Cl = 20,000 mg/kg
 ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)
 <: INDICATES RESULT IS LESS THAN THE
 LABORATORY REPORTING LIMIT
BOLD: INDICATES RESULT EXCEEDS THE
 APPLICABLE REGULATORY CLOSURE CRITERIA

FS01@1.5'
 06/09/2021
 B: <0.00200
 BTEX: <0.00400
 GRO+DRO: <49.9
 TPH: <49.7
 Cl: 71.4

FS02@1.5'
 06/09/2021
 B: <0.00199
 BTEX: <0.00398
 GRO+DRO: <49.9
 TPH: <49.9
 Cl: 60.8

LEGEND



FLOOR SAMPLE IN COMPLIANCE
 WITH APPLICABLE CLOSURE CRITERIA



EXCAVATION EXTENT

NOTE: INCIDENT NUMBER NAPP2110460622
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
 THAT WAS REMOVED

B: BENZENE

BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE,
 AND TOTAL XYLENES

GRO: GASOLINE RANGE ORGANICS

DRO: DIESEL RANGE ORGANICS

TPH: TOTAL PETROLEUM HYDROCARBONS

Cl: CHLORIDE

NMAC: NEW MEXICO ADMINISTRATIVE CODE

NMOCD: NEW MEXICO OIL CONSERVATION DIVISION

IMAGE COURTESY OF ESRI

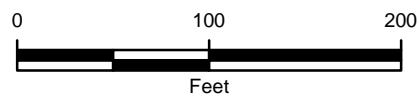


FIGURE 3
 EXCAVATION SOIL SAMPLE LOCATIONS
 PLU 13 DTD 108H
 UNIT A SEC 24 T24S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLES

Table 1

Soil Analytical Results
PLU 13 DTD 108H
Incident Number NAPP2110460622
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
Surface Samples										
SS01	05/10/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	113	<50.0	113	131
SS02	05/10/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	110	<49.9	110	613
SS03	05/10/2021	0.5	<0.00198	<0.00397	<49.9	<49.9	75.6	<49.9	75.6	168
SS04	05/10/2021	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	273
Delineation Samples										
BH01	05/24/2021	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	38.6
BH02	05/24/2021	1	<0.00202	<0.00403	2,370	<49.8	389	2,370	2,760	1,000
BH03	05/24/2021	1	<0.00202	<0.00404	53.4	<49.9	<49.9	53.4	53.4	124
BH04	05/24/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	191
PH01	06/09/2021	2	<0.002	<0.00399	83.5	<50.0	<50.0	83.5	83.5	163
PH01A	06/09/2021	4	<0.00198	<0.00397	61.3	<49.8	<49.8	61.3	61.3	40.4
Floor Samples										
FS01	06/09/2021	1.5	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	71.4
FS02	06/09/2021	1.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	60.8

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

Greyed data represents samples that were excavated


ATTACHMENT 1: REFERENCED WELL RECORDS



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04483 POD1	3	1	2	24	24S	30E	515688	3563594 

Driller License: 1249	Driller Company: ATKINS ENGINEERING ASSOC. INC.		
Driller Name: JACKIE D ATKINS			
Drill Start Date: 11/24/2020	Drill Finish Date: 11/24/2020	Plug Date: 11/30/2020	
Log File Date: 12/17/2020	PCW Rcv Date:	Source:	
Pump Type:	Pipe Discharge Size:	Estimated Yield: 0 GPM	
Casing Size:	Depth Well:	Depth Water:	

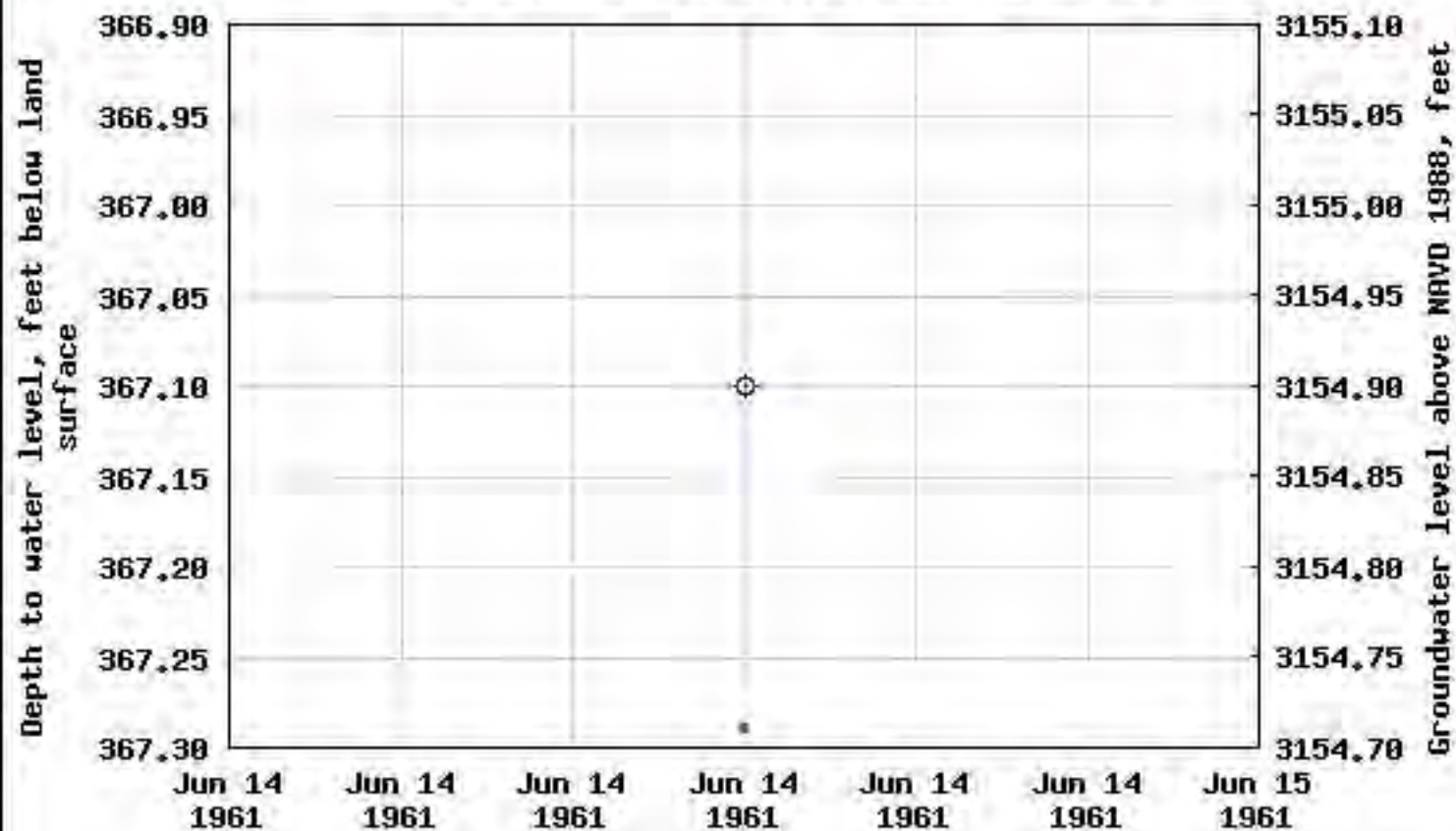
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

6/24/21 9:04 AM


Page 1 of 1


POD SUMMARY - C 04483 POD1


USGS 321334103494901 24S.30E.12.432344





ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH01		5/24/2021	
								Site Name:		PLU 13 DTD 108H	
								RP or Incident Number:			
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		TE012921046	
								Logged By EL		Method: Hand Auger	
Lat/Long: 32.209846,-103.829786				Field Screening: Chloride, PID				Hole Diameter: 3.25"		Total Depth: 1'	
Comments: 40% correction factor included in chloride concentrations											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	<179	0	N	BH01	1'	1	SM	0'-1': Sand, medium-coarse grain, well graded, some caliche gravel, 0.1-0.2 cm, well consolidated, tan			
						2		TD @ 1' bgs			
						3					
						4					
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH02		5/24/2021	
								Site Name:		PLU 13 DTD 108H	
								RP or Incident Number:			
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		TE012921046	
								Logged By EL		Method: Hand Auger	
Lat/Long: 32.209752, -103.829603				Field Screening: Chloride, PID				Hole Diameter: 3.25"		Total Depth: 1'	
Comments: 40% correction factor included in chloride concentrations											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	1,139	8	N	BH02	1'	1	SM	0'-1': Sand, medium-coarse grain, well graded, some caliche gravel, 0.1-0.2 cm, well consolidated, tan TD @ 1' bgs			
						2					
						3					
						4					
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH03		5/24/2021	
								Site Name:		PLU 13 DTD 108H	
								RP or Incident Number:			
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		TE012921046	
								Logged By EL		Method: Hand Auger	
Lat/Long: 32.209687,-103.829738				Field Screening: Chloride, PID				Hole Diameter: 3.25"		Total Depth: 1'	
Comments: 40% correction factor included in chloride concentrations											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	<179	1	N	BH03	1'	1	SM	0'-1': Sand, medium-coarse grain, well-graded, some caliche gravel, 0.1-0.2 cm, well consolidated, tan			
						2		TD @ 1' bgs			
						3					
						4					
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					


 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								BH04		5/24/2021	
								Site Name:		PLU 13 DTD 108H	
								RP or Incident Number:			
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		TE012921046	
								Logged By EL		Method: Hand Auger	
Lat/Long: 32.209763,-103.829756				Field Screening: Chloride, PID				Hole Diameter: 3.25"		Total Depth: 1'	
Comments: 40% correction factor included in chloride concentrations											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	213	0	N	BH04	1'	1	SM	0'-1': Sand, medium-coarse grain, well graded, caliche gravel, 0.1-0.2 cm, well consolidated, tan			
								TD @ 1' bgs			
						2					
						3					
						4					
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name:		Date:	
								PH01		6/9/2021	
								Site Name:		PLU 13 DTD 108H	
								RP or Incident Number:			
								LTE Job Number:		TE012921046	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By TC		Method: Backhoe	
Lat/Long: 32.209752, -103.829603						Field Screening: Chloride, PID		Hole Diameter: 2'		Total Depth: 4'	
Comments: 40% correction factor included in chloride concentrations											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0'-4': Sand, medium-coarse grain, well graded, some caliche gravel, 0.1-0.2 cm, well consolidated, tan			
						1					
D	230	1.2	N	PH01	2'	2	SP				
						3					
D	<179	0.8	N	PH01A	4'	4		TD @ 4' bgs			
						5					
						6					
						7					
						8					
						9					
						10					
						11					
						12					

ATTACHMENT 3: PHOTOGRAPHIC LOG




PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
1	May 10, 2021	
View of release from the northeast corner of the one-call area.		



PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
2	May 10, 2021	
Secondary view of release extent from the northeast corner of the one call area.		



PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
3	May 25, 2021	
View of Borehole 01.		



PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
4	May 25, 2021	
View of Borehole 02.		



PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
5	June 6, 2021	
View of excavation activities.		



PHOTOGRAPHIC LOG		
XTO	PLU 13 DTD 108H Carlsbad, New Mexico	NAPP2110460622

Photo No.	Date	
6	June 6, 2021	
View of completed excavation.		

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-657-1

Laboratory Sample Delivery Group: TE012921046

Client Project/Site: PLU 13 DTD 108H

Revision: 1

For:

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

Attn: Dan Moir

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

Authorized for release by:
5/17/2021 11:29:38 AM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Laboratory Job ID: 890-657-1
SDG: TE012921046

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

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 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Job ID: 890-657-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-657-1

Receipt

The samples were received on 5/11/2021 3:19 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS01 (890-657-1), SS02 (890-657-2), SS03 (890-657-3) and SS02 (890-657-4).

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 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Client Sample ID: SS01

Lab Sample ID: 890-657-1

Date Collected: 05/10/21 13:15

Matrix: Solid

Date Received: 05/11/21 15:19

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		05/12/21 13:07	05/12/21 22:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:18	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/12/21 13:07	05/12/21 22:18	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/12/21 13:07	05/12/21 22:18	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		05/11/21 16:30	05/12/21 19:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/11/21 16:30	05/12/21 19:15	1
Oil Range Organics (Over C28-C36)	113		50.0	mg/Kg		05/11/21 16:30	05/12/21 19:15	1
Total TPH	113		50.0	mg/Kg		05/11/21 16:30	05/12/21 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	05/11/21 16:30	05/12/21 19:15	1
o-Terphenyl	111		70 - 130	05/11/21 16:30	05/12/21 19:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.97	mg/Kg			05/12/21 20:39	1

Client Sample ID: SS02

Lab Sample ID: 890-657-2

Date Collected: 05/10/21 13:22

Matrix: Solid

Date Received: 05/11/21 15:19

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		05/12/21 13:07	05/12/21 22:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/21 13:07	05/12/21 22:38	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:38	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/12/21 13:07	05/12/21 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	05/12/21 13:07	05/12/21 22:38	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/12/21 13:07	05/12/21 22:38	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Client Sample ID: SS02

Lab Sample ID: 890-657-2

Date Collected: 05/10/21 13:22

Matrix: Solid

Date Received: 05/11/21 15:19

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		05/11/21 16:30	05/12/21 19:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/11/21 16:30	05/12/21 19:36	1
OII Range Organics (Over C28-C36)	110		49.9	mg/Kg		05/11/21 16:30	05/12/21 19:36	1
Total TPH	110		49.9	mg/Kg		05/11/21 16:30	05/12/21 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	05/11/21 16:30	05/12/21 19:36	1
o-Terphenyl	116		70 - 130	05/11/21 16:30	05/12/21 19:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	613		4.98	mg/Kg			05/12/21 20:44	1

Client Sample ID: SS03

Lab Sample ID: 890-657-3

Date Collected: 05/10/21 13:25

Matrix: Solid

Date Received: 05/11/21 15:19

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		05/12/21 13:07	05/12/21 22:59	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/12/21 13:07	05/12/21 22:59	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/12/21 13:07	05/12/21 22:59	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/12/21 13:07	05/12/21 22:59	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/12/21 13:07	05/12/21 22:59	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/12/21 13:07	05/12/21 22:59	1
Total BTEX	<0.00397	U	0.00397	mg/Kg		05/12/21 13:07	05/12/21 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	05/12/21 13:07	05/12/21 22:59	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/12/21 13:07	05/12/21 22:59	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		05/11/21 16:30	05/12/21 19:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/11/21 16:30	05/12/21 19:58	1
OII Range Organics (Over C28-C36)	75.6		49.9	mg/Kg		05/11/21 16:30	05/12/21 19:58	1
Total TPH	75.6		49.9	mg/Kg		05/11/21 16:30	05/12/21 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	05/11/21 16:30	05/12/21 19:58	1
o-Terphenyl	122		70 - 130	05/11/21 16:30	05/12/21 19:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		5.05	mg/Kg			05/12/21 20:49	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Client Sample ID: SS04

Lab Sample ID: 890-657-4

Date Collected: 05/10/21 13:30

Matrix: Solid

Date Received: 05/11/21 15:19

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		05/12/21 13:07	05/12/21 23:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 23:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 23:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 23:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 23:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 23:19	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 23:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/12/21 13:07	05/12/21 23:19	1
1,4-Difluorobenzene (Surr)	99		70 - 130	05/12/21 13:07	05/12/21 23:19	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		05/11/21 16:30	05/12/21 20:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/11/21 16:30	05/12/21 20:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/11/21 16:30	05/12/21 20:19	1
Total TPH	<50.0	U	50.0	mg/Kg		05/11/21 16:30	05/12/21 20:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/11/21 16:30	05/12/21 20:19	1
o-Terphenyl	114		70 - 130	05/11/21 16:30	05/12/21 20:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273		4.98	mg/Kg			05/12/21 21:05	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

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)
890-657-1	SS01	105	100
890-657-2	SS02	99	98
890-657-3	SS03	111	103
890-657-4	SS04	104	99
LCS 880-3028/1-A	Lab Control Sample	106	107
LCSD 880-3028/2-A	Lab Control Sample Dup	107	105
MB 880-3028/5-A	Method Blank	91	94
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)
890-657-1	SS01	99	111
890-657-2	SS02	103	116
890-657-3	SS03	110	122
890-657-4	SS04	102	114
LCS 880-2989/2-A	Lab Control Sample	105	107
LCSD 880-2989/3-A	Lab Control Sample Dup	108	113
MB 880-2989/1-A	Method Blank	106	126
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3028/5-A

Matrix: Solid

Analysis Batch: 3029

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3028

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 16:30	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/12/21 13:07	05/12/21 16:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/12/21 13:07	05/12/21 16:30	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/12/21 13:07	05/12/21 16:30	1

Lab Sample ID: LCS 880-3028/1-A

Matrix: Solid

Analysis Batch: 3029

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09171		mg/Kg		92	70 - 130
Toluene	0.100	0.08739		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.09124		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1943		mg/Kg		97	70 - 130
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-3028/2-A

Matrix: Solid

Analysis Batch: 3029

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3028

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1011		mg/Kg		101	70 - 130	10	35
Toluene	0.100	0.09671		mg/Kg		97	70 - 130	10	35
Ethylbenzene	0.100	0.1028		mg/Kg		103	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.2190		mg/Kg		109	70 - 130	12	35
o-Xylene	0.100	0.1134		mg/Kg		113	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

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

Lab Sample ID: MB 880-2989/1-A

Matrix: Solid

Analysis Batch: 3000

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2989

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		05/11/21 15:50	05/12/21 11:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/11/21 15:50	05/12/21 11:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/11/21 15:50	05/12/21 11:45	1
Total TPH	<50.0	U	50.0	mg/Kg		05/11/21 15:50	05/12/21 11:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	05/11/21 15:50	05/12/21 11:45	1
o-Terphenyl	126		70 - 130	05/11/21 15:50	05/12/21 11:45	1

Lab Sample ID: LCS 880-2989/2-A

Matrix: Solid

Analysis Batch: 3000

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2989

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	878.4		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1140		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-2989/3-A

Matrix: Solid

Analysis Batch: 3000

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2989

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	843.5		mg/Kg		84	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1203		mg/Kg		120	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	113		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3018/1-A

Matrix: Solid

Analysis Batch: 3048

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			05/12/21 19:21	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-3018/2-A

Matrix: Solid

Analysis Batch: 3048

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	247.5		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-3018/3-A

Matrix: Solid

Analysis Batch: 3048

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	244.0		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-657-3 MS

Matrix: Solid

Analysis Batch: 3048

Client Sample ID: SS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	168		253	427.0		mg/Kg		103	90 - 110

Lab Sample ID: 890-657-3 MSD

Matrix: Solid

Analysis Batch: 3048

Client Sample ID: SS03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	168		253	425.4		mg/Kg		102	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

GC VOA

Prep Batch: 3028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Total/NA	Solid	5035	
890-657-2	SS02	Total/NA	Solid	5035	
890-657-3	SS03	Total/NA	Solid	5035	
890-657-4	SS04	Total/NA	Solid	5035	
MB 880-3028/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3028/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3028/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Total/NA	Solid	8021B	3028
890-657-2	SS02	Total/NA	Solid	8021B	3028
890-657-3	SS03	Total/NA	Solid	8021B	3028
890-657-4	SS04	Total/NA	Solid	8021B	3028
MB 880-3028/5-A	Method Blank	Total/NA	Solid	8021B	3028
LCS 880-3028/1-A	Lab Control Sample	Total/NA	Solid	8021B	3028
LCSD 880-3028/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3028

GC Semi VOA

Prep Batch: 2989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Total/NA	Solid	8015NM Prep	
890-657-2	SS02	Total/NA	Solid	8015NM Prep	
890-657-3	SS03	Total/NA	Solid	8015NM Prep	
890-657-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-2989/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2989/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 3000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Total/NA	Solid	8015B NM	2989
890-657-2	SS02	Total/NA	Solid	8015B NM	2989
890-657-3	SS03	Total/NA	Solid	8015B NM	2989
890-657-4	SS04	Total/NA	Solid	8015B NM	2989
MB 880-2989/1-A	Method Blank	Total/NA	Solid	8015B NM	2989
LCS 880-2989/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2989
LCSD 880-2989/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2989

HPLC/IC

Leach Batch: 3018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Soluble	Solid	DI Leach	
890-657-2	SS02	Soluble	Solid	DI Leach	
890-657-3	SS03	Soluble	Solid	DI Leach	
890-657-4	SS04	Soluble	Solid	DI Leach	
MB 880-3018/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3018/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3018/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-657-3 MS	SS03	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

HPLC/IC (Continued)

Leach Batch: 3018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-3 MSD	SS03	Soluble	Solid	DI Leach	

Analysis Batch: 3048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-657-1	SS01	Soluble	Solid	300.0	3018
890-657-2	SS02	Soluble	Solid	300.0	3018
890-657-3	SS03	Soluble	Solid	300.0	3018
890-657-4	SS04	Soluble	Solid	300.0	3018
MB 880-3018/1-A	Method Blank	Soluble	Solid	300.0	3018
LCS 880-3018/2-A	Lab Control Sample	Soluble	Solid	300.0	3018
LCSD 880-3018/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3018
890-657-3 MS	SS03	Soluble	Solid	300.0	3018
890-657-3 MSD	SS03	Soluble	Solid	300.0	3018

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Client Sample ID: SS01

Lab Sample ID: 890-657-1

Date Collected: 05/10/21 13:15

Matrix: Solid

Date Received: 05/11/21 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3028	05/12/21 13:07	KL	XM
Total/NA	Analysis	8021B		1	3029	05/12/21 22:18	KL	XM
Total/NA	Prep	8015NM Prep			2989	05/11/21 16:30	AM	XM
Total/NA	Analysis	8015B NM		1	3000	05/12/21 19:15	AJ	XM
Soluble	Leach	DI Leach			3018	05/12/21 09:43	SC	XM
Soluble	Analysis	300.0		1	3048	05/12/21 20:39	CH	XM

Client Sample ID: SS02

Lab Sample ID: 890-657-2

Date Collected: 05/10/21 13:22

Matrix: Solid

Date Received: 05/11/21 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3028	05/12/21 13:07	KL	XM
Total/NA	Analysis	8021B		1	3029	05/12/21 22:38	KL	XM
Total/NA	Prep	8015NM Prep			2989	05/11/21 16:30	AM	XM
Total/NA	Analysis	8015B NM		1	3000	05/12/21 19:36	AJ	XM
Soluble	Leach	DI Leach			3018	05/12/21 09:43	SC	XM
Soluble	Analysis	300.0		1	3048	05/12/21 20:44	CH	XM

Client Sample ID: SS03

Lab Sample ID: 890-657-3

Date Collected: 05/10/21 13:25

Matrix: Solid

Date Received: 05/11/21 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3028	05/12/21 13:07	KL	XM
Total/NA	Analysis	8021B		1	3029	05/12/21 22:59	KL	XM
Total/NA	Prep	8015NM Prep			2989	05/11/21 16:30	AM	XM
Total/NA	Analysis	8015B NM		1	3000	05/12/21 19:58	AJ	XM
Soluble	Leach	DI Leach			3018	05/12/21 09:43	SC	XM
Soluble	Analysis	300.0		1	3048	05/12/21 20:49	CH	XM

Client Sample ID: SS04

Lab Sample ID: 890-657-4

Date Collected: 05/10/21 13:30

Matrix: Solid

Date Received: 05/11/21 15:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3028	05/12/21 13:07	KL	XM
Total/NA	Analysis	8021B		1	3029	05/12/21 23:19	KL	XM
Total/NA	Prep	8015NM Prep			2989	05/11/21 16:30	AM	XM
Total/NA	Analysis	8015B NM		1	3000	05/12/21 20:19	AJ	XM
Soluble	Leach	DI Leach			3018	05/12/21 09:43	SC	XM
Soluble	Analysis	300.0		1	3048	05/12/21 21:05	CH	XM

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

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.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-657-1
SDG: TE012921046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-657-1	SS01	Solid	05/10/21 13:15	05/11/21 15:19	- 0.5
890-657-2	SS02	Solid	05/10/21 13:22	05/11/21 15:19	- 0.5
890-657-3	SS03	Solid	05/10/21 13:25	05/11/21 15:19	- 0.5
890-657-4	SS04	Solid	05/10/21 13:30	05/11/21 15:19	- 0.5

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14



Chain of Custody

Work Order No:

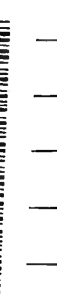
Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1266
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)
Hobbs, NM (575-392-7550)

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Page _____ of _____

Project Manager:		Tacoma Morrissey	Bill to: (if different)	Kyle Littlell
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; tacoma.morrissey@wsp.com

Work Order Comments Program: UST/ST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:									
--	--	--	--	--	--	--	--	--	--

Project Name:	PLU 13 DTD 108H	Turn Around	ANALYSIS REQUEST  890-657 Chain of Custody	Work Order Notes Incident ID: NAPP211046062 API: 30-015-45839
Project Number:	TE012921046	Routine <input checked="" type="checkbox"/>		
P.O. Number:	CC's: 1664941001, 1665021001	Rush:		
Sampler's Name:	Luis Del Val	Due Date:		
SAMPLE RECEIPT				
Temperature (°C):	3.0/2.8	Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID	
Received intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:		
Number of Containers				
EPA 8015)				
EPA 0-8021)				
le (EPA 300.0)				

[illegible]

Total	200.7 / 6010	200.8 / 6020:	Circle Method(s) and Metal(s) to be analyzed																											
8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	11	Sn	U	V	Zn
TCLP / SPLP 6010: 8RCRA			Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U												
			1631 / 245.1 / 7470 / 7471 : Hg																											

Analysis-Signature of this document and reimbursement 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
		2-11-21 / 15:19			

Dated: 02-06-2018 Dow: 2018

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-657-1

SDG Number: TE012921046

Login Number: 657**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins 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: 890-657-1

SDG Number: TE012921046

Login Number: 657**List Number: 2****Creator: Copeland, Tatiana****List Source: Eurofins Midland****List Creation: 05/12/21 03:37 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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-727-1

Laboratory Sample Delivery Group: TE012921046

Client Project/Site: PLU 13 DTD 108H

For:

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

Attn: Dan Moir

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

Authorized for release by:
5/28/2021 8:12:28 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Laboratory Job ID: 890-727-1
SDG: TE012921046

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

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 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Job ID: 890-727-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-727-1

Receipt

The samples were received on 5/25/2021 12:32 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-727-1), BH02 (890-727-2), BH03 (890-727-3) and BH04 (890-727-4).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-3530 recovered above the upper control limit for 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: BH01 (890-727-1), BH02 (890-727-2), BH03 (890-727-3), BH04 (890-727-4) and (CCV 880-3530/20).

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 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Client Sample ID: BH01

Lab Sample ID: 890-727-1

Date Collected: 05/24/21 13:45

Matrix: Solid

Date Received: 05/25/21 12:32

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		05/26/21 12:00	05/27/21 00:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/27/21 00:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/27/21 00:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/26/21 12:00	05/27/21 00:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/27/21 00:01	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/26/21 12:00	05/27/21 00:01	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		05/26/21 12:00	05/27/21 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/26/21 12:00	05/27/21 00:01	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/26/21 12:00	05/27/21 00:01	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		05/26/21 10:57	05/26/21 19:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 19:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 19:33	1
Total TPH	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	05/26/21 10:57	05/26/21 19:33	1
o-Terphenyl	96		70 - 130	05/26/21 10:57	05/26/21 19:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.6		5.02	mg/Kg			05/28/21 11:58	1

Client Sample ID: BH02

Lab Sample ID: 890-727-2

Date Collected: 05/24/21 14:10

Matrix: Solid

Date Received: 05/25/21 12:32

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		05/26/21 12:00	05/27/21 00:26	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:26	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/26/21 12:00	05/27/21 00:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:26	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/26/21 12:00	05/27/21 00:26	1
Total BTEX	<0.00403	U	0.00403	mg/Kg		05/26/21 12:00	05/27/21 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	05/26/21 12:00	05/27/21 00:26	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/26/21 12:00	05/27/21 00:26	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Client Sample ID: BH02

Lab Sample ID: 890-727-2

Date Collected: 05/24/21 14:10

Matrix: Solid

Date Received: 05/25/21 12:32

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	<49.8	U	49.8	mg/Kg		05/26/21 10:57	05/26/21 19:55	1
Diesel Range Organics (Over C10-C28)	2370		49.8	mg/Kg		05/26/21 10:57	05/26/21 19:55	1
Oil Range Organics (Over C28-C36)	389		49.8	mg/Kg		05/26/21 10:57	05/26/21 19:55	1
Total TPH	2760		49.8	mg/Kg		05/26/21 10:57	05/26/21 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	05/26/21 10:57	05/26/21 19:55	1
o-Terphenyl	88		70 - 130	05/26/21 10:57	05/26/21 19:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1000		4.98	mg/Kg			05/28/21 12:03	1

Client Sample ID: BH03

Lab Sample ID: 890-727-3

Date Collected: 05/24/21 14:32

Matrix: Solid

Date Received: 05/25/21 12:32

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		05/26/21 12:00	05/27/21 00:50	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:50	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/26/21 12:00	05/27/21 00:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/26/21 12:00	05/27/21 00:50	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/26/21 12:00	05/27/21 00:50	1
Total BTEX	<0.00404	U	0.00404	mg/Kg		05/26/21 12:00	05/27/21 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/26/21 12:00	05/27/21 00:50	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/26/21 12:00	05/27/21 00:50	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		05/26/21 10:57	05/26/21 20:16	1
Diesel Range Organics (Over C10-C28)	53.4		49.9	mg/Kg		05/26/21 10:57	05/26/21 20:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/26/21 10:57	05/26/21 20:16	1
Total TPH	53.4		49.9	mg/Kg		05/26/21 10:57	05/26/21 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	05/26/21 10:57	05/26/21 20:16	1
o-Terphenyl	100		70 - 130	05/26/21 10:57	05/26/21 20:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		5.03	mg/Kg			05/28/21 12:08	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Client Sample ID: BH04

Lab Sample ID: 890-727-4

Date Collected: 05/24/21 15:04

Matrix: Solid

Date Received: 05/25/21 12:32

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		05/26/21 12:00	05/27/21 01:15	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/26/21 12:00	05/27/21 01:15	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/26/21 12:00	05/27/21 01:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/26/21 12:00	05/27/21 01:15	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/26/21 12:00	05/27/21 01:15	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/26/21 12:00	05/27/21 01:15	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		05/26/21 12:00	05/27/21 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/26/21 12:00	05/27/21 01:15	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/26/21 12:00	05/27/21 01:15	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		05/26/21 10:57	05/26/21 20:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/26/21 10:57	05/26/21 20:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/26/21 10:57	05/26/21 20:37	1
Total TPH	<49.9	U	49.9	mg/Kg		05/26/21 10:57	05/26/21 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	05/26/21 10:57	05/26/21 20:37	1
o-Terphenyl	79		70 - 130	05/26/21 10:57	05/26/21 20:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	191		4.98	mg/Kg			05/28/21 12:13	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

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)
890-727-1	BH01	110	98
890-727-2	BH02	126	91
890-727-3	BH03	106	96
890-727-4	BH04	108	100
LCS 880-3520/1-A	Lab Control Sample	108	98
LCS 880-3520/2-A	Lab Control Sample	103	95
MB 880-3520/5-A	Method Blank	70	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-727-1	BH01	94	96
890-727-2	BH02	95	88
890-727-3	BH03	97	100
890-727-4	BH04	78	79
LCS 880-3527/2-A	Lab Control Sample	100	95
LCSD 880-3527/3-A	Lab Control Sample Dup	101	96
MB 880-3527/1-A	Method Blank	100	103
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3520/5-A

Matrix: Solid

Analysis Batch: 3530

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3520

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/26/21 12:00	05/26/21 15:31	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/26/21 12:00	05/26/21 15:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	05/26/21 12:00	05/26/21 15:31	1
1,4-Difluorobenzene (Surr)	82		70 - 130	05/26/21 12:00	05/26/21 15:31	1

Lab Sample ID: LCS 880-3520/1-A

Matrix: Solid

Analysis Batch: 3530

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1159		mg/Kg		116	70 - 130
Toluene	0.100	0.09439		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.1041		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2101		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1016		mg/Kg		102	70 - 130

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

Lab Sample ID: LCS 880-3520/2-A

Matrix: Solid

Analysis Batch: 3530

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1131		mg/Kg		113	70 - 130
Toluene	0.100	0.09802		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2052		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

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

Lab Sample ID: MB 880-3527/1-A

Matrix: Solid

Analysis Batch: 3504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3527

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		05/26/21 10:57	05/26/21 12:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1
Total TPH	<50.0	U	50.0	mg/Kg		05/26/21 10:57	05/26/21 12:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	05/26/21 10:57	05/26/21 12:45	1
o-Terphenyl	103		70 - 130	05/26/21 10:57	05/26/21 12:45	1

Lab Sample ID: LCS 880-3527/2-A

Matrix: Solid

Analysis Batch: 3504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3527

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1073		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1174		mg/Kg		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: LCSD 880-3527/3-A

Matrix: Solid

Analysis Batch: 3504

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3527

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	967.4		mg/Kg		97	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	1193		mg/Kg		119	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	96		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3529/1-A

Matrix: Solid

Analysis Batch: 3607

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			05/28/21 10:59	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-3529/2-A

Matrix: Solid

Analysis Batch: 3607

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243.8		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-3529/3-A

Matrix: Solid

Analysis Batch: 3607

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	243.7		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

GC VOA

Prep Batch: 3520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Total/NA	Solid	5035	
890-727-2	BH02	Total/NA	Solid	5035	
890-727-3	BH03	Total/NA	Solid	5035	
890-727-4	BH04	Total/NA	Solid	5035	
MB 880-3520/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 3530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Total/NA	Solid	8021B	3520
890-727-2	BH02	Total/NA	Solid	8021B	3520
890-727-3	BH03	Total/NA	Solid	8021B	3520
890-727-4	BH04	Total/NA	Solid	8021B	3520
MB 880-3520/5-A	Method Blank	Total/NA	Solid	8021B	3520
LCS 880-3520/1-A	Lab Control Sample	Total/NA	Solid	8021B	3520
LCS 880-3520/2-A	Lab Control Sample	Total/NA	Solid	8021B	3520

GC Semi VOA

Analysis Batch: 3504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Total/NA	Solid	8015B NM	3527
890-727-2	BH02	Total/NA	Solid	8015B NM	3527
890-727-3	BH03	Total/NA	Solid	8015B NM	3527
890-727-4	BH04	Total/NA	Solid	8015B NM	3527
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015B NM	3527
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3527
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3527

Prep Batch: 3527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Total/NA	Solid	8015NM Prep	
890-727-2	BH02	Total/NA	Solid	8015NM Prep	
890-727-3	BH03	Total/NA	Solid	8015NM Prep	
890-727-4	BH04	Total/NA	Solid	8015NM Prep	
MB 880-3527/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3527/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3527/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Soluble	Solid	DI Leach	
890-727-2	BH02	Soluble	Solid	DI Leach	
890-727-3	BH03	Soluble	Solid	DI Leach	
890-727-4	BH04	Soluble	Solid	DI Leach	
MB 880-3529/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3529/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3529/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

HPLC/IC

Analysis Batch: 3607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-727-1	BH01	Soluble	Solid	300.0	3529
890-727-2	BH02	Soluble	Solid	300.0	3529
890-727-3	BH03	Soluble	Solid	300.0	3529
890-727-4	BH04	Soluble	Solid	300.0	3529
MB 880-3529/1-A	Method Blank	Soluble	Solid	300.0	3529
LCS 880-3529/2-A	Lab Control Sample	Soluble	Solid	300.0	3529
LCSD 880-3529/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3529

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Client Sample ID: BH01

Lab Sample ID: 890-727-1

Date Collected: 05/24/21 13:45

Matrix: Solid

Date Received: 05/25/21 12:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3530	05/27/21 00:01	MR	XEN MID
Total/NA	Prep	8015NM Prep			3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3504	05/26/21 19:33	AJ	XEN MID
Soluble	Leach	DI Leach			3529	05/26/21 10:59	CH	XEN MID
Soluble	Analysis	300.0		1	3607	05/28/21 11:58	SC	XEN MID

Client Sample ID: BH02

Lab Sample ID: 890-727-2

Date Collected: 05/24/21 14:10

Matrix: Solid

Date Received: 05/25/21 12:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3530	05/27/21 00:26	MR	XEN MID
Total/NA	Prep	8015NM Prep			3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3504	05/26/21 19:55	AJ	XEN MID
Soluble	Leach	DI Leach			3529	05/26/21 10:59	CH	XEN MID
Soluble	Analysis	300.0		1	3607	05/28/21 12:03	SC	XEN MID

Client Sample ID: BH03

Lab Sample ID: 890-727-3

Date Collected: 05/24/21 14:32

Matrix: Solid

Date Received: 05/25/21 12:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3530	05/27/21 00:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3504	05/26/21 20:16	AJ	XEN MID
Soluble	Leach	DI Leach			3529	05/26/21 10:59	CH	XEN MID
Soluble	Analysis	300.0		1	3607	05/28/21 12:08	SC	XEN MID

Client Sample ID: BH04

Lab Sample ID: 890-727-4

Date Collected: 05/24/21 15:04

Matrix: Solid

Date Received: 05/25/21 12:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3520	05/26/21 12:00	MR	XEN MID
Total/NA	Analysis	8021B		1	3530	05/27/21 01:15	MR	XEN MID
Total/NA	Prep	8015NM Prep			3527	05/26/21 10:57	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3504	05/26/21 20:37	AJ	XEN MID
Soluble	Leach	DI Leach			3529	05/26/21 10:59	CH	XEN MID
Soluble	Analysis	300.0		1	3607	05/28/21 12:13	SC	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

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.
Project/Site: PLU 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

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 13 DTD 108H

Job ID: 890-727-1
SDG: TE012921046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-727-1	BH01	Solid	05/24/21 13:45	05/25/21 12:32	- 1
890-727-2	BH02	Solid	05/24/21 14:10	05/25/21 12:32	- 1
890-727-3	BH03	Solid	05/24/21 14:32	05/25/21 12:32	- 1
890-727-4	BH04	Solid	05/24/21 15:04	05/25/21 12:32	- 1



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
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 291-1111
Hobbs, NM (575-392-7550)

www.xenco.com Page 1 of 1

Chain of Custody

Work Order No:

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP Permian office	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:	Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com

Work Order Comments	
Program: UST/PST State of Project: Reporting Level: I <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input checked="" type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	<input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund

[illegible]

SAMPLE RECEIPT		Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C):	4.0/3.8				Thermometer ID		
Received intact:	Yes	No			2111007		
Cooler Custody Seals:	Yes	No			Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No			Total Containers:		

Number of Containers

PA 8015)

EPA 0=8021)

de (EPA 300.0)

890-727 Chain of Custody

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

[illegible]

Circle Method(s) and Metal(s) to be analyzed	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 SiO ₂ Na Sr II Sn U V Zn
TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag II U	1634.1 2465.1 7470.7 7471.1

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 <i>[Signature]</i>	<i>[Signature]</i>	10.25.21 1230 ²			
3 <i>[Signature]</i>					
5		6			

Revised Date 05/11/18 Rev 2018

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-727-1

SDG Number: TE012921046

Login Number: 727

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: 890-727-1

SDG Number: TE012921046

Login Number: 727

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 05/26/21 11:26 AM

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-798-1

Laboratory Sample Delivery Group: TE012921046

Client Project/Site: PLU 13 DTD 108H

For:

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

Attn: Tacoma Morrissey

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

Authorized for release by:
6/14/2021 4:07:41 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Laboratory Job ID: 890-798-1
SDG: TE012921046

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Job ID: 890-798-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative 890-798-1

Receipt

The samples were received on 6/11/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS01 (890-798-1), FS02 (890-798-2), PH01 (890-798-3) and PH01A (890-798-4).

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 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Client Sample ID: FS01

Lab Sample ID: 890-798-1

Date Collected: 06/09/21 12:40

Matrix: Solid

Date Received: 06/11/21 09:45

Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 21:32	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/12/21 11:30	06/12/21 21:32	1
1,4-Difluorobenzene (Surr)	93		70 - 130	06/12/21 11:30	06/12/21 21:32	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 F1 *-	49.7	mg/Kg		06/13/21 10:54	06/14/21 00:25	1
Diesel Range Organics (Over C10-C28)	<49.7	U F1 *-	49.7	mg/Kg		06/13/21 10:54	06/14/21 00:25	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		06/13/21 10:54	06/14/21 00:25	1
Total TPH	<49.7	U F1	49.7	mg/Kg		06/13/21 10:54	06/14/21 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	06/13/21 10:54	06/14/21 00:25	1
o-Terphenyl	75		70 - 130	06/13/21 10:54	06/14/21 00:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.4		4.99	mg/Kg			06/14/21 11:41	1

Client Sample ID: FS02

Lab Sample ID: 890-798-2

Date Collected: 06/09/21 12:42

Matrix: Solid

Date Received: 06/11/21 09:45

Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/12/21 11:30	06/12/21 21:52	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		06/12/21 11:30	06/12/21 21:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/12/21 11:30	06/12/21 21:52	1
1,4-Difluorobenzene (Surr)	91		70 - 130	06/12/21 11:30	06/12/21 21:52	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Client Sample ID: FS02

Lab Sample ID: 890-798-2

Date Collected: 06/09/21 12:42

Matrix: Solid

Date Received: 06/11/21 09:45

Sample Depth: - 1.5

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		06/13/21 10:54	06/14/21 01:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9	mg/Kg		06/13/21 10:54	06/14/21 01:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/13/21 10:54	06/14/21 01:28	1
Total TPH	<49.9	U	49.9	mg/Kg		06/13/21 10:54	06/14/21 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	06/13/21 10:54	06/14/21 01:28	1
o-Terphenyl	73		70 - 130	06/13/21 10:54	06/14/21 01:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.8		5.02	mg/Kg			06/14/21 12:58	1

Client Sample ID: PH01

Lab Sample ID: 890-798-3

Date Collected: 06/09/21 10:59

Matrix: Solid

Date Received: 06/11/21 09:45

Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/12/21 11:30	06/12/21 22:13	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		06/12/21 11:30	06/12/21 22:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	06/12/21 11:30	06/12/21 22:13	1
1,4-Difluorobenzene (Surr)	89		70 - 130	06/12/21 11:30	06/12/21 22:13	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	<50.0	U *-	50.0	mg/Kg		06/13/21 10:54	06/14/21 01:48	1
Diesel Range Organics (Over C10-C28)	83.5	*-	50.0	mg/Kg		06/13/21 10:54	06/14/21 01:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/13/21 10:54	06/14/21 01:48	1
Total TPH	83.5		50.0	mg/Kg		06/13/21 10:54	06/14/21 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	06/13/21 10:54	06/14/21 01:48	1
o-Terphenyl	74		70 - 130	06/13/21 10:54	06/14/21 01:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	163		4.98	mg/Kg			06/14/21 12:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Client Sample ID: PH01A

Lab Sample ID: 890-798-4

Date Collected: 06/09/21 12:15

Matrix: Solid

Date Received: 06/11/21 09:45

Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/12/21 11:30	06/12/21 22:33	1
Total BTEX	<0.00397	U	0.00397	mg/Kg		06/12/21 11:30	06/12/21 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	06/12/21 11:30	06/12/21 22:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130	06/12/21 11:30	06/12/21 22:33	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		06/13/21 10:54	06/14/21 02:09	1
Diesel Range Organics (Over C10-C28)	61.3	*-	49.8	mg/Kg		06/13/21 10:54	06/14/21 02:09	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/13/21 10:54	06/14/21 02:09	1
Total TPH	61.3		49.8	mg/Kg		06/13/21 10:54	06/14/21 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	06/13/21 10:54	06/14/21 02:09	1
o-Terphenyl	75		70 - 130	06/13/21 10:54	06/14/21 02:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		4.95	mg/Kg			06/14/21 12:09	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

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)
890-798-1	FS01	93	93
890-798-2	FS02	93	91
890-798-3	PH01	96	89
890-798-4	PH01A	89	98
LCS 880-4041/1-A	Lab Control Sample	115	104
LCSD 880-4041/2-A	Lab Control Sample Dup	115	104
MB 880-4041/5-A	Method Blank	90	92
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)
890-798-1	FS01	82	75
890-798-1 MS	FS01	85	70
890-798-1 MSD	FS01	87	71
890-798-2	FS02	80	73
890-798-3	PH01	82	74
890-798-4	PH01A	82	75
LCS 880-4071/2-A	Lab Control Sample	94	79
LCSD 880-4071/3-A	Lab Control Sample Dup	89	78
MB 880-4071/1-A	Method Blank	88	80
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4041/5-A

Matrix: Solid

Analysis Batch: 4044

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4041

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 19:49	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		06/12/21 11:30	06/12/21 19:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/12/21 11:30	06/12/21 19:49	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/12/21 11:30	06/12/21 19:49	1

Lab Sample ID: LCS 880-4041/1-A

Matrix: Solid

Analysis Batch: 4044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1007		mg/Kg		101	70 - 130
Toluene	0.100	0.09649		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1005		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.2175		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-4041/2-A

Matrix: Solid

Analysis Batch: 4044

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4041

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09597		mg/Kg		96	70 - 130	5	35
Toluene	0.100	0.09182		mg/Kg		92	70 - 130	5	35
Ethylbenzene	0.100	0.09593		mg/Kg		96	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2070		mg/Kg		104	70 - 130	5	35
o-Xylene	0.100	0.1044		mg/Kg		104	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

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

Lab Sample ID: MB 880-4071/1-A

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4071

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		06/13/21 10:54	06/13/21 23:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/13/21 10:54	06/13/21 23:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/13/21 10:54	06/13/21 23:23	1
Total TPH	<50.0	U	50.0	mg/Kg		06/13/21 10:54	06/13/21 23:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	06/13/21 10:54	06/13/21 23:23	1
o-Terphenyl	80		70 - 130	06/13/21 10:54	06/13/21 23:23	1

Lab Sample ID: LCS 880-4071/2-A

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000000	930.4	*-	mg/Kg		0.09	70 - 130
Diesel Range Organics (Over C10-C28)	1000000	996.5	*-	mg/Kg		0.1	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: LCSD 880-4071/3-A

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4071

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000000	904.4	*-	mg/Kg		0.09	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000000	1004	*-	mg/Kg		0.1	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 890-798-1 MS

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 4071

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 F1 *-	999000	930.7	F1	mg/Kg		0.09	70 - 130
Diesel Range Organics (Over C10-C28)	<49.7	U F1 *-	999000	948.4	F1	mg/Kg		0.09	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

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

Lab Sample ID: 890-798-1 MS

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 4071

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	70		70 - 130

Lab Sample ID: 890-798-1 MSD

Matrix: Solid

Analysis Batch: 4067

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 4071

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 F1 *-	997000	949.4	F1	mg/Kg		0.1	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.7	U F1 *-	997000	972.0	F1	mg/Kg		0.09	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	87		70 - 130								
o-Terphenyl	71		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4076/1-A

Matrix: Solid

Analysis Batch: 4082

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			06/14/21 11:25	1

Lab Sample ID: LCS 880-4076/2-A

Matrix: Solid

Analysis Batch: 4082

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.4		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-4076/3-A

Matrix: Solid

Analysis Batch: 4082

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	244.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-798-1 MS

Matrix: Solid

Analysis Batch: 4082

Client Sample ID: FS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	71.4		250	326.9		mg/Kg		102	90 - 110

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-798-1 MSD									Client Sample ID: FS01		
Matrix: Solid									Prep Type: Soluble		
Analysis Batch: 4082											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limits
Chloride	71.4		250	320.5		mg/Kg		100	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

GC VOA

Prep Batch: 4041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Total/NA	Solid	5035	
890-798-2	FS02	Total/NA	Solid	5035	
890-798-3	PH01	Total/NA	Solid	5035	
890-798-4	PH01A	Total/NA	Solid	5035	
MB 880-4041/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4041/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4041/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Total/NA	Solid	8021B	4041
890-798-2	FS02	Total/NA	Solid	8021B	4041
890-798-3	PH01	Total/NA	Solid	8021B	4041
890-798-4	PH01A	Total/NA	Solid	8021B	4041
MB 880-4041/5-A	Method Blank	Total/NA	Solid	8021B	4041
LCS 880-4041/1-A	Lab Control Sample	Total/NA	Solid	8021B	4041
LCSD 880-4041/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4041

GC Semi VOA

Analysis Batch: 4067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Total/NA	Solid	8015B NM	4071
890-798-2	FS02	Total/NA	Solid	8015B NM	4071
890-798-3	PH01	Total/NA	Solid	8015B NM	4071
890-798-4	PH01A	Total/NA	Solid	8015B NM	4071
MB 880-4071/1-A	Method Blank	Total/NA	Solid	8015B NM	4071
LCS 880-4071/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4071
LCSD 880-4071/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4071
890-798-1 MS	FS01	Total/NA	Solid	8015B NM	4071
890-798-1 MSD	FS01	Total/NA	Solid	8015B NM	4071

Prep Batch: 4071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Total/NA	Solid	8015NM Prep	
890-798-2	FS02	Total/NA	Solid	8015NM Prep	
890-798-3	PH01	Total/NA	Solid	8015NM Prep	
890-798-4	PH01A	Total/NA	Solid	8015NM Prep	
MB 880-4071/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4071/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4071/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-798-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-798-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Soluble	Solid	DI Leach	
890-798-2	FS02	Soluble	Solid	DI Leach	
890-798-3	PH01	Soluble	Solid	DI Leach	
890-798-4	PH01A	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

HPLC/IC (Continued)

Leach Batch: 4076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4076/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4076/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4076/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-798-1 MS	FS01	Soluble	Solid	DI Leach	
890-798-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 4082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-798-1	FS01	Soluble	Solid	300.0	4076
890-798-2	FS02	Soluble	Solid	300.0	4076
890-798-3	PH01	Soluble	Solid	300.0	4076
890-798-4	PH01A	Soluble	Solid	300.0	4076
MB 880-4076/1-A	Method Blank	Soluble	Solid	300.0	4076
LCS 880-4076/2-A	Lab Control Sample	Soluble	Solid	300.0	4076
LCSD 880-4076/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4076
890-798-1 MS	FS01	Soluble	Solid	300.0	4076
890-798-1 MSD	FS01	Soluble	Solid	300.0	4076

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Client Sample ID: FS01

Lab Sample ID: 890-798-1

Date Collected: 06/09/21 12:40

Matrix: Solid

Date Received: 06/11/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4041	06/12/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4044	06/12/21 21:32	KL	XEN MID
Total/NA	Prep	8015NM Prep			4071	06/13/21 10:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1	4067	06/14/21 00:25	AJ	XEN MID
Soluble	Leach	DI Leach			4076	06/14/21 09:53	CH	XEN MID
Soluble	Analysis	300.0		1	4082	06/14/21 11:41	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-798-2

Date Collected: 06/09/21 12:42

Matrix: Solid

Date Received: 06/11/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4041	06/12/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4044	06/12/21 21:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			4071	06/13/21 10:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1	4067	06/14/21 01:28	AJ	XEN MID
Soluble	Leach	DI Leach			4076	06/14/21 09:53	CH	XEN MID
Soluble	Analysis	300.0		1	4082	06/14/21 12:58	CH	XEN MID

Client Sample ID: PH01

Lab Sample ID: 890-798-3

Date Collected: 06/09/21 10:59

Matrix: Solid

Date Received: 06/11/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4041	06/12/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4044	06/12/21 22:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			4071	06/13/21 10:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1	4067	06/14/21 01:48	AJ	XEN MID
Soluble	Leach	DI Leach			4076	06/14/21 09:53	CH	XEN MID
Soluble	Analysis	300.0		1	4082	06/14/21 12:03	CH	XEN MID

Client Sample ID: PH01A

Lab Sample ID: 890-798-4

Date Collected: 06/09/21 12:15

Matrix: Solid

Date Received: 06/11/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4041	06/12/21 11:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4044	06/12/21 22:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			4071	06/13/21 10:54	AM	XEN MID
Total/NA	Analysis	8015B NM		1	4067	06/14/21 02:09	AJ	XEN MID
Soluble	Leach	DI Leach			4076	06/14/21 09:53	CH	XEN MID
Soluble	Analysis	300.0		1	4082	06/14/21 12:09	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

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.
Project/Site: PLU 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

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 13 DTD 108H

Job ID: 890-798-1
SDG: TE012921046

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-798-1	FS01	Solid	06/09/21 12:40	06/11/21 09:45	- 1.5
890-798-2	FS02	Solid	06/09/21 12:42	06/11/21 09:45	- 1.5
890-798-3	PH01	Solid	06/09/21 10:59	06/11/21 09:45	- 2
890-798-4	PH01A	Solid	06/09/21 12:15	06/11/21 09:45	- 4



Chain of Custody

Work Order No: _____

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 Comments

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

Project Manager: Jaime Morrissey Bill to: (if different) Kyle Little
 Company Name: WSP USA Inc., Permian office Company Name: XTO Energy
 Address: 3300 North A St. Bldg 1, Unit 222 Address: 3104 E Greene St.
 City, State ZIP: Midland, TX 79705 City, State ZIP: Carlsbad, NM
 Phone: (432) 704-5178 Email: travis.casey@wsp.com, kyle.little@wsp.com, dan.mojir@wsp.com

ANALYSIS REQUEST

Work Order Notes

Project Name: PLU 13 JD 108H Turn Around
 Project Number: 7E0129210216 Routine
 P.O. Number: See work order notes Rush: 24hr
 Sampler's Name: Travis Casey Due Date:

SAMPLE RECEIPT Temp Blank: ☒ Yes ☐ No Wet Ice: ☒ Yes ☐ No
 Temperature (°C): 3.0 Thermometer ID
 Received Inact: ☒ Yes ☐ No Correction Factor: -0.2
 Cooler Custody Seals: ☒ Yes ☐ No Total Containers: 1
 Sample Custody Seals: ☒ Yes ☐ No



890-798 Chain of Custody

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

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
FS01	S	6-9-21	1240	1.5'	1	✓	✓	✓	Composite
FS02	↓	↓	1242	1.5'	1	✓	✓	✓	
PH01	↓	↓	1054	2'	1	✓	✓	✓	
PH01A	↓	↓	1215	4'	1	✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 Hg

Notice: Signature of the document and instrument or 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.

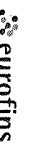
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>[Signature]</u>	<u>Ann Byers</u>	6/11/21 9:45	<u>[Signature]</u>	<u>N. Olsen</u>	6/11/21 9:45

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Eurofine Yanco Carlebad

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

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-798-1

SDG Number: TE012921046

Login Number: 798

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.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-798-1

SDG Number: TE012921046

Login Number: 798

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland

List Creation: 06/12/21 04:19 PM

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

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 34232

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 34232
	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 #NAPP2110460622 PLU 13 DTD 108H, thank you. This closure is approved.	8/27/2021