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	nAPP2106357887
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 32.09421 Longitude -103.83555
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU PB 25-25-30	Site Type Battery
Date Release Discovered 2/22/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
N	25	25S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 95	Volume Recovered (bbls) 95
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Corrosion on a water dump line caused fluid to release into impermeable containment. All fluids were recovered. A 48-hour liner inspection was sent to NMOCD District 2. Liner was inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2106357887
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
By Adrian Baker to 'Bratcher, Mike, EMNRD'; Venegas, Victoria, EMNRD; 'robert.Hamlet@state.nm.us' emily.hernandez@state.nm.us on Tuesday, February 23, 2021 8:46 AM via email.

Initial Response

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

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

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

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

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

Printed Name: Adrian Baker
Title: Environmental Coordinator
Signature: AdBr
Date: 3/4/21
email: adrian.baker@exxonmobil.com
Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

Location:	**PLU PB 25-25-30**	
Spill Date:	**2/22/2021**	
Area 1		
Approximate Area =	533.39	cu.ft.
VOLUME OF LEAK		
Total Produced Water =	95.00	bbls
TOTAL VOLUME OF LEAK		
Total Produced Water =	**95.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**95.00**	**bbls**

Incident ID	nAPP2106357887
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2106357887
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: Environmental Manager

Signature: Date: 05/03/2021

email: Kyle.Littrell@exxonmobil.com Telephone: (432)-221-7331

OCD Only

Received by: Date:

Incident ID	nAPP2106357887
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: Environmental Manager

Signature: Date: 05/03/2021

email: Kyle.Littrell@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	nAPP2106357887
District RP	
Facility ID	
Application ID	

Closure

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

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☒ Description of remediation activities

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

Printed Name: Kyle Littrell Title: Environmental Manager

Signature: Date: 05/03/2021

email: Kyle.Littrell@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 7/20/2021

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: 7/20/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

May 6, 2021

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

RE: Closure Request
PLU PB 25-25-30
Incident Number nAPP2106357887
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the PLU PB 25-25-30 (Site) in Unit N, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number nAPP2106357887.

RELEASE BACKGROUND

On February 22, 2021, corrosion on a water dump line resulted in the release of approximately 95 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 95 bbls of the released produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO reported the release to the NMOCD via email on February 23, 2021 and submitted a Release Notification Form C-141 on March 4, 2021. The release was assigned Incident Number nAPP2106357887.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During March 2021, WSP installed a soil boring (C-4498) within 0.5 miles of the Site utilizing a truck-

mounted hollow-stem auger rig. Soil boring C-4498 was drilled to a depth of 109 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole lithologic/soil sampling log is included in Attachment 1. The location of the borehole is approximately 0.5 miles northwest of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 109 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

The closest continuously flowing or significant watercourse to the Site is an intermittent streambed, located approximately 238 feet south 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 (medium 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
- TPH: 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES

On April 7, 2021, WSP personnel visited the Site to evaluate the release extent and conduct site assessment activities. WSP personnel advanced one core hole (CH01) via core drill near the location of the tear in the liner identified during the liner integrity inspection. Four additional core holes (CH02 through CH05) were advanced around the lined containment to confirm the lateral extent of the release. Two soil samples were collected from each core hole at depths of 1-foot and 2 feet bgs. Soil from the core holes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the core holes were documented on lithologic/soil sampling logs and are included as Attachment 2. The core holes were backfilled with the soil removed and XTO repaired the tear in the liner.

The core hole delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Attachment 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples CH01/CH01A through CH05/CH05A, collected at depths of 1 foot and 2 feet bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 4.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, WSP personnel advanced five core holes (CH01 through CH05) within and around the lined containment to assess for the presence or absence of soil impacts resulting from the February 22, 2021 produced water release within lined containment. Two delineation soil samples were collected from each core hole (CH01 through CH05), at depths of 1-foot and 2 feet bgs. Laboratory analytical results for the delineation soil samples indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil indicated no elevated volatile aromatic hydrocarbons or chloride concentrations beneath the tear in the liner. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria directly below the tear in the liner, XTO respectfully requests NFA for Incident Number nAPP2106357887.

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

Sincerely,

WSP USA Inc.

Kalei Jennings
Associate Consultant

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
Table 1	Soil Analytical Results
Attachment 1	Referenced Well Records
Attachment 2	Lithologic/Sampling Log
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

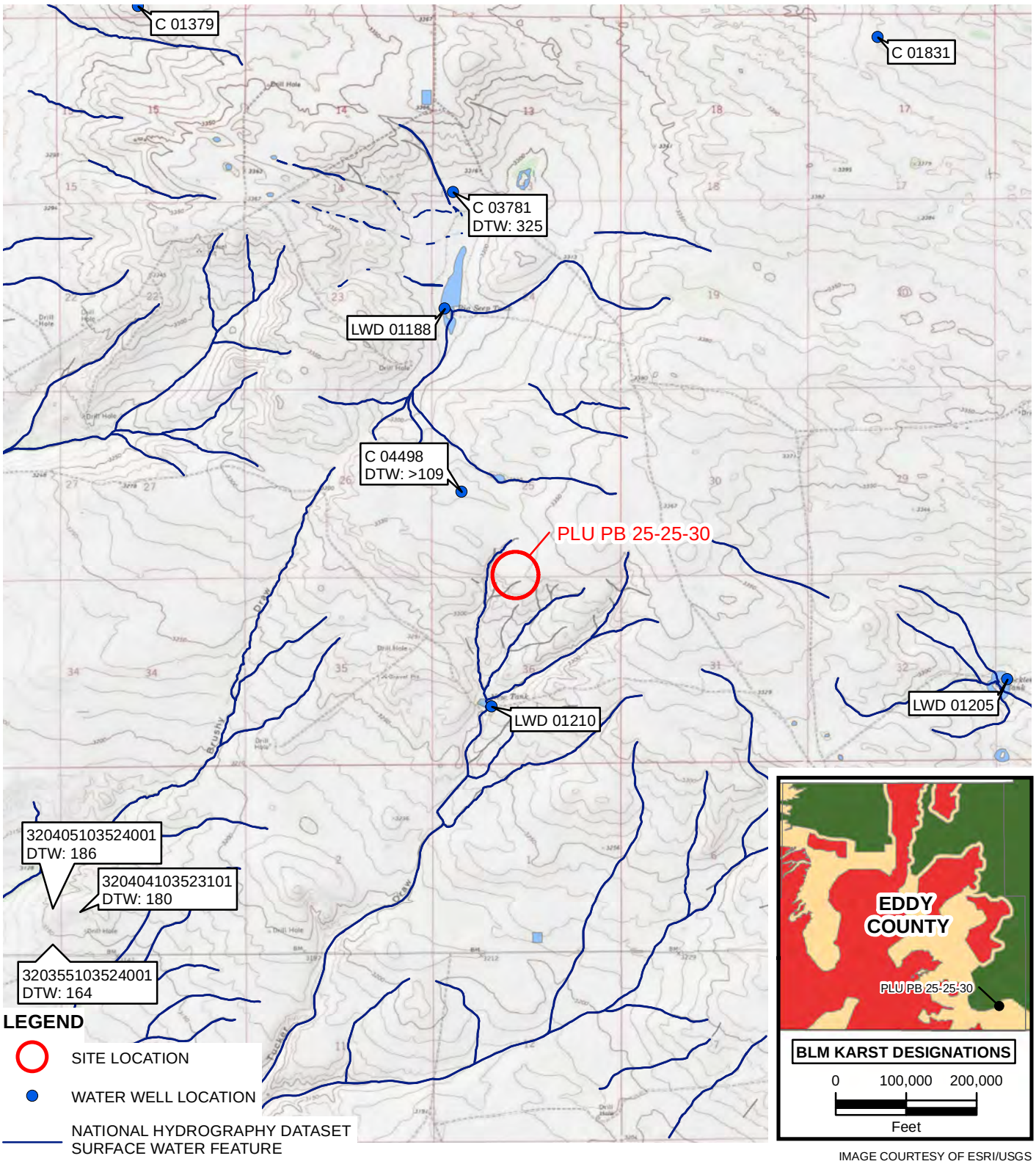


FIGURE 1
SITE LOCATION MAP
PLU PB 25-25-30
UNIT N SEC 25 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\012921035_PLU PHANTOM BANKS 25-25-30\012921035_FIG01_SL_RECEPTOR_2021.mxd

LEGEND

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

CONTAINMENT

IMAGE COURTESY OF ESRI

0 50 100

Feet

N

NOTE: INCIDENT NUMBER nAPP2106357887
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
PLU PB 25-25-30
UNIT N SEC 25 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012921035_PLU PHANTOM BANKS 25-25-30\012921035_FIG02_DELINEATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
PLU PB 25-25-30
Incident Number nAPP2106357887
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (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	NE	100	600
Delineation Samples										
CH01	04/07/2021	1	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	28.4
CH01A	04/07/2021	2	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	472
CH02	04/07/2021	1	0.00965	0.0246	<49.9	<49.9	<49.9	<49.9	61.5	39.0
CH02A	04/07/2021	2	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	36.7
CH03	04/07/2021	1	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	80.1
CH03A	04/07/2021	2	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	42.5
CH04	04/07/2021	1	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	219
CH04A	04/07/2021	2	0.00230	0.00230	<49.9	<49.9	<49.9	<49.9	<49.9	69.3
CH05	04/07/2021	1	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	20.2
CH05A	04/07/2021	2	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	30.3

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 standarc

ATTACHMENT 1: REFERENCED WELL RECORD

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

03/11/2021

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

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4498 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4498Pod1.

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

Sincerely,

Lucas Middleton

Enclosures: as noted above

OSE DII MAR 11 2021 PM4:22

APPLICANT COPY

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DII MAR 11 2021 PM4:22

Copy

APPLICANT

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4498

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

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

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32°	6'	1.96"	N
	LONGITUDE	-103°	50'	26.19"	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

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

NW SW NE Sec. 25 T25S R30E

2. DRILLING & CASING INFORMATION

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

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
02/24/2021	02/24/2021	temporary well material	109	n/a

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

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

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

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

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	109	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 06/30/17)

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

4. HYDROGEOLOGIC ~~LOG~~ OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	34	34	Caliche, tan, no odor, no stain, gravel, dry	Y ✓ N	
34	40	6	sand/ cacliche, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
40	56	16	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
56	72	16	sandstone, low consolidation, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
72	79	7	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
79	109	30	sandstone, low - medium consolidation, tan, no odor, m-f grained, well sorted, m	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

~~METHOD~~ USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

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

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

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

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

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

Shane Eldridge

6. SIGNATURE

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

Jack Atkins — Jackie D. Atkins — 03/11/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

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

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

PLUGGING RECORD

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

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4498- POD1

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

Mailing address: 6401 Holiday Hill Dr.

City: Midland State: Texas Zip code: 79707

II. WELL PLUGGING INFORMATION:

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

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/21

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

4) Date well plugging began: 03/02/2021 Date well plugging concluded: 03/02/2021

5) GPS Well Location: Latitude: 32 deg, 6 min, 1.96 sec
Longitude: -103 deg, 50 min, 26.19 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 109 ft below ground level (bgl), by the following manner: weighted tape

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

8) Date well plugging plan of operations was approved by the State Engineer: 12/01/2020

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

Version: September 8, 2009
Page 1 of 2

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

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	0-10' Hydrated Bentonite	Approx. 16 gallons	16 gallons	Augers	
	10'-109' Drill Cuttings	Approx. 171 gallons	171 gallons	Boring	

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

III. SIGNATURE:

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

Jack Atkins
Signature of Well Driller

03/11/2021
Date

Version: September 8, 2009
Page 2 of 2

2020-03-10_C-4498-POD1_OSE_Well Record and Log-forsign

Final Audit Report 2021-03-11

Created:	2021-03-11
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAq2m7g1wGV8cRoBzMugpPTk25-4ojFW8H

"2020-03-10_C-4498-POD1_OSE_Well Record and Log-forsign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2021-03-11 - 7:17:39 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-03-11 - 7:18:18 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2021-03-11 - 7:29:33 PM GMT- IP address: 74.50.153.115

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-03-11 - 7:31:05 PM GMT - Time Source: server- IP address: 74.50.153.115

Agreement completed.
2021-03-11 - 7:31:05 PM GMT

OSE DII MAR 11 2021 PM4:22

Adobe Sign

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: CH01 | Date: 4-7-2021
Site Name: PLU Phantom Banks 25-25-30
RP or Incident Number: NAPP2106357887
WSP Job Number: TE01292 1035

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB. T.C. | Method: Cone Drilling
Lat/Long: 32.094188, -103.835572 | Field Screening: PID, chlorides. | Hole Diameter: 1.5" | Total Depth: 4'
Comments: All chloride tests include a 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	0-4' CALICHE, tan - light brown, moist, well consolidated, indurated, some coarse sand, no stain, no odor.
M	1327	0.8	N	CH01	1'	1		
M	313	0.2	N	CH01 A	2'	2		2' sand absent
						3		
M	257	0.0	N	CH01 B	4'	4	TDE 4'	TD @ 4' bgs.
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: CH02	Date: 4-7-2021
Site Name: PLU Phantom Banks 25-25-30	
RP or Incident Number: NAPP2106357887	
WSP Job Number: TE012921035	
Logged By: BB, TC	Method: Core Drilling
Hole Diameter: 1.5"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.094047, -103.835556
Field Screening: PID, chlorides

Comments: All chloride tests include a 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	0-2' CALICHE, tan - light brown, wet, well consolidated, indurated, some coarse sand, no stain, no odor.
W	<124	0.0	N	CH02	1'	1		
								2', moist.
M	<124	0.0	N	CH02A	2'	2	TDe2'	- Moisture content due to freshwater needed for core drilling.
						3		TD @ 4' bgs.
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: CH03	Date: 4-7-2021
Site Name: PLU Phantom Banks 25-25-30	
RP or Incident Number: NAPP2106357887	
WSP Job Number: TE01292105S	
Logged By: BO, TC	Method: Core Drilling
Lat/Long: 32.094181, -103.835421	Field Screening: PID, chlorides
Hole Diameter: 1.5"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Comments: All chloride tests include a 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CLHE	0-2' CALICHE, tan - light brown, wet, well consolidated, indurated, some coarse sand, no stain, no odor,
W	4124	0.0	N	CH03	1'	1		- moisture content due to fresh water needed for core drilling.
W	4124	0.0	N	CH03A	2'	2	TD@2'	TD@2' bgs.
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA
506 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: CH04	Date: 4-7-2021
Site Name: PLU Phantom Banks 25-25-30	
RP or Incident Number: NAPP2106357887	
WSP Job Number: TE01292103S	
Logged By: BB, TC	Method: Core Drilling
Hole Diameter: 1.5"	Total Depth: 2'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.094590, -103.825591
Field Screening: PID, Chlorides.
Comments: All chloride tests include a 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	0-2' CALICHE, tan - light brown, moist, well consolidated, indurated, some coarse sand, no stain, no odor.
M	2124	0.0	N	CH04	1'	1		
								2' sand absent.
M	2124	0.0	N	CH04A	2'	2	TD@2'	TD @ 2'.
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

WSP USA
506 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: CH05	Date: 4-7-2021
Site Name: PLU Phantom Banks 25-25-30	
RP or Incident Number: NAPP2106375887	
WSP Job Number: TE012921035	
Logged By: BO TC	Method: Sonic Drilling
Hole Diameter: 1.5"	Total Depth: 2'
Lat/Long: 32.094755, -103.875673	Field Screening: PID, chlorides

Comments: All chloride tests include a 40% correction factor.

LITHOLOGIC / SOIL SAMPLING LOG

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	0-2' CALICHE, tan-light brown, moist, well consolidated, indurated, some coarse grain sand, no stain, no odor.
M	4124	0.0	N	CH05	1'	1		
								2', sand absent.
M	4124	0.0	N	CH05A	2'	2	TD@2'	TD @ 2' bgs.
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ATTACHMENT 3: PHOTOGRAPHIC LOG

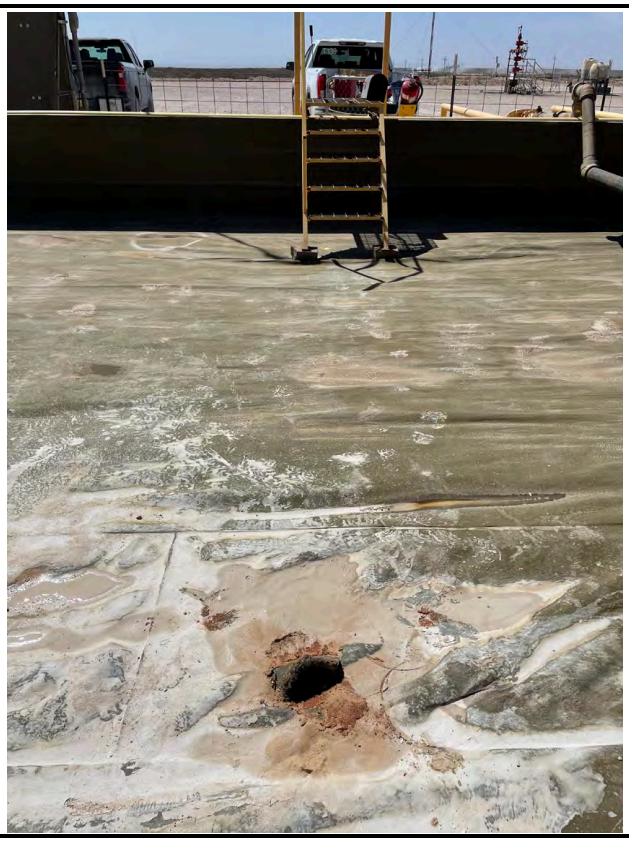
PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU PB 25-25-30 Eddy County, New Mexico	nAPP2106357887

Photo No.	Date
1	March 3, 2021

View of compromised liner inside lined containment.

Photo No.	Date
2	March 3, 2021

View of core hole (CH01) taken from inside lined containment.



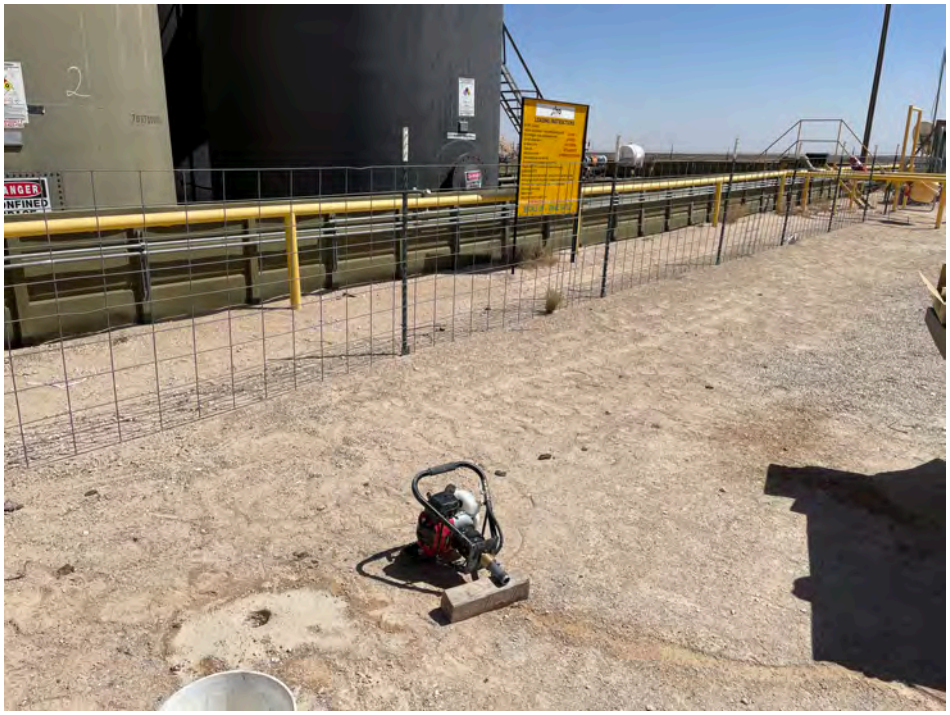
PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU PB 25-25-30 Eddy County, New Mexico	nAPP2106357887

Photo No.	Date
3	April 7, 2021

View of core hole (CH02) taken south of the tank battery.

Photo No.	Date
4	April 7, 2021

View of core hole (CH05) taken west of the tank battery.



ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-498-1
Client Project/Site: PLU PB 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/20/2021 8:52:20 AM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Laboratory Job ID: 890-498-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 19

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-498-1
Project/Site: PLU PB 25-25-30

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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 PB 25-25-30

Job ID: 890-498-1

Job ID: 890-498-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-498-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2021 5:00 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 was 3.6º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH02 (890-498-1) and CH02 A (890-498-2).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1589 and analytical batch 880-1569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Client Sample ID: CH02

Lab Sample ID: 890-498-1
Matrix: Solid
Date Collected: 04/07/21 12:20
Date Received: 04/07/21 17:00
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00965**		0.00200		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
Toluene	**0.00641**		0.00200		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
Ethylbenzene	**0.00855**		0.00200		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/08/21 11:09	04/09/21 20:15	1
Total BTEX	**0.0246**		0.00200		mg/Kg		04/08/21 11:09	04/09/21 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*195*	*S1+*	*70 - 130*	*04/08/21 11:09*	*04/09/21 20:15*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*04/08/21 11:09*	*04/09/21 20:15*	*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	**61.5**	**B**	49.9		mg/Kg		04/08/21 11:45	04/10/21 07:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/08/21 11:45	04/10/21 07:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/08/21 11:45	04/10/21 07:20	1
Total TPH	**61.5**	**B**	49.9		mg/Kg		04/08/21 11:45	04/10/21 07:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*04/08/21 11:45*	*04/10/21 07:20*	*1*
o-Terphenyl	*99*		*70 - 130*	*04/08/21 11:45*	*04/10/21 07:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.0**		5.00		mg/Kg			04/18/21 23:04	1

Client Sample ID: CH02 A

Lab Sample ID: 890-498-2
Matrix: Solid
Date Collected: 04/07/21 12:40
Date Received: 04/07/21 17:00
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/08/21 11:09	04/09/21 20:35	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/08/21 11:09	04/09/21 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*04/08/21 11:09*	*04/09/21 20:35*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*04/08/21 11:09*	*04/09/21 20:35*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Client Sample ID: CH02 A
Date Collected: 04/07/21 12:40
Date Received: 04/07/21 17:00
Sample Depth: - 2

Lab Sample ID: 890-498-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		04/08/21 11:45	04/10/21 07:44	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/08/21 11:45	04/10/21 07:44	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/08/21 11:45	04/10/21 07:44	1
Total TPH	<50.1	U	50.1		mg/Kg		04/08/21 11:45	04/10/21 07:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*04/08/21 11:45*	*04/10/21 07:44*	*1*
o-Terphenyl	*106*		*70 - 130*	*04/08/21 11:45*	*04/10/21 07:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.7**		4.96		mg/Kg			04/18/21 23:09	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-498-1	CH02	195 S1+	86
890-498-2	CH02 A	91	114
LCS 880-1511/1-A	Lab Control Sample	90	102
LCSD 880-1511/2-A	Lab Control Sample Dup	91	108
MB 880-1511/5-A	Method Blank	103	108

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-498-1	CH02	91	99
890-498-2	CH02 A	97	106
LCS 880-1516/2-A	Lab Control Sample	101	98
LCSD 880-1516/3-A	Lab Control Sample Dup	99	94
MB 880-1516/1-A	Method Blank	102	112

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1511/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1511

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*

Lab Sample ID: LCS 880-1511/1-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1511

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1012		mg/Kg		101	70 - 130		
Toluene			0.100	0.1050		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1022		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene			0.200	0.2035		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.09712		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-1511/2-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1511

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09520		mg/Kg		95	70 - 130	6	35
Toluene			0.100	0.1006		mg/Kg		101	70 - 130	4	35
Ethylbenzene			0.100	0.09488		mg/Kg		95	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.1955		mg/Kg		98	70 - 130	4	35
o-Xylene			0.100	0.09283		mg/Kg		93	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

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

Lab Sample ID: MB 880-1516/1-A
Matrix: Solid
Analysis Batch: 1566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1516

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	530.5		50.0		mg/Kg		04/08/21 11:45	04/09/21 22:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 11:45	04/09/21 22:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 11:45	04/09/21 22:08	1
Total TPH	530.5		50.0		mg/Kg		04/08/21 11:45	04/09/21 22:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*04/08/21 11:45*	*04/09/21 22:08*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/08/21 11:45*	*04/09/21 22:08*	*1*

Lab Sample ID: LCS 880-1516/2-A
Matrix: Solid
Analysis Batch: 1566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1516

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1180		mg/Kg		118	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1005		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-1516/3-A
Matrix: Solid
Analysis Batch: 1566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1516

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1187		mg/Kg		119	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	976.9		mg/Kg		98	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1778/1-A
Matrix: Solid
Analysis Batch: 1957

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			04/18/21 20:42	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1778/2-A
Matrix: Solid
Analysis Batch: 1957

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	257.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-1778/3-A
Matrix: Solid
Analysis Batch: 1957

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	247.2		mg/Kg		99	90 - 110	4	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

GC VOA

Prep Batch: 1511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Total/NA	Solid	5035	
890-498-2	CH02 A	Total/NA	Solid	5035	
MB 880-1511/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1511/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1511/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Total/NA	Solid	8021B	1511
890-498-2	CH02 A	Total/NA	Solid	8021B	1511
MB 880-1511/5-A	Method Blank	Total/NA	Solid	8021B	1511
LCS 880-1511/1-A	Lab Control Sample	Total/NA	Solid	8021B	1511
LCSD 880-1511/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1511

GC Semi VOA

Prep Batch: 1516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Total/NA	Solid	8015NM Prep	
890-498-2	CH02 A	Total/NA	Solid	8015NM Prep	
MB 880-1516/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1516/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1516/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Total/NA	Solid	8015B NM	1516
890-498-2	CH02 A	Total/NA	Solid	8015B NM	1516
MB 880-1516/1-A	Method Blank	Total/NA	Solid	8015B NM	1516
LCS 880-1516/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1516
LCSD 880-1516/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1516

HPLC/IC

Leach Batch: 1778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Soluble	Solid	DI Leach	
890-498-2	CH02 A	Soluble	Solid	DI Leach	
MB 880-1778/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-498-1	CH02	Soluble	Solid	300.0	1778
890-498-2	CH02 A	Soluble	Solid	300.0	1778
MB 880-1778/1-A	Method Blank	Soluble	Solid	300.0	1778
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	300.0	1778
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1778

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-498-1
Project/Site: PLU PB 25-25-30

Client Sample ID: CH02 Lab Sample ID: 890-498-1

Date Collected: 04/07/21 12:20 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1511	04/08/21 11:09	MR	XM
Total/NA	Analysis	8021B		1	1569	04/09/21 20:15	MR	XM
Total/NA	Prep	8015NM Prep			1516	04/08/21 11:45	DM	XM
Total/NA	Analysis	8015B NM		1	1566	04/10/21 07:20	AJ	XM
Soluble	Leach	DI Leach			1778	04/14/21 10:22	SC	XM
Soluble	Analysis	300.0		1	1957	04/18/21 23:04	WP	XM

Client Sample ID: CH02 A Lab Sample ID: 890-498-2

Date Collected: 04/07/21 12:40 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1511	04/08/21 11:09	MR	XM
Total/NA	Analysis	8021B		1	1569	04/09/21 20:35	MR	XM
Total/NA	Prep	8015NM Prep			1516	04/08/21 11:45	DM	XM
Total/NA	Analysis	8015B NM		1	1566	04/10/21 07:44	AJ	XM
Soluble	Leach	DI Leach			1778	04/14/21 10:22	SC	XM
Soluble	Analysis	300.0		1	1957	04/18/21 23:09	WP	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-498-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-498-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-498-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-498-1	CH02	Solid	04/07/21 12:20	04/07/21 17:00	- 1
890-498-2	CH02 A	Solid	04/07/21 12:40	04/07/21 17:00	- 2

Chain of Custody

Work Order No: _____

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

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TE012921033	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):		Thermometer ID	
Received Intact:	(Yes) No		ZNM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	3.8
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3.6

Work Order Notes

I. N. H
nAPP2106357887
C.C. #
1137191001

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

890-498 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
CH02	S	4-7-21	1220	1'	1	✓	✓	✓	
CH02A	1	1	1240	2'	1	✓	✓	✓	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4-7-21 1700	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-498-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
CH02 (890-498-1)	4/7/21	12 20 Mountain		Solid			X	X	X	1	
CH02 A (890-498-2)	4/7/21	12 40 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: 4.8.21					
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-498-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
CH02 (890-498-1)	4/7/21	12 20 Mountain		Solid			X	X	X	4	
CH02 A (890-498-2)	4/7/21	12 40 Mountain		Solid			X	X	X	4	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
1	Cloe Cuff 4.8.21				4-8-21 2400pm	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-498-1
SDG Number:

Login Number: 498
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: 890-498-1
SDG Number:

Login Number: 498
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/08/21 03:34 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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-499-1
Client Project/Site: PLU PB 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/15/2021 6:38:08 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Laboratory Job ID: 890-499-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 21

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-499-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-499-1

Job ID: 890-499-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-499-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2021 5:00 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 was 3.6º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH03 (890-499-1) and CH03 A (890-499-2).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1589 and analytical batch 880-1569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

Client Sample ID: CH03

Lab Sample ID: 890-499-1
Matrix: Solid
Date Collected: 04/07/21 13:00
Date Received: 04/07/21 17:00
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		04/09/21 12:06	04/10/21 03:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 03:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 03:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/09/21 12:06	04/10/21 03:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 03:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/09/21 12:06	04/10/21 03:10	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:10*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:10*	*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		04/08/21 15:43	04/09/21 03:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 03:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 03:36	1
Total TPH	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/08/21 15:43*	*04/09/21 03:36*	*1*
o-Terphenyl	*102*		*70 - 130*	*04/08/21 15:43*	*04/09/21 03:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.1**		5.00		mg/Kg			04/15/21 14:23	1

Client Sample ID: CH03 A

Lab Sample ID: 890-499-2
Matrix: Solid
Date Collected: 04/07/21 13:20
Date Received: 04/07/21 17:00
Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/09/21 12:06	04/10/21 03:30	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:30*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:30*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

Client Sample ID: CH03 A
Date Collected: 04/07/21 13:20
Date Received: 04/07/21 17:00
Sample Depth: 2'

Lab Sample ID: 890-499-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 03:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 03:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 03:57	1
Total TPH	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/08/21 15:43*	*04/09/21 03:57*	*1*
o-Terphenyl	*97*		*70 - 130*	*04/08/21 15:43*	*04/09/21 03:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.5**		5.01		mg/Kg			04/15/21 14:28	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-499-1	CH03	86	108
890-499-2	CH03 A	98	110
LCS 880-1589/1-A	Lab Control Sample	93	114
LCSD 880-1589/2-A	Lab Control Sample Dup	94	111
MB 880-1511/5-A	Method Blank	103	108
MB 880-1589/5-A	Method Blank	102	101

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-499-1	CH03	99	102
890-499-2	CH03 A	95	97
LCS 880-1546/2-A	Lab Control Sample	109	104
LCSD 880-1546/3-A	Lab Control Sample Dup	106	104
MB 880-1546/1-A	Method Blank	109	117

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1511/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1511

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*

Lab Sample ID: MB 880-1589/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1589

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*

Lab Sample ID: LCS 880-1589/1-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09701		mg/Kg		97	70 - 130		
Toluene			0.100	0.09986		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.09672		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1935		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09580		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

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

Lab Sample ID: LCSD 880-1589/2-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09714		mg/Kg		97	70 - 130	0	35
Toluene			0.100	0.09960		mg/Kg		100	70 - 130	0	35
Ethylbenzene			0.100	0.09878		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1923		mg/Kg		96	70 - 130	1	35
o-Xylene			0.100	0.09333		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-1546/1-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1546

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		04/08/21 15:43	04/08/21 23:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Total TPH	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*
o-Terphenyl	*117*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*

Lab Sample ID: LCS 880-1546/2-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1157		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1077		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1152		mg/Kg		115	70 - 130	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

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

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1117		mg/Kg		112	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1756/1-A
Matrix: Solid
Analysis Batch: 1805

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			04/14/21 23:32	1

Lab Sample ID: LCS 880-1756/2-A
Matrix: Solid
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	230.5		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-1756/3-A
Matrix: Solid
Analysis Batch: 1805

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	254.0		mg/Kg		102	90 - 110	10	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

GC VOA

Prep Batch: 1511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1511/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Total/NA	Solid	8021B	1589
890-499-2	CH03 A	Total/NA	Solid	8021B	1589
MB 880-1511/5-A	Method Blank	Total/NA	Solid	8021B	1511
MB 880-1589/5-A	Method Blank	Total/NA	Solid	8021B	1589
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	8021B	1589
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1589

Prep Batch: 1589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Total/NA	Solid	5035	
890-499-2	CH03 A	Total/NA	Solid	5035	
MB 880-1589/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Total/NA	Solid	8015B NM	1546
890-499-2	CH03 A	Total/NA	Solid	8015B NM	1546
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015B NM	1546
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1546
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1546

Prep Batch: 1546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Total/NA	Solid	8015NM Prep	
890-499-2	CH03 A	Total/NA	Solid	8015NM Prep	
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Soluble	Solid	DI Leach	
890-499-2	CH03 A	Soluble	Solid	DI Leach	
MB 880-1756/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-499-1	CH03	Soluble	Solid	300.0	1756
890-499-2	CH03 A	Soluble	Solid	300.0	1756
MB 880-1756/1-A	Method Blank	Soluble	Solid	300.0	1756

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

HPLC/IC (Continued)

Analysis Batch: 1805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	300.0	1756
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1756

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-499-1
Project/Site: PLU PB 25-25-30

Client Sample ID: CH03 Lab Sample ID: 890-499-1

Date Collected: 04/07/21 13:00 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 03:10	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 03:36	AJ	XM
Soluble	Leach	DI Leach			1756	04/14/21 08:33	CH	XM
Soluble	Analysis	300.0		1	1805	04/15/21 14:23	CH	XM

Client Sample ID: CH03 A Lab Sample ID: 890-499-2

Date Collected: 04/07/21 13:20 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 03:30	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 03:57	AJ	XM
Soluble	Leach	DI Leach			1756	04/14/21 08:33	CH	XM
Soluble	Analysis	300.0		1	1805	04/15/21 14:28	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 890-499-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-499-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-499-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-499-1	CH03	Solid	04/07/21 13:00	04/07/21 17:00	1'
890-499-2	CH03 A	Solid	04/07/21 13:20	04/07/21 17:00	2'

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TE012921035	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No		INM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	3.8	
Sample Custody Seals:	Yes No N/A	Total Containers:	3.6	

Work Order Notes

I.N. # nAPP2106357887
C.C # 1137191001

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

890-499 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
CH03	S	4-7-21	1300	1'	1	✓	✓	✓	
CH03A	S	1	1320	2'	1	✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4-7-21 1700	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TE012921033	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):		Thermometer ID		
Received Intact:	Yes No		TNM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	3.8	
Sample Custody Seals:	Yes No N/A	Total Containers:	3-6	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH03	S	4-7-21	1300	1'	1	✓	✓	✓
CH03A	S	1	1320	2'	1	✓	✓	✓

890-499 Chain of Custody

Work Order Notes

I.N.# nAPP2106357887
C.C.# 1137191001

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4-7-21 1700	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-499-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701	PO #:			
Phone: 432-704-5440(Tel)	WO #:			
Email				
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
CH03 (890-499-1)	4/7/21	13 00 Mountain		Solid			X	X	X	1	
CH03 A (890-499-2)	4/7/21	13 20 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Ana Anita 4.8.21	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-499-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5036FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
CH03 (890-499-1)	4/7/21	13 00 Mountain		Solid			X	X	X	1	
CH03 A (890-499-2)	4/7/21	13 20 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Chris Castro 4.8.21				4-8-21 2:40 pm	
2						
3						

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-499-1
SDG Number:

Login Number: 499
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: 890-499-1
SDG Number:

Login Number: 499
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/08/21 03:33 PM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-500-1
Client Project/Site: PLU PB 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/15/2021 6:40:18 PM

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

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Laboratory Job ID: 890-500-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 21

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-500-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-500-1

Job ID: 890-500-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-500-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2021 5:00 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 was 3.6º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH04 (890-500-1) and CH04 A (890-500-2).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1589 and analytical batch 880-1569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

Client Sample ID: CH04

Date Collected: 04/07/21 13:40
Date Received: 04/07/21 17:00
Sample Depth: 1'

Lab Sample ID: 890-500-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 03:51	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:51*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*04/09/21 12:06*	*04/10/21 03:51*	*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		04/08/21 15:43	04/09/21 04:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 04:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 04:18	1
Total TPH	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/09/21 04:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/08/21 15:43*	*04/09/21 04:18*	*1*
o-Terphenyl	*98*		*70 - 130*	*04/08/21 15:43*	*04/09/21 04:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**219**		5.01		mg/Kg			04/15/21 14:33	1

Client Sample ID: CH04 A

Date Collected: 04/07/21 13:50
Date Received: 04/07/21 17:00
Sample Depth: 2'

Lab Sample ID: 890-500-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00230**		0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 04:12	1
Total BTEX	**0.00230**		0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:12*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:12*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

Client Sample ID: CH04 A

Date Collected: 04/07/21 13:50
Date Received: 04/07/21 17:00
Sample Depth: 2'

Lab Sample ID: 890-500-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:01	1
Total TPH	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:01*	*1*
o-Terphenyl	*110*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.3**		5.03		mg/Kg			04/15/21 14:38	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-500-1	CH04	90	110
890-500-2	CH04 A	90	108
LCS 880-1589/1-A	Lab Control Sample	93	114
LCSD 880-1589/2-A	Lab Control Sample Dup	94	111
MB 880-1511/5-A	Method Blank	103	108
MB 880-1589/5-A	Method Blank	102	101

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-500-1	CH04	95	98
890-500-2	CH04 A	106	110
LCS 880-1546/2-A	Lab Control Sample	109	104
LCSD 880-1546/3-A	Lab Control Sample Dup	106	104
MB 880-1546/1-A	Method Blank	109	117

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1511/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1511

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*

Lab Sample ID: MB 880-1589/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1589

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*

Lab Sample ID: LCS 880-1589/1-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09701		mg/Kg		97	70 - 130		
Toluene			0.100	0.09986		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.09672		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1935		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09580		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

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

Lab Sample ID: LCSD 880-1589/2-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09714		mg/Kg		97	70 - 130	0	35
Toluene			0.100	0.09960		mg/Kg		100	70 - 130	0	35
Ethylbenzene			0.100	0.09878		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1923		mg/Kg		96	70 - 130	1	35
o-Xylene			0.100	0.09333		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-1546/1-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1546

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		04/08/21 15:43	04/08/21 23:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Total TPH	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*
o-Terphenyl	*117*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*

Lab Sample ID: LCS 880-1546/2-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1157		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1077		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1152		mg/Kg		115	70 - 130	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

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

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1117		mg/Kg		112	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1756/1-A
Matrix: Solid
Analysis Batch: 1805

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			04/14/21 23:32	1

Lab Sample ID: LCS 880-1756/2-A
Matrix: Solid
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	230.5		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-1756/3-A
Matrix: Solid
Analysis Batch: 1805

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	254.0		mg/Kg		102	90 - 110	10	20

QC Association Summary

Client: WSP USA Inc.
Job ID: 890-500-1
Project/Site: PLU PB 25-25-30

GC VOA

Prep Batch: 1511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1511/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Total/NA	Solid	8021B	1589
890-500-2	CH04 A	Total/NA	Solid	8021B	1589
MB 880-1511/5-A	Method Blank	Total/NA	Solid	8021B	1511
MB 880-1589/5-A	Method Blank	Total/NA	Solid	8021B	1589
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	8021B	1589
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1589

Prep Batch: 1589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Total/NA	Solid	5035	
890-500-2	CH04 A	Total/NA	Solid	5035	
MB 880-1589/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Total/NA	Solid	8015B NM	1546
890-500-2	CH04 A	Total/NA	Solid	8015B NM	1546
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015B NM	1546
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1546
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1546

Prep Batch: 1546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Total/NA	Solid	8015NM Prep	
890-500-2	CH04 A	Total/NA	Solid	8015NM Prep	
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Soluble	Solid	DI Leach	
890-500-2	CH04 A	Soluble	Solid	DI Leach	
MB 880-1756/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-500-1	CH04	Soluble	Solid	300.0	1756
890-500-2	CH04 A	Soluble	Solid	300.0	1756
MB 880-1756/1-A	Method Blank	Soluble	Solid	300.0	1756

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

HPLC/IC (Continued)

Analysis Batch: 1805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	300.0	1756
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1756

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-500-1
Project/Site: PLU PB 25-25-30

Client Sample ID: CH04 Lab Sample ID: 890-500-1

Date Collected: 04/07/21 13:40 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 03:51	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 04:18	AJ	XM
Soluble	Leach	DI Leach			1756	04/14/21 08:33	CH	XM
Soluble	Analysis	300.0		1	1805	04/15/21 14:33	CH	XM

Client Sample ID: CH04 A Lab Sample ID: 890-500-2

Date Collected: 04/07/21 13:50 **Matrix: Solid**
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 04:12	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 05:01	AJ	XM
Soluble	Leach	DI Leach			1756	04/14/21 08:33	CH	XM
Soluble	Analysis	300.0		1	1805	04/15/21 14:38	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-500-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-500-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-500-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-500-1	CH04	Solid	04/07/21 13:40	04/07/21 17:00	1'
890-500-2	CH04 A	Solid	04/07/21 13:50	04/07/21 17:00	2'

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TE012921035	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):		Thermometer ID	
Received Intact:	(Yes) No	NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	3.6
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3-6

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH04	S	4-7-21	1340	1'	1	✓	✓	✓
CH04A	1	1	1350	2'	1	✓	✓	✓

890-500 Chain of Custody

Work Order Notes

I. H. # nAPP2106357887
L. C. # 1137191001

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4-7-21 1900	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

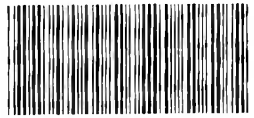
Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TE012921035	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):		Thermometer ID	
Received Intact:	Yes No	NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	3.5
Sample Custody Seals:	Yes No N/A	Total Containers:	3-6

ANALYSIS REQUEST



Work Order Notes

I. N. # nAPP2106357887
L.C.# 1137191001

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
CH04	S	4-7-21	1340	1'	1	✓	✓	✓	
CH04A	S	4-7-21	1350	2'	1	✓	✓	✓	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Tri Sch	Cle Cut	4.7.21 1900	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-500-1
Address: 1211 W Florida Ave ,	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note.
			Preservation Code:								
CH04 (890-500-1)	4/7/21	13 40 Mountain		Solid			X	X	X	1	
CH04 A (890-500-2)	4/7/21	13 50 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Cice Chyt 4.8.21	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

1 2 3 4 5 6 7 8 9 10 11 12 13 14

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-500-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X				X	
CH04 (890-500-1)	4/7/21	13 40 Mountain		Solid			X	X	X	1	
CH04 A (890-500-2)	4/7/21	13 50 Mountain		Solid			X	X	X	1	

Preservation Codes

A HCL	M Hexane
B NaOH	N None
C Zn Acetate	O AsNaO2
D Nitric Acid	P Na2O4S
E NaHSO4	Q Na2SO3
F MeOH	R Na2S2O3
G - Amchlor	S H2SO4
H Ascorbic Acid	T TSP Dodecahydrate
I Ice	U Acetone
J DI Water	V MCAA
K EDTA	W pH 4-5
L EDA	Z other (specify)

Other:

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

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For ________ Months*

Deliverable Requested I II III IV Other (specify) — Primary Deliverable Rank. 2

Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature] 4·8·21			[signature]	4-8-21 2:40p.m	

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

Ver 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-500-1
SDG Number:

Login Number: 500
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: 890-500-1
SDG Number:

Login Number: 500
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/08/21 03:34 PM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-501-1
Client Project/Site: PLU PB 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/19/2021 7:03:20 PM

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

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Laboratory Job ID: 890-501-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 12
Lab Chronicle 14
Certification Summary 15
Method Summary 16
Sample Summary 17
Chain of Custody 18
Receipt Checklists 21

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-501-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-501-1

Job ID: 890-501-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-501-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2021 5:00 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 was 3.6º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH05 (890-501-1) and CH05 A (890-501-2).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1589 and analytical batch 880-1569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Client Sample ID: CH05

Lab Sample ID: 890-501-1
Matrix: Solid
Date Collected: 04/07/21 14:10
Date Received: 04/07/21 17:00
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		04/09/21 12:06	04/10/21 04:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/09/21 12:06	04/10/21 04:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/09/21 12:06	04/10/21 04:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/09/21 12:06	04/10/21 04:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/09/21 12:06	04/10/21 04:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/09/21 12:06	04/10/21 04:32	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/09/21 12:06	04/10/21 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:32*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:32*	*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	<49.8	U	49.8		mg/Kg		04/08/21 15:43	04/09/21 05:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/08/21 15:43	04/09/21 05:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/08/21 15:43	04/09/21 05:22	1
Total TPH	<49.8	U	49.8		mg/Kg		04/08/21 15:43	04/09/21 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:22*	*1*
o-Terphenyl	*95*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.2**		5.02		mg/Kg			04/15/21 14:43	1

Client Sample ID: CH05 A

Lab Sample ID: 890-501-2
Matrix: Solid
Date Collected: 04/07/21 14:30
Date Received: 04/07/21 17:00
Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/09/21 12:06	04/10/21 04:53	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/09/21 12:06	04/10/21 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:53*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*04/09/21 12:06*	*04/10/21 04:53*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Client Sample ID: CH05 A
Date Collected: 04/07/21 14:30
Date Received: 04/07/21 17:00
Sample Depth: 2'

Lab Sample ID: 890-501-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:43	1
Total TPH	<49.9	U	49.9		mg/Kg		04/08/21 15:43	04/09/21 05:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:43*	*1*
o-Terphenyl	*100*		*70 - 130*	*04/08/21 15:43*	*04/09/21 05:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.3**		4.98		mg/Kg			04/19/21 12:17	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-501-1	CH05	93	112
890-501-2	CH05 A	95	112
LCS 880-1589/1-A	Lab Control Sample	93	114
LCSD 880-1589/2-A	Lab Control Sample Dup	94	111
MB 880-1511/5-A	Method Blank	103	108
MB 880-1589/5-A	Method Blank	102	101

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-501-1	CH05	95	95
890-501-2	CH05 A	96	100
LCS 880-1546/2-A	Lab Control Sample	109	104
LCSD 880-1546/3-A	Lab Control Sample Dup	106	104
MB 880-1546/1-A	Method Blank	109	117

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1511/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1511

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*

Lab Sample ID: MB 880-1589/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1589

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*

Lab Sample ID: LCS 880-1589/1-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09701		mg/Kg		97	70 - 130		
Toluene			0.100	0.09986		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.09672		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1935		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09580		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

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

Lab Sample ID: LCSD 880-1589/2-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09714		mg/Kg		97	70 - 130	0	35
Toluene			0.100	0.09960		mg/Kg		100	70 - 130	0	35
Ethylbenzene			0.100	0.09878		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1923		mg/Kg		96	70 - 130	1	35
o-Xylene			0.100	0.09333		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-1546/1-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1546

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		04/08/21 15:43	04/08/21 23:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1
Total TPH	<50.0	U	50.0		mg/Kg		04/08/21 15:43	04/08/21 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*
o-Terphenyl	*117*		*70 - 130*	*04/08/21 15:43*	*04/08/21 23:23*	*1*

Lab Sample ID: LCS 880-1546/2-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1157		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1077		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1152		mg/Kg		115	70 - 130	0	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

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

Lab Sample ID: LCSD 880-1546/3-A
Matrix: Solid
Analysis Batch: 1499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1117		mg/Kg		112	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1756/1-A
Matrix: Solid
Analysis Batch: 1805

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			04/14/21 23:32	1

Lab Sample ID: LCS 880-1756/2-A
Matrix: Solid
Analysis Batch: 1805

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	230.5		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-1756/3-A
Matrix: Solid
Analysis Batch: 1805

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	254.0		mg/Kg		102	90 - 110	10	20

Lab Sample ID: MB 880-1778/1-A
Matrix: Solid
Analysis Batch: 1957

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			04/18/21 20:42	1

Lab Sample ID: LCS 880-1778/2-A
Matrix: Solid
Analysis Batch: 1957

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	257.7		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-1778/3-A
Matrix: Solid
Analysis Batch: 1957

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	247.2		mg/Kg		99	90 - 110	4	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-501-2 MS
Matrix: Solid
Analysis Batch: 1957

Client Sample ID: CH05 A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	30.3		249	284.0		mg/Kg		102	90 - 110		

Lab Sample ID: 890-501-2 MSD
Matrix: Solid
Analysis Batch: 1957

Client Sample ID: CH05 A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.3		249	289.1		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

GC VOA

Prep Batch: 1511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1511/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Total/NA	Solid	8021B	1589
890-501-2	CH05 A	Total/NA	Solid	8021B	1589
MB 880-1511/5-A	Method Blank	Total/NA	Solid	8021B	1511
MB 880-1589/5-A	Method Blank	Total/NA	Solid	8021B	1589
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	8021B	1589
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1589

Prep Batch: 1589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Total/NA	Solid	5035	
890-501-2	CH05 A	Total/NA	Solid	5035	
MB 880-1589/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Total/NA	Solid	8015B NM	1546
890-501-2	CH05 A	Total/NA	Solid	8015B NM	1546
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015B NM	1546
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1546
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1546

Prep Batch: 1546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Total/NA	Solid	8015NM Prep	
890-501-2	CH05 A	Total/NA	Solid	8015NM Prep	
MB 880-1546/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1546/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Soluble	Solid	DI Leach	
MB 880-1756/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 1778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-2	CH05 A	Soluble	Solid	DI Leach	
MB 880-1778/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

HPLC/IC (Continued)

Leach Batch: 1778 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-2 MS	CH05 A	Soluble	Solid	DI Leach	
890-501-2 MSD	CH05 A	Soluble	Solid	DI Leach	

Analysis Batch: 1805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-1	CH05	Soluble	Solid	300.0	1756
MB 880-1756/1-A	Method Blank	Soluble	Solid	300.0	1756
LCS 880-1756/2-A	Lab Control Sample	Soluble	Solid	300.0	1756
LCSD 880-1756/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1756

Analysis Batch: 1957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-501-2	CH05 A	Soluble	Solid	300.0	1778
MB 880-1778/1-A	Method Blank	Soluble	Solid	300.0	1778
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	300.0	1778
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1778
890-501-2 MS	CH05 A	Soluble	Solid	300.0	1778
890-501-2 MSD	CH05 A	Soluble	Solid	300.0	1778

Lab Chronicle

Client: WSP USA Inc.
Job ID: 890-501-1
Project/Site: PLU PB 25-25-30

Client Sample ID: CH05
Lab Sample ID: 890-501-1
Date Collected: 04/07/21 14:10
Matrix: Solid
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 04:32	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 05:22	AJ	XM
Soluble	Leach	DI Leach			1756	04/14/21 08:33	CH	XM
Soluble	Analysis	300.0		1	1805	04/15/21 14:43	CH	XM

Client Sample ID: CH05 A
Lab Sample ID: 890-501-2
Date Collected: 04/07/21 14:30
Matrix: Solid
Date Received: 04/07/21 17:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 04:53	MR	XM
Total/NA	Prep	8015NM Prep			1546	04/08/21 15:43	DM	XM
Total/NA	Analysis	8015B NM		1	1499	04/09/21 05:43	AJ	XM
Soluble	Leach	DI Leach			1778	04/14/21 10:22	SC	XM
Soluble	Analysis	300.0		1	1957	04/19/21 12:17	WP	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-501-1
Project/Site: PLU PB 25-25-30

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 PB 25-25-30

Job ID: 890-501-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-501-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-501-1	CH05	Solid	04/07/21 14:10	04/07/21 17:00	1'
890-501-2	CH05 A	Solid	04/07/21 14:30	04/07/21 17:00	2'

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	IE012921035	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):		Thermometer ID		
Received Intact:	(Yes) No	CNM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	3.8	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3-10	

Work Order Notes

I. N. # nAPP2102357887
C. C. # 113271491001

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
CH05	S	4-7-21	1410	1'	1	✓	✓	✓	
CH05A	1	1	1430	2'	1	✓	✓	✓	

890-501 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4.7.21 1700	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-501-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G - Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K - EDTA, L EDA, M Hexane, N - None, O AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
CH05 (890-501-1)	4/7/21	14 10 Mountain		Solid			X	X	X	1	
CH05 A (890-501-2)	4/7/21	14 30 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by: Coe Clift 4-8-21					
Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company

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

Ver. 11/01/2020

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-501-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
CH05 (890-501-1)	4/7/21	14 10 Mountain		Solid			X	X	X	1	
CH05 A (890-501-2)	4/7/21	14 30 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by: Cae Cat 4-8-21	Date/Time:	Company	Received by:	Date/Time: 4-8-21 2:40 PM	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-501-1
SDG Number:

Login Number: 501
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: 890-501-1
SDG Number:

Login Number: 501
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/08/21 03:35 PM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-502-1
Laboratory Sample Delivery Group: TE012921035
Client Project/Site: PLU PB 25-25-30
Revision: 1

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/22/2021 12:55:06 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Laboratory Job ID: 890-502-1
SDG: TE012921035

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 20

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

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 PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Job ID: 890-502-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-502-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 4/19/2021. The report (revision 1) is being revised due to: Per client request, re running samples 001 & 002 for TPH and Chloride.

Receipt
The samples were received on 4/7/2021 5:00 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 was 3.6º C.

Receipt Exceptions

Per client request, re running samples 001 & 002 for TPH and Chloride

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-1589 and analytical batch 880-1569 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Client Sample ID: CH01

Date Collected: 04/07/21 11:25
Date Received: 04/07/21 17:00
Sample Depth: - 1

Lab Sample ID: 890-502-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/09/21 12:06	04/10/21 06:58	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*04/09/21 12:06*	*04/10/21 06:58*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*04/09/21 12:06*	*04/10/21 06:58*	*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		04/20/21 13:48	04/21/21 08:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/20/21 13:48	04/21/21 08:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/20/21 13:48	04/21/21 08:45	1
Total TPH	<49.9	U	49.9		mg/Kg		04/20/21 13:48	04/21/21 08:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*04/20/21 13:48*	*04/21/21 08:45*	*1*
o-Terphenyl	*124*		*70 - 130*	*04/20/21 13:48*	*04/21/21 08:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.4**		5.04		mg/Kg			04/18/21 22:18	1

Client Sample ID: CH01 A

Date Collected: 04/07/21 11:40
Date Received: 04/07/21 17:00
Sample Depth: - 2

Lab Sample ID: 890-502-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		04/09/21 12:06	04/10/21 07:19	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/09/21 12:06	04/10/21 07:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*04/09/21 12:06*	*04/10/21 07:19*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*04/09/21 12:06*	*04/10/21 07:19*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Client Sample ID: CH01 A

Date Collected: 04/07/21 11:40
Date Received: 04/07/21 17:00
Sample Depth: - 2

Lab Sample ID: 890-502-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 09:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 09:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 09:06	1
Total TPH	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*04/20/21 13:48*	*04/21/21 09:06*	*1*
o-Terphenyl	*110*		*70 - 130*	*04/20/21 13:48*	*04/21/21 09:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**472**		25.0		mg/Kg			04/21/21 11:15	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-502-1	CH01	90	110
890-502-2	CH01 A	98	116
LCS 880-1589/1-A	Lab Control Sample	93	114
LCSD 880-1589/2-A	Lab Control Sample Dup	94	111
MB 880-1511/5-A	Method Blank	103	108
MB 880-1589/5-A	Method Blank	102	101

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-502-1	CH01	122	124
890-502-2	CH01 A	113	110
LCS 880-2048/2-A	Lab Control Sample	123	106
LCSD 880-2048/3-A	Lab Control Sample Dup	123	108
MB 880-2048/1-A	Method Blank	111	111

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1511/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1511

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/08/21 11:09	04/09/21 12:19	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 11:09	04/09/21 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/08/21 11:09*	*04/09/21 12:19*	*1*

Lab Sample ID: MB 880-1589/5-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1589

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/09/21 12:06	04/10/21 02:06	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/09/21 12:06	04/10/21 02:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/09/21 12:06*	*04/10/21 02:06*	*1*

Lab Sample ID: LCS 880-1589/1-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09701		mg/Kg		97	70 - 130		
Toluene			0.100	0.09986		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.09672		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.1935		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09580		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

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

Lab Sample ID: LCSD 880-1589/2-A
Matrix: Solid
Analysis Batch: 1569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1589

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09714		mg/Kg		97	70 - 130	0	35
Toluene			0.100	0.09960		mg/Kg		100	70 - 130	0	35
Ethylbenzene			0.100	0.09878		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1923		mg/Kg		96	70 - 130	1	35
o-Xylene			0.100	0.09333		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-2048/1-A
Matrix: Solid
Analysis Batch: 2044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 2048

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		04/20/21 13:48	04/21/21 00:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 00:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 00:39	1
Total TPH	<50.0	U	50.0		mg/Kg		04/20/21 13:48	04/21/21 00:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*04/20/21 13:48*	*04/21/21 00:39*	*1*
o-Terphenyl	*111*		*70 - 130*	*04/20/21 13:48*	*04/21/21 00:39*	*1*

Lab Sample ID: LCS 880-2048/2-A
Matrix: Solid
Analysis Batch: 2044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 2048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1253		mg/Kg		125	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1068		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: LCSD 880-2048/3-A
Matrix: Solid
Analysis Batch: 2044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1235		mg/Kg		124	70 - 130	1	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

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

Lab Sample ID: LCSD 880-2048/3-A
Matrix: Solid
Analysis Batch: 2044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 2048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1065		mg/Kg		106	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1778/1-A
Matrix: Solid
Analysis Batch: 1957

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			04/18/21 20:42	1

Lab Sample ID: LCS 880-1778/2-A
Matrix: Solid
Analysis Batch: 1957

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	257.7		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-1778/3-A
Matrix: Solid
Analysis Batch: 1957

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	247.2		mg/Kg		99	90 - 110	4	20

Lab Sample ID: MB 880-2055/1-A
Matrix: Solid
Analysis Batch: 2094

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			04/21/21 08:58	1

Lab Sample ID: LCS 880-2055/2-A
Matrix: Solid
Analysis Batch: 2094

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	271.5		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-2055/3-A
Matrix: Solid
Analysis Batch: 2094

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	265.2		mg/Kg		106	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

GC VOA

Prep Batch: 1511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1511/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Total/NA	Solid	8021B	1589
890-502-2	CH01 A	Total/NA	Solid	8021B	1589
MB 880-1511/5-A	Method Blank	Total/NA	Solid	8021B	1511
MB 880-1589/5-A	Method Blank	Total/NA	Solid	8021B	1589
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	8021B	1589
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1589

Prep Batch: 1589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Total/NA	Solid	5035	
890-502-2	CH01 A	Total/NA	Solid	5035	
MB 880-1589/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1589/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1589/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 2044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Total/NA	Solid	8015B NM	2048
890-502-2	CH01 A	Total/NA	Solid	8015B NM	2048
MB 880-2048/1-A	Method Blank	Total/NA	Solid	8015B NM	2048
LCS 880-2048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2048
LCSD 880-2048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2048

Prep Batch: 2048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Total/NA	Solid	8015NM Prep	
890-502-2	CH01 A	Total/NA	Solid	8015NM Prep	
MB 880-2048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Soluble	Solid	DI Leach	
MB 880-1778/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-1	CH01	Soluble	Solid	300.0	1778
MB 880-1778/1-A	Method Blank	Soluble	Solid	300.0	1778
LCS 880-1778/2-A	Lab Control Sample	Soluble	Solid	300.0	1778
LCSD 880-1778/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1778

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

HPLC/IC

Leach Batch: 2055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-2	CH01 A	Soluble	Solid	DI Leach	
MB 880-2055/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2055/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2055/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 2094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-502-2	CH01 A	Soluble	Solid	300.0	2055
MB 880-2055/1-A	Method Blank	Soluble	Solid	300.0	2055
LCS 880-2055/2-A	Lab Control Sample	Soluble	Solid	300.0	2055
LCSD 880-2055/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2055

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Client Sample ID: CH01
Date Collected: 04/07/21 11:25
Date Received: 04/07/21 17:00

Lab Sample ID: 890-502-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 06:58	MR	XM
Total/NA	Prep	8015NM Prep			2048	04/20/21 13:48	DM	XM
Total/NA	Analysis	8015B NM		1	2044	04/21/21 08:45	AJ	XM
Soluble	Leach	DI Leach			1778	04/14/21 10:22	SC	XM
Soluble	Analysis	300.0		1	1957	04/18/21 22:18	WP	XM

Client Sample ID: CH01 A
Date Collected: 04/07/21 11:40
Date Received: 04/07/21 17:00

Lab Sample ID: 890-502-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1589	04/09/21 12:06	MR	XM
Total/NA	Analysis	8021B		1	1569	04/10/21 07:19	MR	XM
Total/NA	Prep	8015NM Prep			2048	04/20/21 13:48	DM	XM
Total/NA	Analysis	8015B NM		1	2044	04/21/21 09:06	AJ	XM
Soluble	Leach	DI Leach			2055	04/20/21 15:27	CH	XM
Soluble	Analysis	300.0		5	2094	04/21/21 11:15	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-502-1
Project/Site: PLU PB 25-25-30 SDG: TE012921035

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 PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU PB 25-25-30

Job ID: 890-502-1
SDG: TE012921035

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-502-1	CH01	Solid	04/07/21 11:25	04/07/21 17:00	- 1
890-502-2	CH01 A	Solid	04/07/21 11:40	04/07/21 17:00	- 2

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
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, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	PLU PB 25-25-30	Turn Around	
Project Number:	TEOQ921035	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	-0.2	Thermometer ID	
Received Intact:	(Yes) No		TNM-007
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	3.8
Sample Custody Seals:	Yes (No) N/A	Total Containers:	3.6

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH01	S	4-7-21	1125	1'	1	✓	✓	✓
CH01A	|	|	1146	2'	1	✓	✓	✓
CH01B	|	|	1200	4'	1	✓	✓	✓

890-502 Chain of Custody

Work Order Notes

IM # nAPP2106357887
C.C.H
1137141001

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

Sample Comments

Hold unless CH01A exceeds 600 cl

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		4.7.21 1700	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-502-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PLU PB 25-25-30	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O - AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
CH01 (890-502-1)	4/7/21	11 25 Mountain		Solid			X	X	X	1	
CH01 A (890-502-2)	4/7/21	11 40 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
Joe Ortiz 4.8.21					
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-154 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-502-1
Address: 1211 W Florida Ave	Due Date Requested: 4/13/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701	PO #:			
Phone: 432-704-5440(Tel)	WO #:			
Email	Project #: 89000004			
Project Name: PLU PB 25-25-30	SSOW#:			
Site:				

Analysis Requested

Preservation Codes

A HCL	M - Hexane
B NaOH	N None
C Zn Acetate	O AsNaO2
D Nitric Acid	P Na2O4S
E NaHSO4	Q Na2SO3
F MeOH	R Na2S2O3
G - Amchlor	S H2SO4
H Ascorbic Acid	T TSP Dodecahydrate
I Ice	U Acetone
J DI Water	V MCAA
K EDTA	W pH 4-5
L EDA	Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
Preservation Code:											
CH01 (890-502-1)	4/7/21	11 25 Mountain		Solid			X	X	X	1	
CH01 A (890-502-2)	4/7/21	11 40 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Joe Cuff 4.8.21	Date/Time:	Company	Received by:	Date/Time: 4-8-21 2:10pm	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-502-1
SDG Number: TE012921035

Login Number: 502
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: 890-502-1
SDG Number: TE012921035

Login Number: 502
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/08/21 04:06 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	

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 27939

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 27939
	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 #NAPP2106357887 PLU PB 25-25-30, thank you. This closure is approved.	7/20/2021