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	NRM2109735302
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of 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		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2109735302
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?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: Adrian Baker Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Location:	**PLU PB 25-25-30**	
Spill Date:	**3/24/2021**	
Area 1		
Approximate Area =	56.15	cu.ft.
VOLUME OF LEAK		
Total Produced Water =	10.00	bbls
TOTAL VOLUME OF LEAK		
Total Produced Water =	**10.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**10.00**	**bbls**

Incident ID	NRM2109735302
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	NRM2109735302
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: 5/28/2021

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

OCD Only

Received by: Date:

Incident ID	NRM2109735302
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: 5/28/2021

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:

State of New Mexico
Oil Conservation Division

Incident ID	NRM2109735302
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

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Printed Name: Kyle Littrell Title: Environmental Manager

Signature: Date: 5/28/2021

email: Kyle_Littrell@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 7/28/2021

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: 7/28/2021

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 28, 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 NAPP2109735302
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 Poker Lake Unit (PLU) Phantom Banks (PB) 25-25-30 (Site) located 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 the 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 NAPP2109735302.

RELEASE BACKGROUND

On March 24, 2021, a 3-inch steel dump line released approximately 10 barrels (bbls) of produced water within the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; all 10 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 the 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 on a Release Notification Form C-141 on April 7, 2021. The release was assigned Incident Number NAPP2109735302.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater

well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-03781, located approximately 2.1 miles north of the Site. The groundwater well has a reported depth to groundwater of 325 feet bgs and a total depth of 720 feet bgs. NMOSE well C-03781 was sampled most recently on February 19, 2015. All wells used for depth to groundwater determination are depicted on Figure 1 and referenced well records are provided in Attachment 1.

On February 24, 2021, in an effort to confirm depth to water in the area, a borehole (C-4498/POD1) was advanced to a depth of 109 feet bgs via truck-mounted hollow stem auger rig. The borehole was located approximately 0.5 miles northwest of the Site. A WSP geologist continuously logged and described soils. 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. The borehole was properly abandoned with hydrated bentonite chips. The location of borehole C-4498/POD1 is provided on Figure 1. The borehole lithologic/soil sampling log is included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent stream, located approximately 190 feet to the 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
- Total Petroleum Hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On March 30, 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 at a location near the tear in the liner to assess for the presence or absence of impacted soil. Four additional core holes (CH02 through CH05) were advanced around the outside of the lined

containment to confirm lateral delineation. Two soil samples were collected from each core hole, CH01 through CH05, at depths of approximately 1-foot and 4 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 a lithologic/soil sampling log 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. The 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 Xenco Laboratories (Xenco) 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 the delineation soil samples collected from core holes CH01 through CH05 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 reports are included as Attachment 4.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, WSP personnel advanced one core hole (CH01) near the location of the tear in the liner and four core holes (CH02 through CH05) around the lined containment, to assess for the presence or absence of soil impacts resulting from the March 24, 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 4 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 from the core holes 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, XTO respectfully requests NFA for Incident Number NAPP2109735302.

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

Sincerely,

WSP USA Inc.

Kaleb Henry
Assistant Consultant, Geologist

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

cc: 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 Logs
Attachment 3	Photographic Log
Attachment 4	Laboratory Analytical Reports

FIGURES

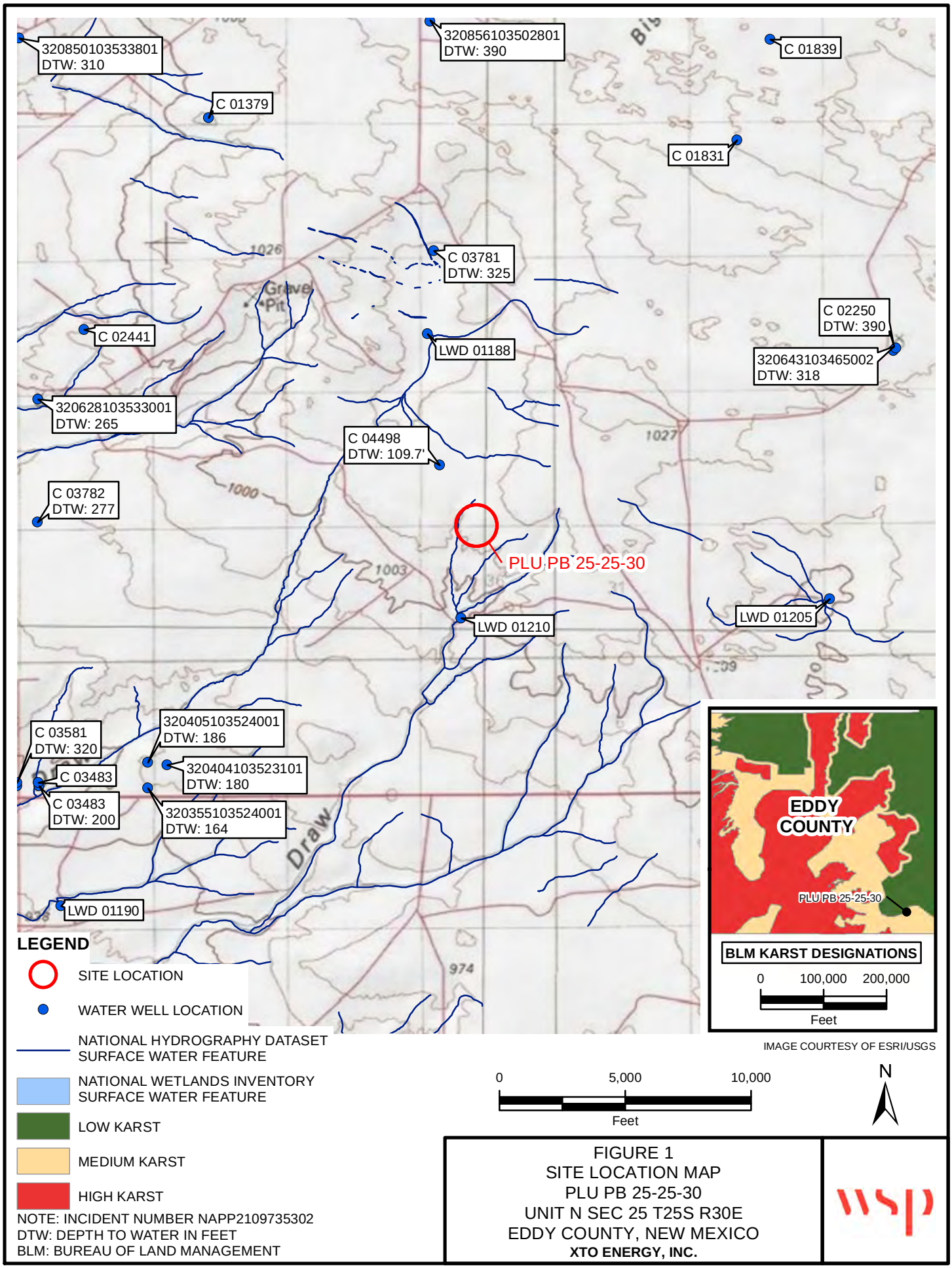
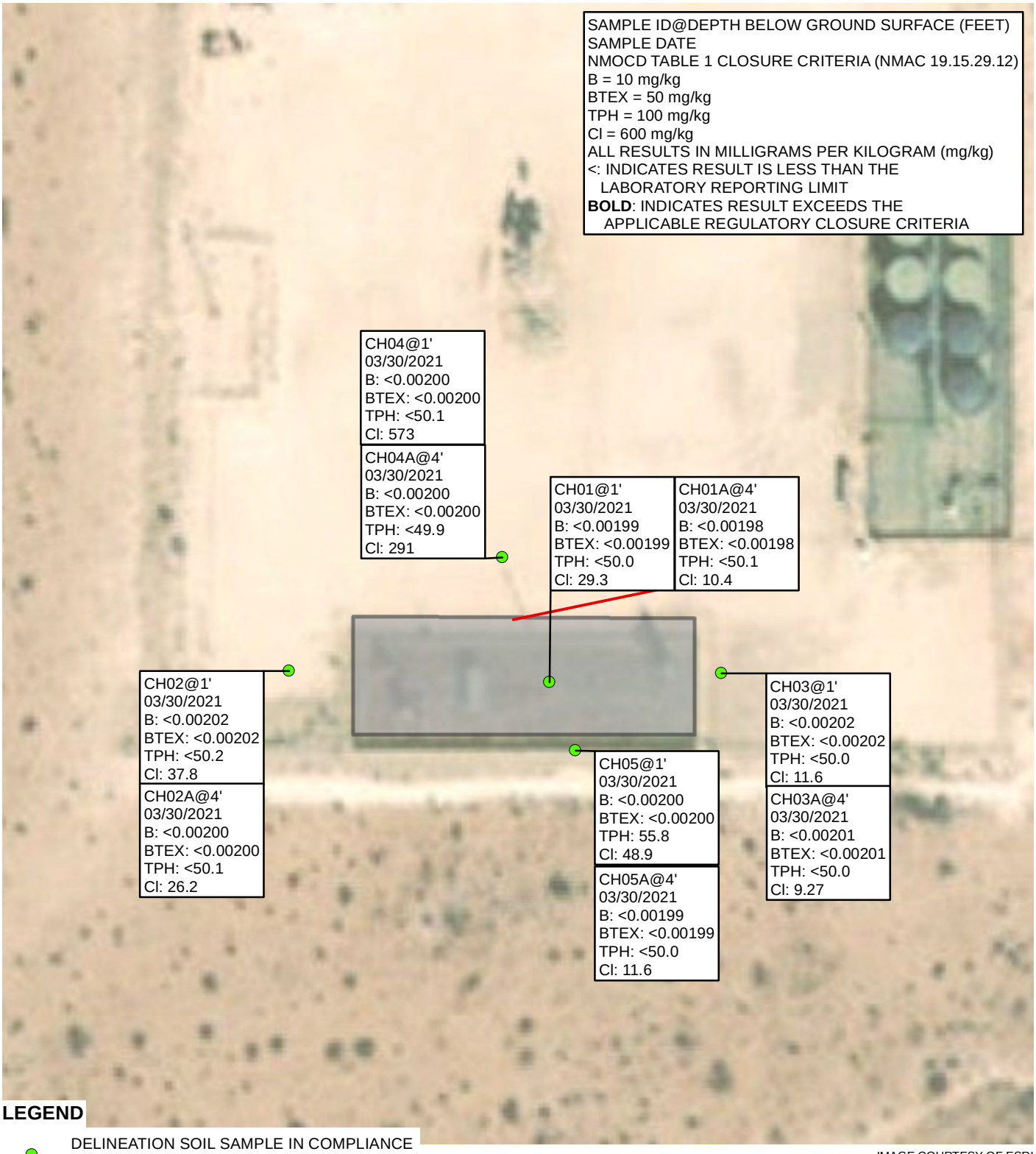


FIGURE 1
SITE LOCATION MAP
PLU PB 25-25-30
UNIT N SEC 25 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920072_PHANTOM BANKS 25-25-30 USA BATTERY\012920072_FIG01_SL_RECEPTOR_SECOND_RELEASE_2021.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NAPP2109735302

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\012920072_PHANTOM BANKS 25-25-30 USA BATTERY\012920072_FIG02_DELINEATION_SECOND_RELEASE_2021.mxd

TABLES

Table 1

Soil Analytical Results
PLU PB 25-25-30
Incident Number NAPP2109735302
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	03/30/2021	1	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	29.3
CH01A	03/30/2021	4	<0.00198	<0.00198	<50.1	<50.1	<50.1	<50.1	<50.1	10.4
CH02	03/30/2021	1	<0.00202	<0.00202	<50.2	<50.2	<50.2	<50.2	<50.2	37.8
CH02A	03/30/2021	4	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	26.2
CH03	03/30/2021	1	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	11.6
CH03A	03/30/2021	4	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	9.27
CH04	03/30/2021	1	<0.00200	<0.00200	<50.1	<50.1	<50.1	<50.1	<50.1	573
CH04A	03/30/2021	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	291
CH05	03/30/2021	1	<0.00200	<0.00200	<49.8	55.8	<49.8	55.8	55.8	48.9
CH05A	03/30/2021	4	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	11.6

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

ATTACHMENT 1: REFERENCED WELL RECORD

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 03781 POD1	3	3	3	13	25S	30E	609306	3554761

Driller License: 331 **Driller Company:** SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.

Driller Name:

Drill Start Date: 01/08/2015 **Drill Finish Date:** 01/10/2015 **Plug Date:**

Log File Date: 02/19/2015 **PCW Rcv Date:** **Source:** Artesian

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: 8.63 **Depth Well:** 720 feet **Depth Water:** 325 feet

Water Bearing Stratifications:	Top	Bottom	Description
	200	370	Sandstone/Gravel/Conglomerate
	370	390	Sandstone/Gravel/Conglomerate
	390	410	Sandstone/Gravel/Conglomerate
	410	440	Sandstone/Gravel/Conglomerate
	440	460	Shale/Mudstone/Siltstone
	460	470	Shale/Mudstone/Siltstone
	470	490	Shale/Mudstone/Siltstone
	490	500	Shale/Mudstone/Siltstone
	500	510	Sandstone/Gravel/Conglomerate
	510	530	Shale/Mudstone/Siltstone
	530	660	Shale/Mudstone/Siltstone
	660	690	Shale/Mudstone/Siltstone
	690	700	Shale/Mudstone/Siltstone
	700	720	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	340	720

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 APR 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):

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

DESCRIPTION:

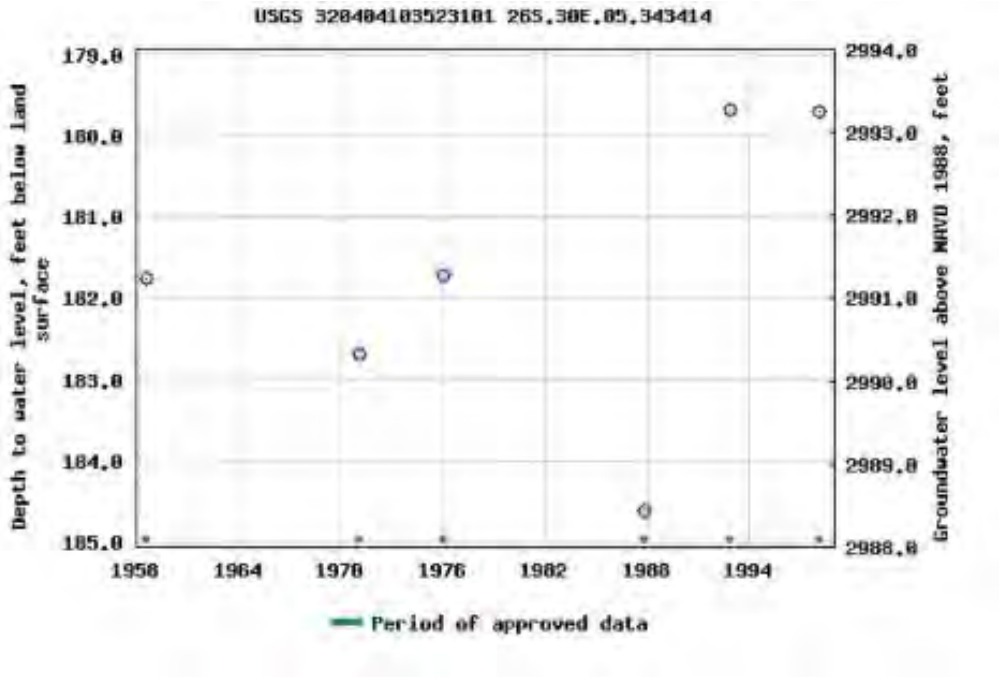
Latitude 32°04'04", Longitude 103°52'31" NAD27
Eddy County, New Mexico , Hydrologic Unit 13070001
Well depth: 775 feet
Land surface altitude: 3,173 feet above NAVD88.
Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-18	1998-01-28	6
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries



ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
CH01	3/30/2021
Site Name: PLU PB 25-25-30	
RP or Incident Number:	
LTE Job Number: TE012920072	
Logged By:	Method: Wet Core Drill
Hole Diameter: 1.5'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long:	Field Screening:
32.093941,-103.835973	Chloride, PID

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, light brown-tan, poorly consolidated, some small gravel, some oder, trace stain, fill
						0.5	SW-S	SANDSTONE w/caliche gravel, wet, brown-light brown, well consolidated, medium-coarse grain, well graded, some tan caliche gravel, few small chert gravel, no stain, no odor
wet	<168	1.0	n	CH01	1	1		
wet	<168	2.1	n			2		
						3		
wet	<168	2.1	m	CH01A	4	4		
								Total Depth: 4 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
CH02	3/30/2021

Site Name: PLU PB 25-25-30

RP or Incident Number: NRM2012453444

LTE Job Number: TE012920072

LITHOLOGIC / SOIL SAMPLING LOG

Logged By:	Method: Wet Core Drill

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.093941,-103.835973	Chloride, PID	1.5'	4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, light brown-tan, poorly consolidated, some small gravel, some oder, trace stain, fill
wet	<168	0.3	n	CH02	1	1	SW-S	SANDSTONE w/caliche gravel, wet, brown-light brown, well consolidated, medium-coarse grain, well graded, some tan caliche gravel, few small chert gravel, no stain, no odor
wet	<168	0.0	n			2		
						3		
wet	<168	0.0	n	CH02A	4	4		
								Total Depth: 4 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
CH03	3/30/2021
Site Name: PLU PB 25-25-30	
RP or Incident Number: NRM2012453444	
LTE Job Number: TE012920072	
Logged By: TC/BB	Method: Wet Core Drill
Hole Diameter: 1.5'	Total Depth: 4'

LITHOLOGIC / SOIL SAMPLING LOG

Lat/Long: 32.093941,-103.835973

Field Screening: Chloride, PID

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, light brown-tan, poorly consolidated, some small gravel, some oder, trace stain, fill
wet	<168	0.3	n	CH03	1	1	SW-S	SANDSTONE w/caliche gravel, wet, brown-light brown, well consolidated, medium-coarse grain, well graded, some tan caliche gravel, few small chert gravel, no stain, no odor
wet	257.6	0.1	n			2		
						3		
wet	<168	0.0	n	CH03A	4	4		
								Total Depth: 4 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
CH04	3/30/2021

Site Name: PLU PB 25-25-30

RP or Incident Number: NRM2012453444

LTE Job Number: TE012920072

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: TC/BB	Method: Wet Core Drill

Lat/Long:	Field Screening:	Hole Diameter:	Total Depth:
32.093941,-103.835973	Chloride, PID	1.5'	4'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, light brown-tan, poorly consolidated, some small gravel, some oder, trace stain, fill
wet	520	0.2	n	CH04	1	1	SW-S	SANDSTONE w/caliche gravel, wet, brown-light brown, well consolidated, medium-coarse grain, well graded, some tan caliche gravel, few small chert gravel, no stain, no odor
wet	364.0	0.1	n			2		
						3		
wet	229	0.1	n	CH04A	4	4		

Total Depth: 4 feet bgs

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or PH Name: CH05	Date: 3/30/2021
	Site Name: PLU PB 25-25-30	
	RP or Incident Number: NRM2012453444	
	LTE Job Number: TE012920072	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: TC/BB	Method: Wet Core Drill
Lat/Long: 32.093941,-103.835973	Field Screening: Chloride, PID	Hole Diameter: 1.5' / Total Depth: 4'
Comments:		

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	CALICHE, dry, light brown-tan, poorly consolidated, some small gravel, some oder, trace stain, fill
wet	<168	6.7	n	CH05	1	1	SW-S	SANDSTONE w/caliche gravel, wet, brown-light brown, well consolidated, medium-coarse grain, well graded, some tan caliche gravel, few small chert gravel, no stain, no odor
wet	<168	2.1	n			2		
						3		
wet	<168	1.0	n	CH05A	4	4		
								Total Depth: 4 feet bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU PB 25-25-30 Eddy County, New Mexico	TE012920072

Photo No.	Date
1	March 30, 2021

Northeast facing view of core hole within lined containment.

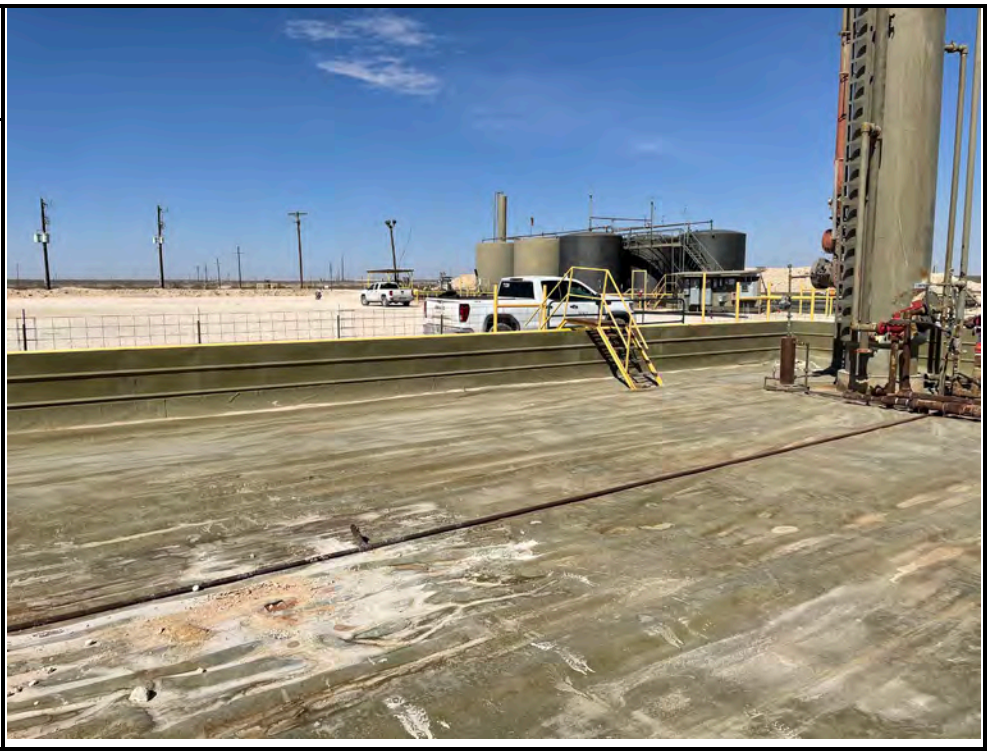


Photo No.	Date
2	March 30, 2021

West facing view of core hole within lined containment.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Job Number: 890-462-1

SDG Number: TE012920072

Job Description: Phantom Banks 25-25-30

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
4/12/2021 5:46 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
04/12/2021

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

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

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

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Lab Sample ID:	890-462-1	890-462-2
Client Sample ID:	CH01	CH01 A
Depth:	1	4
Matrix:	Solid	Solid
Date Collected:	03/30/2021 10:34	03/30/2021 10:49

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	04/06/2021 16:49		04/06/2021 16:49	
	Analyzed:	04/07/2021 05:22		04/07/2021 05:42	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00199 U	0.00199	<0.00198 U	0.00198
Toluene		<0.00199 U	0.00199	<0.00198 U	0.00198
Ethylbenzene		<0.00199 U	0.00199	<0.00198 U	0.00198
m-Xylene & p-Xylene		<0.00398 U	0.00398	<0.00396 U	0.00396
o-Xylene		<0.00199 U	0.00199	<0.00198 U	0.00198
Xylenes, Total		<0.00398 U	0.00398	<0.00396 U	0.00396
Total BTEX		<0.00199 U	0.00199	<0.00198 U	0.00198

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

	Prepared:	04/02/2021 09:33		04/02/2021 09:33	
	Analyzed:	04/02/2021 20:48		04/02/2021 21:10	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U *+	50.0	<50.1 U *+	50.1
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.1 U	50.1
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<50.1 U	50.1
Total TPH		<50.0 U	50.0	<50.1 U	50.1

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	04/11/2021 20:52		04/11/2021 20:58	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**29.3**	4.95	**10.4**	5.00

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-462-1
Laboratory Sample Delivery Group: TE012920072
Client Project/Site: Phantom Banks 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/12/2021 5:45:58 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: Phantom Banks 25-25-30

Laboratory Job ID: 890-462-1
SDG: TE012920072

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-462-1
Project/Site: Phantom Banks 25-25-30 SDG: TE012920072

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Job ID: 890-462-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-462-1

Receipt
The samples were received on 3/31/2021 1:21 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH01 (890-462-1) and CH01 A (890-462-2).

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Client Sample ID: CH01

Lab Sample ID: 890-462-1
Matrix: Solid
Date Collected: 03/30/21 10:34
Date Received: 03/31/21 13:21
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/21 16:49	04/07/21 05:22	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/06/21 16:49	04/07/21 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*04/06/21 16:49*	*04/07/21 05:22*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*04/06/21 16:49*	*04/07/21 05:22*	*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		04/02/21 09:33	04/02/21 20:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 20:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 20:48	1
Total TPH	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*04/02/21 09:33*	*04/02/21 20:48*	*1*
o-Terphenyl	*121*		*70 - 130*	*04/02/21 09:33*	*04/02/21 20:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.3**		4.95		mg/Kg			04/11/21 20:52	1

Client Sample ID: CH01 A

Lab Sample ID: 890-462-2
Matrix: Solid
Date Collected: 03/30/21 10:49
Date Received: 03/31/21 13:21
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/06/21 16:49	04/07/21 05:42	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		04/06/21 16:49	04/07/21 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*04/06/21 16:49*	*04/07/21 05:42*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/06/21 16:49*	*04/07/21 05:42*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Client Sample ID: CH01 A

Date Collected: 03/30/21 10:49
Date Received: 03/31/21 13:21
Sample Depth: - 4

Lab Sample ID: 890-462-2

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		04/02/21 09:33	04/02/21 21:10	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/02/21 09:33	04/02/21 21:10	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/02/21 09:33	04/02/21 21:10	1
Total TPH	<50.1	U	50.1		mg/Kg		04/02/21 09:33	04/02/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*04/02/21 09:33*	*04/02/21 21:10*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*04/02/21 09:33*	*04/02/21 21:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.4**		5.00		mg/Kg			04/11/21 20:58	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

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)										
890-462-1	CH01	127	106										
890-462-2	CH01 A	112	94										
LCS 880-1404/1-A	Lab Control Sample	104	105										
LCSD 880-1404/2-A	Lab Control Sample Dup	105	106										
MB 880-1404/5-A	Method Blank	105	97										

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)										
890-462-1	CH01	113	121										
890-462-2	CH01 A	131 S1+	136 S1+										
LCS 880-1228/2-A	Lab Control Sample	116	114										
LCSD 880-1228/3-A	Lab Control Sample Dup	117	114										
MB 880-1228/1-A	Method Blank	109	119										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1404/5-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1404

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*

Lab Sample ID: LCS 880-1404/1-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1045		mg/Kg		105	70 - 130		
Toluene			0.100	0.09651		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1967		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1008		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-1404/2-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	0	35
Toluene			0.100	0.09625		mg/Kg		96	70 - 130	0	35
Ethylbenzene			0.100	0.09959		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1955		mg/Kg		98	70 - 130	1	35
o-Xylene			0.100	0.09893		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

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

Lab Sample ID: MB 880-1228/1-A
Matrix: Solid
Analysis Batch: 1237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1228

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		04/02/21 09:33	04/02/21 12:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 12:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 12:15	1
Total TPH	<50.0	U	50.0		mg/Kg		04/02/21 09:33	04/02/21 12:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/02/21 09:33*	*04/02/21 12:15*	*1*
o-Terphenyl	*119*		*70 - 130*	*04/02/21 09:33*	*04/02/21 12:15*	*1*

Lab Sample ID: LCS 880-1228/2-A
Matrix: Solid
Analysis Batch: 1237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1228

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1363	*+	mg/Kg		136	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1084		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: LCSD 880-1228/3-A
Matrix: Solid
Analysis Batch: 1237

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1228

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1217		mg/Kg		122	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	1150		mg/Kg		115	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1542/1-A
Matrix: Solid
Analysis Batch: 1625

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			04/11/21 17:55	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1542/2-A
Matrix: Solid
Analysis Batch: 1625

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	254.2		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-1542/3-A
Matrix: Solid
Analysis Batch: 1625

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	245.1		mg/Kg		98	90 - 110	4	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-462-1
Project/Site: Phantom Banks 25-25-30 SDG: TE012920072

GC VOA

Analysis Batch: 1370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Total/NA	Solid	8021B	1404
890-462-2	CH01 A	Total/NA	Solid	8021B	1404
MB 880-1404/5-A	Method Blank	Total/NA	Solid	8021B	1404
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	8021B	1404
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1404

Prep Batch: 1404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Total/NA	Solid	5035	
890-462-2	CH01 A	Total/NA	Solid	5035	
MB 880-1404/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Total/NA	Solid	8015NM Prep	
890-462-2	CH01 A	Total/NA	Solid	8015NM Prep	
MB 880-1228/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1228/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Total/NA	Solid	8015B NM	1228
890-462-2	CH01 A	Total/NA	Solid	8015B NM	1228
MB 880-1228/1-A	Method Blank	Total/NA	Solid	8015B NM	1228
LCS 880-1228/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1228
LCSD 880-1228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1228

HPLC/IC

Leach Batch: 1542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Soluble	Solid	DI Leach	
890-462-2	CH01 A	Soluble	Solid	DI Leach	
MB 880-1542/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1542/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1542/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-462-1	CH01	Soluble	Solid	300.0	1542
890-462-2	CH01 A	Soluble	Solid	300.0	1542
MB 880-1542/1-A	Method Blank	Soluble	Solid	300.0	1542
LCS 880-1542/2-A	Lab Control Sample	Soluble	Solid	300.0	1542
LCSD 880-1542/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1542

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Client Sample ID: CH01
Date Collected: 03/30/21 10:34
Date Received: 03/31/21 13:21

Lab Sample ID: 890-462-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 05:22	AJ	XM
Total/NA	Prep	8015NM Prep			1228	04/02/21 09:33	DM	XM
Total/NA	Analysis	8015B NM		1	1237	04/02/21 20:48	AJ	XM
Soluble	Leach	DI Leach			1542	04/08/21 15:27	SC	XM
Soluble	Analysis	300.0		1	1625	04/11/21 20:52	CH	XM

Client Sample ID: CH01 A
Date Collected: 03/30/21 10:49
Date Received: 03/31/21 13:21

Lab Sample ID: 890-462-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 05:42	AJ	XM
Total/NA	Prep	8015NM Prep			1228	04/02/21 09:33	DM	XM
Total/NA	Analysis	8015B NM		1	1237	04/02/21 21:10	AJ	XM
Soluble	Leach	DI Leach			1542	04/08/21 15:27	SC	XM
Soluble	Analysis	300.0		1	1625	04/11/21 20:58	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: 890-462-1
Project/Site: Phantom Banks 25-25-30 SDG: TE012920072

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-462-1
Project/Site: Phantom Banks 25-25-30 SDG: TE012920072

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: Phantom Banks 25-25-30

Job ID: 890-462-1
SDG: TE012920072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-462-1	CH01	Solid	03/30/21 10:34	03/31/21 13:21	- 1
890-462-2	CH01 A	Solid	03/30/21 10:49	03/31/21 13:21	- 4

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

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4/12/2021

Project Manager:	Tacoma Morrissey	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:	Phantom Banks 25-25-30	Turn Around	
Project Number:	TE012920072	Routine	X
P.O. Number:	NRM2012953444	Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.0 / 0.8	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH01	S	3/30/21	1034	1'	1	X	X	X
CH01A	S	3/30/21	1049	4'	1	X	X	X

890-462 Chain of Custody

Work Order Notes

LC#: 1140221001
API#: 30-015-40756

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

Sample Comments

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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	Gabby Ordonez	3/31/21 13:21	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-462-1
SDG Number: TE012920072

Login Number: 462
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: 890-462-1
SDG Number: TE012920072

Login Number: 462
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/01/21 11:44 AM

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

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ANALYTICAL REPORT

Job Number: 890-463-1

SDG Number: TE012920072

Job Description: Phantom Bank 25-25-30

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
4/9/2021 4:40 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
04/09/2021

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

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

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

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

Lab Sample ID:	890-463-1	890-463-2
Client Sample ID:	CH02	CH02A
Depth:	1	4
Matrix:	Solid	Solid
Date Collected:	03/30/2021 15:20	03/30/2021 15:40

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	04/06/2021 16:49		04/06/2021 16:49	
	Analyzed:	04/07/2021 06:03		04/07/2021 06:23	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00202 U	0.00202	<0.00200 U	0.00200
Toluene		<0.00202 U	0.00202	<0.00200 U	0.00200
Ethylbenzene		<0.00202 U	0.00202	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00404 U	0.00404	<0.00401 U	0.00401
o-Xylene		<0.00202 U	0.00202	<0.00200 U	0.00200
Xylenes, Total		<0.00404 U	0.00404	<0.00401 U	0.00401
Total BTEX		<0.00202 U	0.00202	<0.00200 U	0.00200

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

	Prepared:	04/03/2021 13:41		04/03/2021 13:41	
	Analyzed:	04/05/2021 06:04		04/05/2021 06:26	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.2 U	50.2	<50.1 U	50.1
Diesel Range Organics (Over C10-C28)		<50.2 U	50.2	<50.1 U	50.1
OII Range Organics (Over C28-C36)		<50.2 U	50.2	<50.1 U	50.1
Total TPH		<50.2 U	50.2	<50.1 U	50.1

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	04/08/2021 20:45		04/08/2021 21:00	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**37.8**	4.97	**26.2**	4.97

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-463-1
Laboratory Sample Delivery Group: TE012920072
Client Project/Site: Phantom Bank 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/9/2021 4:40:50 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: Phantom Bank 25-25-30

Laboratory Job ID: 890-463-1
SDG: TE012920072

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

Job ID: 890-463-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-463-1

Receipt
The samples were received on 3/31/2021 1:21 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH02 (890-463-1) and CH02A (890-463-2).

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

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH02 Lab Sample ID: 890-463-1

Date Collected: 03/30/21 15:20 **Matrix: Solid**
Date Received: 03/31/21 13:21
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/06/21 16:49	04/07/21 06:03	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:03*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:03*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		04/03/21 13:41	04/05/21 06:04	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		04/03/21 13:41	04/05/21 06:04	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		04/03/21 13:41	04/05/21 06:04	1
Total TPH	<50.2	U	50.2		mg/Kg		04/03/21 13:41	04/05/21 06:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:04*	*1*
o-Terphenyl	*128*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.8**		4.97		mg/Kg			04/08/21 20:45	1

Client Sample ID: CH02A Lab Sample ID: 890-463-2

Date Collected: 03/30/21 15:40 **Matrix: Solid**
Date Received: 03/31/21 13:21
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/06/21 16:49	04/07/21 06:23	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:23*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:23*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH02A **Lab Sample ID: 890-463-2**
Date Collected: 03/30/21 15:40 **Matrix: Solid**
Date Received: 03/31/21 13:21
Sample Depth: - 4

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		04/03/21 13:41	04/05/21 06:26	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 06:26	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 06:26	1
Total TPH	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 06:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:26*	*1*
o-Terphenyl	*120*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.2**		4.97		mg/Kg			04/08/21 21:00	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

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)										
890-463-1	CH02	116	108										
890-463-2	CH02A	119	98										
LCS 880-1404/1-A	Lab Control Sample	104	105										
LCSD 880-1404/2-A	Lab Control Sample Dup	105	106										
MB 880-1404/5-A	Method Blank	105	97										

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)										
890-463-1	CH02	117	128										
890-463-2	CH02A	111	120										
LCS 880-1283/2-A	Lab Control Sample	121	116										
LCSD 880-1283/3-A	Lab Control Sample Dup	117	113										
MB 880-1283/1-A	Method Blank	100	104										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1404/5-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1404

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*

Lab Sample ID: LCS 880-1404/1-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1045		mg/Kg		105	70 - 130		
Toluene			0.100	0.09651		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1967		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1008		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-1404/2-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	0	35
Toluene			0.100	0.09625		mg/Kg		96	70 - 130	0	35
Ethylbenzene			0.100	0.09959		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1955		mg/Kg		98	70 - 130	1	35
o-Xylene			0.100	0.09893		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

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

Lab Sample ID: MB 880-1283/1-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1283

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		04/03/21 13:41	04/04/21 22:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*
o-Terphenyl	*104*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*

Lab Sample ID: LCS 880-1283/2-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1072		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 880-1283/3-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1076		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	976.6		mg/Kg		98	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1412/1-A
Matrix: Solid
Analysis Batch: 1523

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			04/08/21 19:02	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1412/2-A
Matrix: Solid
Analysis Batch: 1523

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	265.5		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-1412/3-A
Matrix: Solid
Analysis Batch: 1523

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	265.3		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

GC VOA

Analysis Batch: 1370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Total/NA	Solid	8021B	1404
890-463-2	CH02A	Total/NA	Solid	8021B	1404
MB 880-1404/5-A	Method Blank	Total/NA	Solid	8021B	1404
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	8021B	1404
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1404

Prep Batch: 1404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Total/NA	Solid	5035	
890-463-2	CH02A	Total/NA	Solid	5035	
MB 880-1404/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Total/NA	Solid	8015NM Prep	
890-463-2	CH02A	Total/NA	Solid	8015NM Prep	
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Total/NA	Solid	8015B NM	1283
890-463-2	CH02A	Total/NA	Solid	8015B NM	1283
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015B NM	1283
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1283
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1283

HPLC/IC

Leach Batch: 1412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Soluble	Solid	DI Leach	
890-463-2	CH02A	Soluble	Solid	DI Leach	
MB 880-1412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-463-1	CH02	Soluble	Solid	300.0	1412
890-463-2	CH02A	Soluble	Solid	300.0	1412
MB 880-1412/1-A	Method Blank	Soluble	Solid	300.0	1412
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	300.0	1412
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1412

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH02 Lab Sample ID: 890-463-1

Date Collected: 03/30/21 15:20 **Matrix: Solid**
Date Received: 03/31/21 13:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 06:03	AJ	XM
Total/NA	Prep	8015NM Prep			1283	04/03/21 13:41	DM	XM
Total/NA	Analysis	8015B NM		1	1291	04/05/21 06:04	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 20:45	CH	XM

Client Sample ID: CH02A Lab Sample ID: 890-463-2

Date Collected: 03/30/21 15:40 **Matrix: Solid**
Date Received: 03/31/21 13:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 06:23	AJ	XM
Total/NA	Prep	8015NM Prep			1283	04/03/21 13:41	DM	XM
Total/NA	Analysis	8015B NM		1	1291	04/05/21 06:26	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:00	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: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-463-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-463-1
SDG: TE012920072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-463-1	CH02	Solid	03/30/21 15:20	03/31/21 13:21	- 1
890-463-2	CH02A	Solid	03/30/21 15:40	03/31/21 13:21	- 4

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

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4/9/2021

Project Manager:	Tacoma Morrissey	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:	Plutonium Banks 25-25-30	Turn Around	
Project Number:	TE01292007Z	Routine	X
P.O. Number:	NRM201295344	Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.0 | 0.8	Thermometer ID		
Received Intact:	(Yes) No	T_NM_007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:		
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH02	S	3/30/21	1520	1'	1	X	X	X
CH02A	S	3/30/21	1540	4'	1	X	X	X

890-463 Chain of Custody

Work Order Notes

CC#: 114022001

API: 30-015-40756

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	Gabby Ordonez	3/31/21 13:21	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: 890-142 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 #: 890-463-1
Address: 1211 W Florida Ave	Due Date Requested: 4/6/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Phantom Bank 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 (890-463-1)	3/30/21	15 20 Mountain		Solid			X	X	X	1	
CH02A (890-463-2)	3/30/21	15 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
1	Clue Cuyler 3-31-21				4-1-21 11:30am	
2						
3						

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: 890-463-1
SDG Number: TE012920072

Login Number: 463
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: 890-463-1
SDG Number: TE012920072

Login Number: 463
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/01/21 11:43 AM

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

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ANALYTICAL REPORT

Job Number: 890-464-1

SDG Number: TE012920072

Job Description: Phantom Bank 25-25-30

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
4/9/2021 4:42 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
04/09/2021

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

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

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

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Lab Sample ID:	890-464-1	890-464-2
Client Sample ID:	CH03	CH03A
Matrix:	Solid	Solid
Date Collected:	03/30/2021 11:50	03/30/2021 12:10

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	04/06/2021 16:49		04/06/2021 16:49	
	Analyzed:	04/07/2021 06:44		04/07/2021 07:04	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00202 U	0.00202	<0.00201 U	0.00201
Toluene		<0.00202 U	0.00202	<0.00201 U	0.00201
Ethylbenzene		<0.00202 U	0.00202	<0.00201 U	0.00201
m-Xylene & p-Xylene		<0.00403 U	0.00403	<0.00402 U	0.00402
o-Xylene		<0.00202 U	0.00202	<0.00201 U	0.00201
Xylenes, Total		<0.00403 U	0.00403	<0.00402 U	0.00402
Total BTEX		<0.00202 U	0.00202	<0.00201 U	0.00201

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

	Prepared:	04/03/2021 13:41		04/03/2021 13:41	
	Analyzed:	04/05/2021 06:47		04/05/2021 07:09	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<50.0 U	50.0
Total TPH		<50.0 U	50.0	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	04/08/2021 21:05		04/08/2021 21:10	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**11.6**	4.97	**9.27**	4.95

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-464-1
Laboratory Sample Delivery Group: TE012920072
Client Project/Site: Phantom Bank 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/9/2021 4:42:48 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: Phantom Bank 25-25-30

Laboratory Job ID: 890-464-1
SDG: TE012920072

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Job ID: 890-464-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-464-1

Comments
No additional comments.

Receipt
The samples were received on 3/31/2021 1:21 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 0.8º C.

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-1366 and analytical batch 880-1370 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: instrument injection error on CCV

(CCV 880-1370/2)

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: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Client Sample ID: CH03

Date Collected: 03/30/21 11:50
Date Received: 03/31/21 13:21

Lab Sample ID: 890-464-1

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		04/06/21 16:49	04/07/21 06:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/06/21 16:49	04/07/21 06:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:44	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/06/21 16:49	04/07/21 06:44	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		04/06/21 16:49	04/07/21 06:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:44*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/06/21 16:49*	*04/07/21 06:44*	*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		04/03/21 13:41	04/05/21 06:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 06:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 06:47	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:47*	*1*
o-Terphenyl	*118*		*70 - 130*	*04/03/21 13:41*	*04/05/21 06:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.6**		4.97		mg/Kg			04/08/21 21:05	1

Client Sample ID: CH03A

Date Collected: 03/30/21 12:10
Date Received: 03/31/21 13:21

Lab Sample ID: 890-464-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/06/21 16:49	04/07/21 07:04	1
Total BTEX	<0.00201	U	0.00201		mg/Kg		04/06/21 16:49	04/07/21 07:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:04*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:04*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 07:09	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Client Sample ID: CH03A

Date Collected: 03/30/21 12:10
Date Received: 03/31/21 13:21

Lab Sample ID: 890-464-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 07:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 07:09	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/05/21 07:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*04/03/21 13:41*	*04/05/21 07:09*	*1*
o-Terphenyl	*118*		*70 - 130*	*04/03/21 13:41*	*04/05/21 07:09*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.27**		4.95		mg/Kg			04/08/21 21:10	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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)										
890-464-1	CH03	113	94										
890-464-2	CH03A	108	95										
LCS 880-1404/1-A	Lab Control Sample	104	105										
LCSD 880-1404/2-A	Lab Control Sample Dup	105	106										
MB 880-1404/5-A	Method Blank	105	97										

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)										
890-464-1	CH03	110	118										
890-464-2	CH03A	108	118										
LCS 880-1283/2-A	Lab Control Sample	121	116										
LCSD 880-1283/3-A	Lab Control Sample Dup	117	113										
MB 880-1283/1-A	Method Blank	100	104										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1404/5-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1404

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*

Lab Sample ID: LCS 880-1404/1-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1045		mg/Kg		105	70 - 130		
Toluene			0.100	0.09651		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1967		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1008		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-1404/2-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	0	35
Toluene			0.100	0.09625		mg/Kg		96	70 - 130	0	35
Ethylbenzene			0.100	0.09959		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1955		mg/Kg		98	70 - 130	1	35
o-Xylene			0.100	0.09893		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

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

Lab Sample ID: MB 880-1283/1-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1283

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		04/03/21 13:41	04/04/21 22:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*
o-Terphenyl	*104*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*

Lab Sample ID: LCS 880-1283/2-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1072		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 880-1283/3-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1076		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	976.6		mg/Kg		98	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1412/1-A
Matrix: Solid
Analysis Batch: 1523

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			04/08/21 19:02	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1412/2-A
Matrix: Solid
Analysis Batch: 1523

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	265.5		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-1412/3-A
Matrix: Solid
Analysis Batch: 1523

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	265.3		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

GC VOA

Analysis Batch: 1370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Total/NA	Solid	8021B	1404
890-464-2	CH03A	Total/NA	Solid	8021B	1404
MB 880-1404/5-A	Method Blank	Total/NA	Solid	8021B	1404
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	8021B	1404
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1404

Prep Batch: 1404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Total/NA	Solid	5035	
890-464-2	CH03A	Total/NA	Solid	5035	
MB 880-1404/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Total/NA	Solid	8015NM Prep	
890-464-2	CH03A	Total/NA	Solid	8015NM Prep	
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Total/NA	Solid	8015B NM	1283
890-464-2	CH03A	Total/NA	Solid	8015B NM	1283
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015B NM	1283
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1283
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1283

HPLC/IC

Leach Batch: 1412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Soluble	Solid	DI Leach	
890-464-2	CH03A	Soluble	Solid	DI Leach	
MB 880-1412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-464-1	CH03	Soluble	Solid	300.0	1412
890-464-2	CH03A	Soluble	Solid	300.0	1412
MB 880-1412/1-A	Method Blank	Soluble	Solid	300.0	1412
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	300.0	1412
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1412

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH03 Lab Sample ID: 890-464-1

Date Collected: 03/30/21 11:50 **Matrix: Solid**
Date Received: 03/31/21 13:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 06:44	AJ	XM
Total/NA	Prep	8015NM Prep			1283	04/03/21 13:41	DM	XM
Total/NA	Analysis	8015B NM		1	1291	04/05/21 06:47	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:05	CH	XM

Client Sample ID: CH03A Lab Sample ID: 890-464-2

Date Collected: 03/30/21 12:10 **Matrix: Solid**
Date Received: 03/31/21 13:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 07:04	AJ	XM
Total/NA	Prep	8015NM Prep			1283	04/03/21 13:41	DM	XM
Total/NA	Analysis	8015B NM		1	1291	04/05/21 07:09	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:10	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: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-464-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-464-1
SDG: TE012920072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-464-1	CH03	Solid	03/30/21 11:50	03/31/21 13:21	
890-464-2	CH03A	Solid	03/30/21 12:10	03/31/21 13:21	

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

4/9/2021

Project Manager:	Tacoma Morrissey	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:	Phantom Banks 25-25-3E	Turn Around	
Project Number:	TE012920072	Routine	X
P.O. Number:	NRM2017953444	Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.0 | 0.8	Thermometer ID	
Received Intact:	(Yes) No	T_NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
CH03	S	3-30-21	1150	1'	1	✓	✓	✓	Discrete
CH03A	1	1	1210	4'	1	✓	✓	✓	

890-464 Chain of Custody

Work Order Notes

CH#: 1140221001

API#: 30-015-40756

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

ANALYSIS REQUEST

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	Gabby Ordonez	3/31/21 13:21	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: 890-142 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 #: 890-464-1
Address: 1211 W Florida Ave	Due Date Requested: 4/6/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Phantom Bank 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	
CH03 (890-464-1)	3/30/21	11 50 Mountain		Solid			X	X	X	1	
CH03A (890-464-2)	3/30/21	12 10 Mountain		Solid			X	X	X	1	

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:

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: Cia Cufts 3:31 21	Date/Time:	Company	Received by: [signature]	Date/Time: 4-1-21 11.30am	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-464-1
SDG Number: TE012920072

Login Number: 464
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: 890-464-1
SDG Number: TE012920072

Login Number: 464
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/01/21 11:43 AM

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

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ANALYTICAL REPORT

Job Number: 890-465-1

SDG Number: TE012920072

Job Description: Phantom Bank 25-25-30

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
4/9/2021 4:43 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
04/09/2021

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

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

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

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Lab Sample ID:	890-465-1	890-465-2
Client Sample ID:	CH04	CH04A
Depth:	1	4
Matrix:	Solid	Solid
Date Collected:	03/30/2021 13:30	03/30/2021 13:50

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	04/06/2021 16:49		04/06/2021 16:49	
	Analyzed:	04/07/2021 07:24		04/07/2021 07:45	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00200 U	0.00200	<0.00200 U	0.00200
Toluene		<0.00200 U	0.00200	<0.00200 U	0.00200
Ethylbenzene		<0.00200 U	0.00200	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00401 U	0.00401	<0.00400 U	0.00400
o-Xylene		<0.00200 U	0.00200	<0.00200 U	0.00200
Xylenes, Total		<0.00401 U	0.00401	<0.00400 U	0.00400
Total BTEX		<0.00200 U	0.00200	<0.00200 U	0.00200

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

	Prepared:	04/03/2021 13:41		04/05/2021 09:24	
	Analyzed:	04/05/2021 07:29		04/05/2021 18:57	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.1 U	50.1	<49.9 U *+	49.9
Diesel Range Organics (Over C10-C28)		<50.1 U	50.1	<49.9 U	49.9
Oil Range Organics (Over C28-C36)		<50.1 U	50.1	<49.9 U	49.9
Total TPH		<50.1 U	50.1	<49.9 U	49.9

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	04/08/2021 21:15		04/08/2021 21:20	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**573**	4.96	**291**	4.98

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-465-1
Laboratory Sample Delivery Group: TE012920072
Client Project/Site: Phantom Bank 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/9/2021 4:44:27 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: Phantom Bank 25-25-30

Laboratory Job ID: 890-465-1
SDG: TE012920072

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Job ID: 890-465-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-465-1

Comments
No additional comments.

Receipt
The samples were received on 3/31/2021 1:21 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-1366 and analytical batch 880-1370 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: instrument injection error on CCV

(CCV 880-1370/2)

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. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH04 Lab Sample ID: 890-465-1

Date Collected: 03/30/21 13:30 **Matrix: Solid**
Date Received: 03/31/21 13:21
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		04/06/21 16:49	04/07/21 07:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/06/21 16:49	04/07/21 07:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/06/21 16:49	04/07/21 07:24	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:24*	*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	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 07:29	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 07:29	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 07:29	1
Total TPH	<50.1	U	50.1		mg/Kg		04/03/21 13:41	04/05/21 07:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*04/03/21 13:41*	*04/05/21 07:29*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/03/21 13:41*	*04/05/21 07:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**573**		4.96		mg/Kg			04/08/21 21:15	1

Client Sample ID: CH04A Lab Sample ID: 890-465-2

Date Collected: 03/30/21 13:50 **Matrix: Solid**
Date Received: 03/31/21 13:21
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 07:45	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 07:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:45*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*04/06/21 16:49*	*04/07/21 07:45*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Client Sample ID: CH04A
Date Collected: 03/30/21 13:50
Date Received: 03/31/21 13:21
Sample Depth: - 4

Lab Sample ID: 890-465-2
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		04/05/21 09:24	04/05/21 18:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/05/21 09:24	04/05/21 18:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/05/21 09:24	04/05/21 18:57	1
Total TPH	<49.9	U	49.9		mg/Kg		04/05/21 09:24	04/05/21 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*04/05/21 09:24*	*04/05/21 18:57*	*1*
o-Terphenyl	*123*		*70 - 130*	*04/05/21 09:24*	*04/05/21 18:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	291		4.98		mg/Kg			04/08/21 21:20	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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)								
890-465-1	CH04	111	102								
890-465-2	CH04A	116	98								
LCS 880-1404/1-A	Lab Control Sample	104	105								
LCSD 880-1404/2-A	Lab Control Sample Dup	105	106								
MB 880-1404/5-A	Method Blank	105	97								

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)								
890-465-1	CH04	108	112								
890-465-2	CH04A	113	123								
LCS 880-1283/2-A	Lab Control Sample	121	116								
LCS 880-1303/2-A	Lab Control Sample	114	111								
LCSD 880-1283/3-A	Lab Control Sample Dup	117	113								
LCSD 880-1303/3-A	Lab Control Sample Dup	114	106								
MB 880-1283/1-A	Method Blank	100	104								
MB 880-1303/1-A	Method Blank	112	124								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1404/5-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1404

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/21 16:49	04/07/21 00:34	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/06/21 16:49	04/07/21 00:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/06/21 16:49*	*04/07/21 00:34*	*1*

Lab Sample ID: LCS 880-1404/1-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1045		mg/Kg		105	70 - 130		
Toluene			0.100	0.09651		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.1000		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1967		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.1008		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-1404/2-A
Matrix: Solid
Analysis Batch: 1370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1404

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	0	35
Toluene			0.100	0.09625		mg/Kg		96	70 - 130	0	35
Ethylbenzene			0.100	0.09959		mg/Kg		100	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1955		mg/Kg		98	70 - 130	1	35
o-Xylene			0.100	0.09893		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

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

Lab Sample ID: MB 880-1283/1-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1283

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		04/03/21 13:41	04/04/21 22:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 13:41	04/04/21 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*
o-Terphenyl	*104*		*70 - 130*	*04/03/21 13:41*	*04/04/21 22:41*	*1*

Lab Sample ID: LCS 880-1283/2-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1072		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 880-1283/3-A
Matrix: Solid
Analysis Batch: 1291

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1283

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1076		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	976.6		mg/Kg		98	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: MB 880-1303/1-A
Matrix: Solid
Analysis Batch: 1310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1303

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		04/05/21 09:24	04/05/21 15:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1
Total TPH	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	04/05/21 09:24	04/05/21 15:03	1
o-Terphenyl	124		70 - 130	04/05/21 09:24	04/05/21 15:03	1

Lab Sample ID: LCS 880-1303/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 1310 — **Prep Batch: 1303**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1426	*+	mg/Kg		143	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1198		mg/Kg		120	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: LCSD 880-1303/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 1310 — **Prep Batch: 1303**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1308	*+	mg/Kg		131	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1154		mg/Kg		115	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	106		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1412/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1523

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/08/21 19:02	1

Lab Sample ID: LCS 880-1412/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1523

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	265.5		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-1412/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 1523

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	265.3		mg/Kg		106	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

GC VOA

Analysis Batch: 1370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Total/NA	Solid	8021B	1404
890-465-2	CH04A	Total/NA	Solid	8021B	1404
MB 880-1404/5-A	Method Blank	Total/NA	Solid	8021B	1404
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	8021B	1404
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1404

Prep Batch: 1404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Total/NA	Solid	5035	
890-465-2	CH04A	Total/NA	Solid	5035	
MB 880-1404/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1404/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1404/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 1283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Total/NA	Solid	8015NM Prep	
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Total/NA	Solid	8015B NM	1283
MB 880-1283/1-A	Method Blank	Total/NA	Solid	8015B NM	1283
LCS 880-1283/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1283
LCSD 880-1283/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1283

Prep Batch: 1303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-2	CH04A	Total/NA	Solid	8015NM Prep	
MB 880-1303/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1303/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1303/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-2	CH04A	Total/NA	Solid	8015B NM	1303
MB 880-1303/1-A	Method Blank	Total/NA	Solid	8015B NM	1303
LCS 880-1303/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1303
LCSD 880-1303/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1303

HPLC/IC

Leach Batch: 1412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Soluble	Solid	DI Leach	
890-465-2	CH04A	Soluble	Solid	DI Leach	
MB 880-1412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

HPLC/IC (Continued)

Leach Batch: 1412 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-465-1	CH04	Soluble	Solid	300.0	1412
890-465-2	CH04A	Soluble	Solid	300.0	1412
MB 880-1412/1-A	Method Blank	Soluble	Solid	300.0	1412
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	300.0	1412
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1412

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Client Sample ID: CH04
Date Collected: 03/30/21 13:30
Date Received: 03/31/21 13:21

Lab Sample ID: 890-465-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 07:24	AJ	XM
Total/NA	Prep	8015NM Prep			1283	04/03/21 13:41	DM	XM
Total/NA	Analysis	8015B NM		1	1291	04/05/21 07:29	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:15	CH	XM

Client Sample ID: CH04A
Date Collected: 03/30/21 13:50
Date Received: 03/31/21 13:21

Lab Sample ID: 890-465-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1404	04/06/21 16:49	MR	XM
Total/NA	Analysis	8021B		1	1370	04/07/21 07:45	AJ	XM
Total/NA	Prep	8015NM Prep			1303	04/05/21 09:24	DM	XM
Total/NA	Analysis	8015B NM		1	1310	04/05/21 18:57	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:20	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: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-465-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-465-1
SDG: TE012920072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-465-1	CH04	Solid	03/30/21 13:30	03/31/21 13:21	- 1
890-465-2	CH04A	Solid	03/30/21 13:50	03/31/21 13:21	- 4

Chain of Custody

Work Order No: _____

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

Page 1 of 1

4/9/2021

Project Manager:	Tacoma Morrissey	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:	Plowman Fed 25-25-30	Turn Around	
Project Number:	TE0129200 72	Routine	X
P.O. Number:	NRM 201 295 3414	Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.0 | 0.8	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH04	S	3-30-21	1330	1'	1	✓	✓	✓
CH04A	S	3-30-21	1350	4'	1	✓	✓	✓

890-465 Chain of Custody

Work Order Notes

C/# 1140221001

API#: 30-015-40750

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

Sample Comments

Discrete

Page 17 of 20

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	Gaby Ordonez	3/31/21 13:21	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: 890-142 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 #: 890-465-1
Address: 1211 W Florida Ave	Due Date Requested: 4/6/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Phantom Bank 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:											
CH04 (890-465-1)	3/30/21	13 30 Mountain		Solid			X	X	X	1	
CH04A (890-465-2)	3/30/21	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	Date/Time	Company	Received by	Date/Time	Company
1	Cloe Cuff 3-31-21					
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: 890-465-1
SDG Number: TE012920072

Login Number: 465
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: 890-465-1
SDG Number: TE012920072

Login Number: 465
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/01/21 11:42 AM

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

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ANALYTICAL REPORT

Job Number: 890-466-1

SDG Number: TE012920072

Job Description: Phantom Bank 25-25-30

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
4/9/2021 4:45 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
04/09/2021

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

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

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

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Lab Sample ID:	890-466-1	890-466-2
Client Sample ID:	CH05	CH05A
Depth:	1	4
Matrix:	Solid	Solid
Date Collected:	03/30/2021 11:15	03/30/2021 11:40

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	04/08/2021 10:10		04/08/2021 10:10	
	Analyzed:	04/08/2021 22:31		04/08/2021 22:56	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00200 U	0.00200	<0.00199 U	0.00199
Toluene		<0.00200 U	0.00200	<0.00199 U	0.00199
Ethylbenzene		<0.00200 U	0.00200	<0.00199 U	0.00199
m-Xylene & p-Xylene		<0.00399 U	0.00399	<0.00398 U	0.00398
o-Xylene		<0.00200 U	0.00200	<0.00199 U	0.00199
Xylenes, Total		<0.00399 U	0.00399	<0.00398 U	0.00398
Total BTEX		<0.00200 U	0.00200	<0.00199 U	0.00199

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

	Prepared:	04/05/2021 09:24		04/05/2021 09:24	
	Analyzed:	04/05/2021 19:19		04/05/2021 19:40	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<49.8 U *+	49.8	<50.0 U *+	50.0
Diesel Range Organics (Over C10-C28)		**55.8**	49.8	<50.0 U	50.0
OII Range Organics (Over C28-C36)		<49.8 U	49.8	<50.0 U	50.0
Total TPH		**55.8**	49.8	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	04/08/2021 21:25		04/08/2021 21:30	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**48.9**	4.98	**11.6**	4.99

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-466-1
Laboratory Sample Delivery Group: TE012920072
Client Project/Site: Phantom Bank 25-25-30

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

Attn: Dan Moir

JKramer

Authorized for release by:
4/9/2021 4:45:40 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: Phantom Bank 25-25-30

Laboratory Job ID: 890-466-1
SDG: TE012920072

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-466-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc. Job ID: 890-466-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Job ID: 890-466-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-466-1

Receipt
The samples were received on 3/31/2021 1:21 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

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

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-466-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

Client Sample ID: CH05 Lab Sample ID: 890-466-1

Date Collected: 03/30/21 11:15 **Matrix: Solid**
Date Received: 03/31/21 13:21
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		04/08/21 10:10	04/08/21 22:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 22:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 22:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/08/21 10:10	04/08/21 22:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 22:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/08/21 10:10	04/08/21 22:31	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*04/08/21 10:10*	*04/08/21 22:31*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*04/08/21 10:10*	*04/08/21 22:31*	*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		04/05/21 09:24	04/05/21 19:19	1
Diesel Range Organics (Over C10-C28)	**55.8**		49.8		mg/Kg		04/05/21 09:24	04/05/21 19:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/05/21 09:24	04/05/21 19:19	1
Total TPH	**55.8**		49.8		mg/Kg		04/05/21 09:24	04/05/21 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*04/05/21 09:24*	*04/05/21 19:19*	*1*
o-Terphenyl	*111*		*70 - 130*	*04/05/21 09:24*	*04/05/21 19:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.9**		4.98		mg/Kg			04/08/21 21:25	1

Client Sample ID: CH05A Lab Sample ID: 890-466-2

Date Collected: 03/30/21 11:40 **Matrix: Solid**
Date Received: 03/31/21 13:21
Sample Depth: - 4

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 10:10	04/08/21 22:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/08/21 10:10	04/08/21 22:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/08/21 10:10	04/08/21 22:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/08/21 10:10	04/08/21 22:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/08/21 10:10	04/08/21 22:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/08/21 10:10	04/08/21 22:56	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		04/08/21 10:10	04/08/21 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/08/21 10:10*	*04/08/21 22:56*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/08/21 10:10*	*04/08/21 22:56*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Client Sample ID: CH05A
Date Collected: 03/30/21 11:40
Date Received: 03/31/21 13:21
Sample Depth: - 4

Lab Sample ID: 890-466-2
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		04/05/21 09:24	04/05/21 19:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 19:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 19:40	1
Total TPH	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*04/05/21 09:24*	*04/05/21 19:40*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/05/21 09:24*	*04/05/21 19:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.6		4.99		mg/Kg			04/08/21 21:30	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

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)
890-466-1	CH05	121	82
890-466-2	CH05A	113	94
LCS 880-1506/1-A	Lab Control Sample	101	96
LCSD 880-1506/2-A	Lab Control Sample Dup	110	112
MB 880-1506/5-A	Method Blank	75	83

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)
890-466-1	CH05	110	111
890-466-2	CH05A	109	112
LCS 880-1303/2-A	Lab Control Sample	114	111
LCSD 880-1303/3-A	Lab Control Sample Dup	114	106
MB 880-1303/1-A	Method Blank	112	124

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1506/5-A
Matrix: Solid
Analysis Batch: 1508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1506

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/08/21 10:10	04/08/21 16:14	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/08/21 10:10	04/08/21 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*04/08/21 10:10*	*04/08/21 16:14*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*04/08/21 10:10*	*04/08/21 16:14*	*1*

Lab Sample ID: LCS 880-1506/1-A
Matrix: Solid
Analysis Batch: 1508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1506

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1038		mg/Kg		104	70 - 130		
Toluene			0.100	0.1129		mg/Kg		113	70 - 130		
Ethylbenzene			0.100	0.1056		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2152		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1146		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-1506/2-A
Matrix: Solid
Analysis Batch: 1508

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1506

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1103		mg/Kg		110	70 - 130	6	35
Toluene			0.100	0.1052		mg/Kg		105	70 - 130	7	35
Ethylbenzene			0.100	0.1110		mg/Kg		111	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2278		mg/Kg		114	70 - 130	6	35
o-Xylene			0.100	0.1231		mg/Kg		123	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

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

Lab Sample ID: MB 880-1303/1-A
Matrix: Solid
Analysis Batch: 1310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1303

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		04/05/21 09:24	04/05/21 15:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1
Total TPH	<50.0	U	50.0		mg/Kg		04/05/21 09:24	04/05/21 15:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*04/05/21 09:24*	*04/05/21 15:03*	*1*
o-Terphenyl	*124*		*70 - 130*	*04/05/21 09:24*	*04/05/21 15:03*	*1*

Lab Sample ID: LCS 880-1303/2-A
Matrix: Solid
Analysis Batch: 1310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1303

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1426	*+	mg/Kg		143	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1198		mg/Kg		120	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: LCSD 880-1303/3-A
Matrix: Solid
Analysis Batch: 1310

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1303

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1308	*+	mg/Kg		131	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1154		mg/Kg		115	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1412/1-A
Matrix: Solid
Analysis Batch: 1523

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			04/08/21 19:02	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-1412/2-A
Matrix: Solid
Analysis Batch: 1523

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	265.5		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-1412/3-A
Matrix: Solid
Analysis Batch: 1523

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	265.3		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-466-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

GC VOA

Prep Batch: 1506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Total/NA	Solid	5035	
890-466-2	CH05A	Total/NA	Solid	5035	
MB 880-1506/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1506/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1506/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 1508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Total/NA	Solid	8021B	1506
890-466-2	CH05A	Total/NA	Solid	8021B	1506
MB 880-1506/5-A	Method Blank	Total/NA	Solid	8021B	1506
LCS 880-1506/1-A	Lab Control Sample	Total/NA	Solid	8021B	1506
LCSD 880-1506/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1506

GC Semi VOA

Prep Batch: 1303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Total/NA	Solid	8015NM Prep	
890-466-2	CH05A	Total/NA	Solid	8015NM Prep	
MB 880-1303/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1303/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1303/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 1310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Total/NA	Solid	8015B NM	1303
890-466-2	CH05A	Total/NA	Solid	8015B NM	1303
MB 880-1303/1-A	Method Blank	Total/NA	Solid	8015B NM	1303
LCS 880-1303/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1303
LCSD 880-1303/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1303

HPLC/IC

Leach Batch: 1412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Soluble	Solid	DI Leach	
890-466-2	CH05A	Soluble	Solid	DI Leach	
MB 880-1412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-466-1	CH05	Soluble	Solid	300.0	1412
890-466-2	CH05A	Soluble	Solid	300.0	1412
MB 880-1412/1-A	Method Blank	Soluble	Solid	300.0	1412
LCS 880-1412/2-A	Lab Control Sample	Soluble	Solid	300.0	1412
LCSD 880-1412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1412

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Client Sample ID: CH05
Date Collected: 03/30/21 11:15
Date Received: 03/31/21 13:21

Lab Sample ID: 890-466-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1506	04/08/21 10:10	MR	XM
Total/NA	Analysis	8021B		1	1508	04/08/21 22:31	AJ	XM
Total/NA	Prep	8015NM Prep			1303	04/05/21 09:24	DM	XM
Total/NA	Analysis	8015B NM		1	1310	04/05/21 19:19	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:25	CH	XM

Client Sample ID: CH05A
Date Collected: 03/30/21 11:40
Date Received: 03/31/21 13:21

Lab Sample ID: 890-466-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1506	04/08/21 10:10	MR	XM
Total/NA	Analysis	8021B		1	1508	04/08/21 22:56	AJ	XM
Total/NA	Prep	8015NM Prep			1303	04/05/21 09:24	DM	XM
Total/NA	Analysis	8015B NM		1	1310	04/05/21 19:40	AJ	XM
Soluble	Leach	DI Leach			1412	04/06/21 19:01	SC	XM
Soluble	Analysis	300.0		1	1523	04/08/21 21:30	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: 890-466-1
Project/Site: Phantom Bank 25-25-30 SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

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: Phantom Bank 25-25-30

Job ID: 890-466-1
SDG: TE012920072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-466-1	CH05	Solid	03/30/21 11:15	03/31/21 13:21	- 1
890-466-2	CH05A	Solid	03/30/21 11:40	03/31/21 13:21	- 4

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

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4/9/2021

Project Manager:	Tacoma Morrissey	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:	Thornton Banks 25-25-30	Turn Around	
Project Number:	TE01292 00072	Routine	X
P.O. Number:	NRM2012953444	Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.0 10.8	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:		
Sample Custody Seals:	Yes (No) N/A	Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
CH05	S	3/30/21	1115	1'	1	X	X	X
CH05A	↓	↓	1140	4'	1	X	X	X

890-466 Chain of Custody

Work Order Notes

CC#: 114022/001

API#: 30-015-40756

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

Sample Comments

Page 16 of 19

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		Gabby Ordonez	3/31/21 13:21	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: 890-142 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 #: 890-466-1
Address: 1211 W Florida Ave	Due Date Requested: 4/6/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Phantom Bank 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:											
CH05 (890-466-1)	3/30/21	11 15 Mountain		Solid			X	X	X	1	
CH05A (890-466-2)	3/30/21	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
1	Cleo Cuto 3-31-21				4-1-21 11:30am	
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: 890-466-1
SDG Number: TE012920072

Login Number: 466
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: 890-466-1
SDG Number: TE012920072

Login Number: 466
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/01/21 11:42 AM

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

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 30639

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 30639
	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 #NAPP2109735302 PLU PB 25-25-30 BATTERY, thank you. This closure is approved.	7/28/2021