Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2109156710
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 03/11/2022

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

OCD Only

Received by: Robert Hamlet Date: 10/27/2022

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

Closure Approved by: Robert Hamlet Date: 10/27/2022

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2109156710
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.10941 Longitude -103.88191
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 21 Lincoln Fee SWD 1	Site Type SWD
Date Release Discovered 3-17-2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	21	25S	30E	Eddy

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

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) HCl Acid	Volume/Weight Released (provide units) 15 BBLS	Volume/Weight Recovered (provide units) 12.12 BBLS

Cause of Release A 4" hose separated from blender, releasing acid onto the ground. All standing fluids were recovered. A third-party contractor has been retained for remediation activities.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2109156710
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? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

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

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

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

NA

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

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 04/01/2021

email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

OCD Only

Received by: Ramona Marcus Date: 5/4/2021

Location:	**PLU 21 Lincoln Fee SWD 1**	
Spill Date:	**3/17/2021**	
	Area 1	
Approximate Area =	3234.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total acid =	15.00	bbls
	TOTAL VOLUME OF LEAK	
Total acid =	15.00	bbls
TOTAL VOLUME RECOVERED		
Total acid =	**12.12**	**bbls**

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 23765

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	5380	23765	C-141

OCD Reviewer	Condition
rmarcus	None

Incident ID	NAPP2109156710
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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2109156710
District RP	
Facility ID	
Application ID	

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 03/11/2022

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2109156710
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 03/11/2022

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

OCD Only

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

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

March 10, 2022

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

RE: Closure Request Addendum
PLU 21 Lincoln Fee SWD 1
Incident Number NAPP2109156710
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following addendum to a Closure Request submitted on September 13, 2021. This Addendum provides an update to the delineation activities completed at the PLU 21 Lincoln Fee SWD 1 (Site), located in Unit O, Section 21, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1), in response to the denial of the Closure Request by the New Mexico Oil Conservation Division (NMOCD). In the denial, NMOCD expressed concern that the lateral delineation may not be sufficient. Based on the delineation activities described below, XTO is requesting no further action (NFA) for Incident Number NAPP2109156710.

BACKGROUND

On March 17, 2021, a hose separated from the blender, resulting in the release of approximately 15 barrels (bbls) of HCL acid onto the surface of the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 12.12 bbls of HCL acid were recovered. XTO reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) on April 1, 2021. The release was assigned Incident Number NAPP2109156710.

The Closure Request detailed site characterization 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). Based on the site characterization, the following Closure Criteria were applied:

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

- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Site assessment and excavation activities were conducted at the Site to address the HCL acid release. Based on laboratory analytical results for the preliminary and delineation soil samples (Figure 2 and Figure 3), approximately 19 cubic yards of impacted soil were excavated and transported offsite for disposal. Closure was requested based on laboratory analytical results for the final excavation soil samples indicating benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria (Figure 4).

On January 28, 2022, NMOCD denied the Closure Request for Incident Number NAPP2109156710 for the following reasons:

- *The closure report is denied. Delineation of edges/sidewalls of a release requires clean samples equal to or less than 600 mg/kg for chlorides and 100 mg/kg for TPH. If the edge of the spill has been visually identified, a sample will need to be pulled from the clean side to prove extent. Once that is accomplished, you can excavate to the table 1 criteria on the pad. This will define the edge of the release and ensure the release did not leave the pad. While vertical definition of contamination that may be acceptable is almost exclusively driven by depth to water, as determined, and as driven by Table I in rule, horizontal definition is different. The edges (horizontal definition) of a liquid release must be determined as well. The only value for determination of horizontal impact are derived by either "background" value as determined appropriate to Rule 29, or, for chloride, 600 mg/Kg in soils. This 600 mg/Kg value is discussed in detail in 19.15.29.13 D. (1)*

ADDITIONAL DELINEATION ACTIVITIES

On February 8, 2022, WSP personnel returned to the Site to collect additional lateral delineation soil samples. Four soil samples (SS04 through SS07) were collected from a depth of 0.5 feet bgs around the release extent to confirm the lateral extent of the release. The delineation soil sample locations and the release extent are depicted on the attached Figure 3. Laboratory analytical results for soil samples SS04 through SS07 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with Closure Criteria and provided lateral delineation to below the most stringent Table 1 Closure Criteria. The soil sample analytical results are summarized on Table 1 and the complete laboratory analytical reports are included in Attachment 1.

CLOSURE REQUEST

Site assessment and excavation activities were completed at the Site to address the impacted soil resulting from the March 17, 2021 release of HCL acid at the Site. Based on laboratory analytical results below the Site Closure Criteria in the excavation soil samples, and lateral and vertical delineation to below the most stringent Table 1 Closure Criteria, XTO respectfully requests no further action for Incident Number NAPP2109156710.

If you have any questions or comments, please do not hesitate to contact Ms. Aimee Cole at (720) 384-7365.

Sincerely,

WSP USA Inc.

Hadlie Green
Assistant Consultant, Geologist

Aimee Cole
Sr. Consultant, Environmental Scientist

cc: Adrian Baker, XTO

Attachments:

Figure 1	Site Location Map
Figure 2	Preliminary Soil Sample Locations
Figure 3	Delineation Soil Sample Locations
Figure 4	Excavation Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Laboratory Analytical Reports

FIGURES

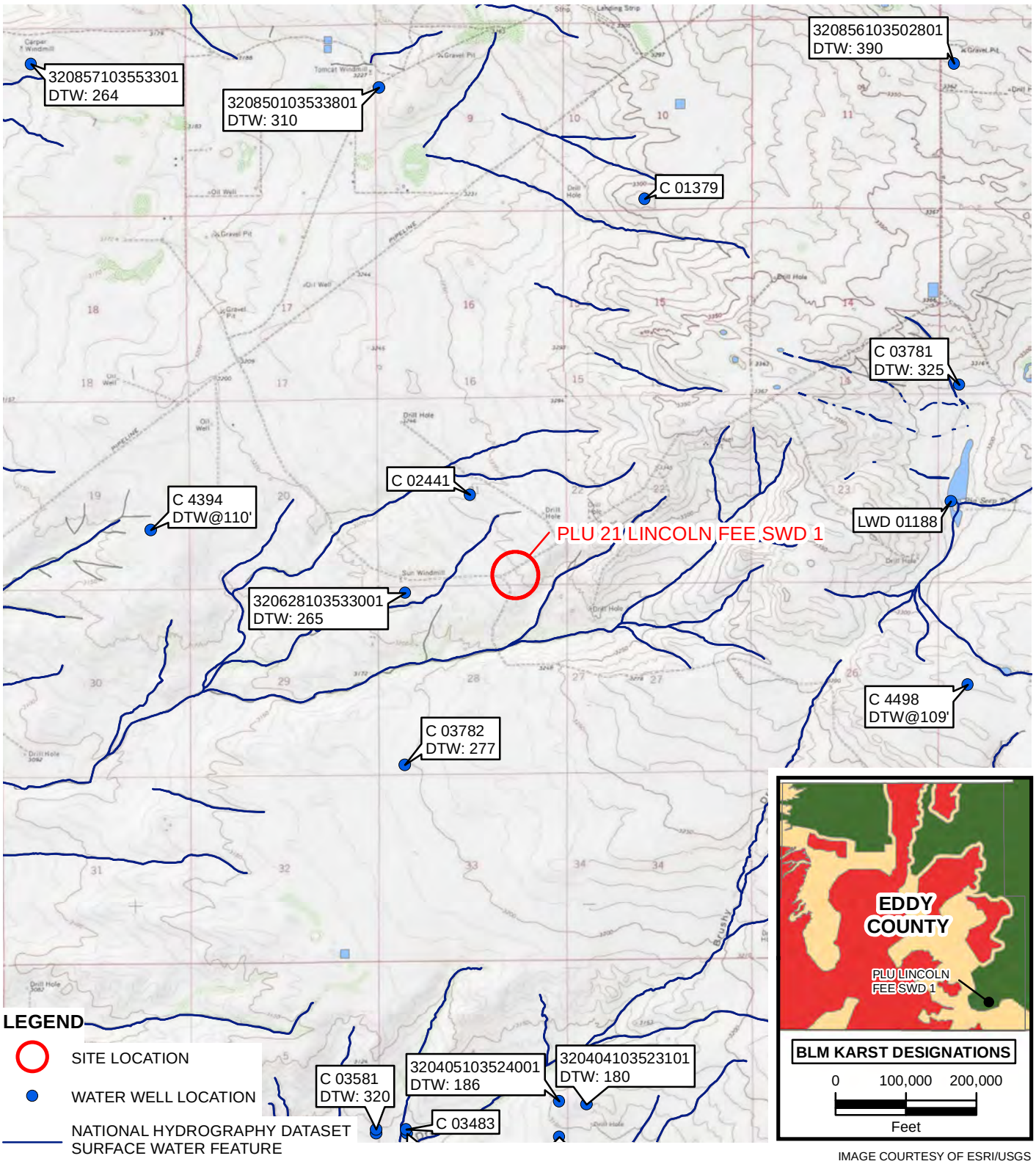

IMAGE COURTESY OF ESRI/USGS

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NAPP2109156710

FIGURE 1
SITE LOCATION MAP
PLU 21 LINCOLN FEE SWD 1
UNIT O SEC 21 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\012921041_PLU 21 LINCOLN FEE SWD 1\012921041_FIG01_SL_RECEPTOR_2021.mxd

IMAGE COURTESY OF ESRI

LEGEND

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

NOTE: INCIDENT NUMBER NAPP2109156710
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

0 30 60
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
PLU 21 LINCOLN FEE SWD 1
UNIT O SEC 21 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012921041_PLU 21 LINCOLN FEE SWD 1\012921041_FIG02_PRELIMINARY_2021.mxd

LEGEND

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT

IMAGE COURTESY OF ESRI

0 30 60

Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
PLU 21 LINCOLN FEE SWD 1
UNIT O SEC 21 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

NOTE: INCIDENT NUMBER NAPP2109156710
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

P:\XTO Energy\GIS\MXD\012921041_PLU 21 LINCOLN FEE SWD 1\012921041_FIG03_DELINEATION_2022.mxd

LEGEND

FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

EXCAVATION EXTENT

IMAGE COURTESY OF ESRI

0 30 60

Feet

N

NOTE: INCIDENT NUMBER NAPP2109156710
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
PLU 21 LINCOLN FEE SWD 1
UNIT O SEC 21 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012921041_PLU 21 LINCOLN FEE SWD 1\012921041_FIG04_EXCAVATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
PLU 21 Lincoln Fee SWD 1
Incident Number NAPP2109156710
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)	pH in Water (SU)	Temperature (Deg °C)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29			10	50	NE	NE	NE	1,000	2,500	20,000	NE	NE
Surface Samples												
SS01	04/21/2021	0.5	<0.00201	<0.00402	907	<50.0	55.6	907	963	10,300	NA	NA
SS02	04/21/2021	0.5	<0.00199	<0.00398	1,080	<49.9	<49.9	**1,080**	1,080	10,200	NA	NA
SS03	04/21/2021	0.5	<0.00200	<0.00399	367	<49.8	<49.8	367	367	10,400	NA	NA
Delineation Samples												
PH01	06/17/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	3,890	8.0	20.8
PH01A	06/17/2021	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	2,650	8.0	20.8
PH01B	06/17/2021	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	151	8.2	20.9
PH02	06/17/2021	1	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	1,170	8.0	18.3
PH02A	06/17/2021	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	230	8.0	21.6
SS04	02/08/2022	0.5	<0.00200	<0.00400	562	<50.0	<50.0	<50.0	562	436	NA	NA
SS05	02/08/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	133	NA	NA
SS06	02/08/2022	0.5	<0.00202	0.00859	<49.9	<49.9	<49.9	<49.9	<49.9	342	NA	NA
SS07	02/08/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	9.79	NA	NA

Table 1

Soil Analytical Results
PLU 21 Lincoln Fee SWD 1
Incident Number NAPP2109156710
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)	pH in Water (SU)	Temperature (Deg °C)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29			10	50	NE	NE	NE	1,000	2,500	20,000	NE	NE
Excavation Floor Samples												
FS01	06/17/2021	1.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	3,720	8.00	18.7
FS02	06/17/2021	1.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,080	7.8	21.4
FS03	06/17/2021	1.5	<0.00199	<0.00398	70.3	<50.0	<50.0	70.3	70.3	3,860	7.9	22.2
FS04	06/17/2021	1.5	<0.00198	<0.00397	60.1	<49.9	<49.9	60.1	60.1	929	8.1	19.9

Notes:

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

ATTACHMENT 1: LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1923-1
Laboratory Sample Delivery Group: TE012921041 TASK 02
Client Project/Site: PLU 21 Lincoln Fee SWD 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
2/16/2022 3:48:00 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Laboratory Job ID: 890-1923-1
SDG: TE012921041 TASK 02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Job ID: 890-1923-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1923-1

Receipt
The sample was received on 2/8/2022 3:44 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19048 and analytical batch 880-18980 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1919-A-1-C). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

Client Sample ID: SS04

Date Collected: 02/08/22 11:50
Date Received: 02/08/22 15:44
Sample Depth: 0.5

Lab Sample ID: 890-1923-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 06:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 06:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 06:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/10/22 08:26	02/11/22 06:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 06:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/10/22 08:26	02/11/22 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*02/10/22 08:26*	*02/11/22 06:43*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/10/22 08:26*	*02/11/22 06:43*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/14/22 10:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**562**		50.0		mg/Kg			02/15/22 20:20	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		02/10/22 13:28	02/11/22 01:21	1
Diesel Range Organics (Over C10-C28)	**562**		50.0		mg/Kg		02/10/22 13:28	02/11/22 01:21	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/11/22 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*02/10/22 13:28*	*02/11/22 01:21*	*1*
o-Terphenyl	*107*		*70 - 130*	*02/10/22 13:28*	*02/11/22 01:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**436**		24.9		mg/Kg			02/16/22 05:00	5

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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)
880-10981-A-1-E MS	Matrix Spike	126	90
880-10981-A-1-F MSD	Matrix Spike Duplicate	141 S1+	106
890-1923-1	SS04	124	93
LCS 880-18967/1-A	Lab Control Sample	108	86
LCSD 880-18967/2-A	Lab Control Sample Dup	122	106
MB 880-18967/5-A	Method Blank	126	96
MB 880-19012/8	Method Blank	138 S1+	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1919-A-1-D MS	Matrix Spike	123	82
890-1919-A-1-E MSD	Matrix Spike Duplicate	120	85
890-1923-1	SS04	106	107

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-19048/2-A	Lab Control Sample	91	101
LCSD 880-19048/3-A	Lab Control Sample Dup	100	112
MB 880-19048/1-A	Method Blank	94	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18967/5-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 18967

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 01:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/10/22 08:26	02/11/22 01:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/10/22 08:26	02/11/22 01:00	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/10/22 08:26	02/11/22 01:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/10/22 08:26*	*02/11/22 01:00*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/10/22 08:26*	*02/11/22 01:00*	*1*

Lab Sample ID: LCS 880-18967/1-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18967

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07786		mg/Kg		78	70 - 130		
Toluene			0.100	0.08344		mg/Kg		83	70 - 130		
Ethylbenzene			0.100	0.09126		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1772		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.09153		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-18967/2-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18967

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09303		mg/Kg		93	70 - 130	18	35
Toluene			0.100	0.09686		mg/Kg		97	70 - 130	15	35
Ethylbenzene			0.100	0.1027		mg/Kg		103	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.1956		mg/Kg		98	70 - 130	10	35
o-Xylene			0.100	0.09594		mg/Kg		96	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-10981-A-1-E MS
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 18967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1 F2	0.0996	0.02863	F1	mg/Kg		29	70 - 130		
Toluene	<0.00200	U F1 F2	0.0996	0.03494	F1	mg/Kg		35	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

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

Lab Sample ID: 880-10981-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19012 — **Prep Batch: 18967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1 F2	0.0996	0.03651	F1	mg/Kg		37	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.199	0.07573	F1	mg/Kg		38	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.03926	F1	mg/Kg		39	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 880-10981-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19012 — **Prep Batch: 18967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.0998	0.06334	F1 F2	mg/Kg		63	70 - 130	75	35
Toluene	<0.00200	U F1 F2	0.0998	0.07214	F2	mg/Kg		72	70 - 130	69	35
Ethylbenzene	<0.00200	U F1 F2	0.0998	0.07209	F2	mg/Kg		72	70 - 130	66	35
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.200	0.1443	F2	mg/Kg		72	70 - 130	62	35
o-Xylene	<0.00200	U F1 F2	0.0998	0.07133	F2	mg/Kg		71	70 - 130	58	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: MB 880-19012/8 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19012

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			02/10/22 13:24	1
Toluene	<0.00200	U	0.00200	mg/Kg			02/10/22 13:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			02/10/22 13:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			02/10/22 13:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			02/10/22 13:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			02/10/22 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*		*02/10/22 13:24*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*		*02/10/22 13:24*	*1*

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

Lab Sample ID: MB 880-19048/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18980 — **Prep Batch: 19048**

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		02/10/22 13:28	02/10/22 20:24	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

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

Lab Sample ID: MB 880-19048/1-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19048

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/10/22 13:28*	*02/10/22 20:24*	*1*
o-Terphenyl	*99*		*70 - 130*	*02/10/22 13:28*	*02/10/22 20:24*	*1*

Lab Sample ID: LCS 880-19048/2-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	960.7		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: LCSD 880-19048/3-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1022		mg/Kg		102	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-1919-A-1-D MS
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	532		1000	1613		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	2800	F1	1000	3100	F1	mg/Kg		30	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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

Lab Sample ID: 890-1919-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18980 — **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	532		998	1549		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	2800	F1	998	3065	F1	mg/Kg		26	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19069/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/22 02:07	1

Lab Sample ID: LCS 880-19069/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	260.0		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-19069/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	240.1		mg/Kg		96	90 - 110	8	20

Lab Sample ID: 890-1914-A-5-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	90.2		250	341.3		mg/Kg		101	90 - 110		

Lab Sample ID: 890-1914-A-5-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	90.2		250	348.6		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

GC VOA

Prep Batch: 18967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	5035	
MB 880-18967/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18967/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18967/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10981-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-10981-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	8021B	18967
MB 880-18967/5-A	Method Blank	Total/NA	Solid	8021B	18967
MB 880-19012/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-18967/1-A	Lab Control Sample	Total/NA	Solid	8021B	18967
LCSD 880-18967/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18967
880-10981-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	18967
880-10981-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18967

Analysis Batch: 19367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	8015B NM	19048
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015B NM	19048
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19048
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19048
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19048
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19048

Prep Batch: 19048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Soluble	Solid	DI Leach	
MB 880-19069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

HPLC/IC (Continued)

Leach Batch: 19069 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1923-1	SS04	Soluble	Solid	300.0	19069
MB 880-19069/1-A	Method Blank	Soluble	Solid	300.0	19069
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	300.0	19069
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19069
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	19069
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19069

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

Client Sample ID: SS04
Date Collected: 02/08/22 11:50
Date Received: 02/08/22 15:44

Lab Sample ID: 890-1923-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18967	02/10/22 08:26	KL	XEN MID
Total/NA	Analysis	8021B		1	19012	02/11/22 06:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	19367	02/14/22 10:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1	19517	02/15/22 20:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19048	02/10/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18980	02/11/22 01:21	AJ	XEN MID
Soluble	Leach	DI Leach			19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		5	19488	02/16/22 05:00	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 890-1923-1
Project/Site: PLU 21 Lincoln Fee SWD 1
SDG: TE012921041 TASK 02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1923-1
SDG: TE012921041 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1923-1	SS04	Solid	02/08/22 11:50	02/08/22 15:44	0.5

Page 37 of 97

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 1

2/16/2022

Project Manager:	Kalei Jennings	Bill to: (if different)	Amy Ruth
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432 704 5178	Email:	amy.ruth@exxonmobil.com,aimee.cole@wsp.com

Work Order Comments

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

Project Name:	PLU 21 Lincoln Fee SWD 1	Turn Around	
Project Number:	TE012921041 Task 02	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2 / 1.0	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)
SS04	S	02/08/22	11:50	0.5'	1	X	X	X

890-1923 Chain of Custody

Work Order Notes

CC: 1986791001
API:30-015-474478

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

Sample Comments

Discrete

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 Mugs		2/8/22 3:44	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 6/20/2022 1:36:28 PM

Released to Imaging: 10/27/2022 8:30:32 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1923-1
SDG Number: TE012921041 TASK 02

Login Number: 1923
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: 890-1923-1
SDG Number: TE012921041 TASK 02

Login Number: 1923
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/10/22 12:21 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1920-1
Laboratory Sample Delivery Group: TE012921041 TASK02
Client Project/Site: PLU 21 Lincoln Fee SWD 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
2/16/2022 3:47:09 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Laboratory Job ID: 890-1920-1
SDG: TE012921041 TASK02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

Job ID: 890-1920-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1920-1

Receipt
The sample was received on 2/8/2022 3:22 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19048 and analytical batch 880-18980 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1919-A-1-C). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

Client Sample ID: SS05

Date Collected: 02/08/22 12:19
Date Received: 02/08/22 15:22
Sample Depth: 0.5

Lab Sample ID: 890-1920-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/10/22 08:12	02/10/22 14:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/10/22 08:12	02/10/22 14:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/10/22 08:12	02/10/22 14:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/10/22 08:12	02/10/22 14:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/10/22 08:12	02/10/22 14:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/10/22 08:12	02/10/22 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/10/22 08:12*	*02/10/22 14:54*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/10/22 08:12*	*02/10/22 14:54*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/14/22 10:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/15/22 20:20	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		02/10/22 13:28	02/11/22 00:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/11/22 00:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/11/22 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*02/10/22 13:28*	*02/11/22 00:17*	*1*
o-Terphenyl	*109*		*70 - 130*	*02/10/22 13:28*	*02/11/22 00:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**133**		4.98		mg/Kg			02/16/22 04:41	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

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)
890-1920-1	SS05	122	98
890-1920-1 MS	SS05	126	100
890-1920-1 MSD	SS05	120	89
LCS 880-18966/1-A	Lab Control Sample	124	89
LCSD 880-18966/2-A	Lab Control Sample Dup	125	99
MB 880-19012/8	Method Blank	138 S1+	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-1919-A-1-D MS	Matrix Spike	123	82
890-1919-A-1-E MSD	Matrix Spike Duplicate	120	85
890-1920-1	SS05	103	109

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-19048/2-A	Lab Control Sample	91	101
LCSD 880-19048/3-A	Lab Control Sample Dup	100	112
MB 880-19048/1-A	Method Blank	94	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 880-18966/1-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18966

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09242		mg/Kg		92	70 - 130		
Toluene			0.100	0.1057		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2005		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.09917		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-18966/2-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18966

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09061		mg/Kg		91	70 - 130	2	35
Toluene			0.100	0.09656		mg/Kg		97	70 - 130	9	35
Ethylbenzene			0.100	0.1003		mg/Kg		100	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1956		mg/Kg		98	70 - 130	2	35
o-Xylene			0.100	0.09470		mg/Kg		95	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 880-19012/8
Matrix: Solid
Analysis Batch: 19012

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Toluene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			02/10/22 13:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			02/10/22 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*		*02/10/22 13:24*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*		*02/10/22 13:24*	*1*

Lab Sample ID: 890-1920-1 MS
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: SS05
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

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

Lab Sample ID: 890-1920-1 MS
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: SS05
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1920-1 MSD
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: SS05
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-19048/1-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19048

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		02/10/22 13:28	02/10/22 20:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	02/10/22 13:28	02/10/22 20:24	1
o-Terphenyl	99		70 - 130	02/10/22 13:28	02/10/22 20:24	1

Lab Sample ID: LCS 880-19048/2-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	960.7		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-19048/3-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1022		mg/Kg		102	70 - 130	6	20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

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

Lab Sample ID: LCSD 880-19048/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-1919-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	532		1000	1613		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	2800	F1	1000	3100	F1	mg/Kg		30	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: 890-1919-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	532		998	1549		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	2800	F1	998	3065	F1	mg/Kg		26	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19069/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/22 02:07	1

Lab Sample ID: LCS 880-19069/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	260.0		mg/Kg		104	90 - 110

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-19069/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	240.1		mg/Kg		96	90 - 110	8	20

Lab Sample ID: 890-1914-A-5-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	90.2		250	341.3		mg/Kg		101	90 - 110		

Lab Sample ID: 890-1914-A-5-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	90.2		250	348.6		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

GC VOA

Prep Batch: 18966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	5035	
LCS 880-18966/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18966/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 19012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	8021B	18966
MB 880-19012/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-18966/1-A	Lab Control Sample	Total/NA	Solid	8021B	18966
LCSD 880-18966/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18966
890-1920-1 MS	SS05	Total/NA	Solid	8021B	
890-1920-1 MSD	SS05	Total/NA	Solid	8021B	

Analysis Batch: 19367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	8015B NM	19048
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015B NM	19048
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19048
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19048
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19048
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19048

Prep Batch: 19048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Soluble	Solid	DI Leach	
MB 880-19069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

HPLC/IC

Analysis Batch: 19488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1920-1	SS05	Soluble	Solid	300.0	19069
MB 880-19069/1-A	Method Blank	Soluble	Solid	300.0	19069
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	300.0	19069
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19069
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	19069
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19069

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

Client Sample ID: SS05
Date Collected: 02/08/22 12:19
Date Received: 02/08/22 15:22

Lab Sample ID: 890-1920-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18966	02/10/22 08:12	KL	XEN MID
Total/NA	Analysis	8021B		1	19012	02/10/22 14:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	19367	02/14/22 10:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1	19517	02/15/22 20:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19048	02/10/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18980	02/11/22 00:17	AJ	XEN MID
Soluble	Leach	DI Leach			19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1	19488	02/16/22 04:41	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1920-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1920-1
SDG: TE012921041 TASK02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1920-1	SS05	Solid	02/08/22 12:19	02/08/22 15:22	0.5

Page 56 of 97

Chain of Custody

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

Work Order No: _____

2/16/2022

Project Manager:	Kalei Jennings	Bill to: (if different)	Amy Ruth
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432 704 5178	Email:	amy.ruth@exxonmobil.com,aimee.cole@wsp.com

Work Order Comments

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

Project Name:	PLU 21 Lincoln Fee SWD 1	Turn Around	
Project Number:	TE012921041 Task 02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT					
Temp Blank:	Yes No	Wet Ice:	Yes No		
Temperature (°C):	1.2 / 1.4 C	Thermometer ID			
Received Intact:	Yes No	T-NM-007			
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2		
Sample Custody Seals:	Yes No N/A	Total Containers:			

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS05	S	02/08/22	12:19	0.5'	1	X	X	X

890-1920 Chain of Custody

Work Order Notes

CC: 1986791001
API:30-015-474478

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

Sample Comments

Discrete

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			2/16/22 3:04			
3				4		
5				6		

Revised Date 051418 Rev. 2018 1

Received by OCD: 6/20/2022 1:36:28 PM

Released to Imaging: 10/27/2022 8:30:32 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1920-1
SDG Number: TE012921041 TASK02

Login Number: 1920
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: 890-1920-1
SDG Number: TE012921041 TASK02

Login Number: 1920
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/10/22 12:21 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1922-1
Laboratory Sample Delivery Group: TE012921041 TASK 02
Client Project/Site: PLU 21 Lincoln Fee SWD 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
2/16/2022 3:47:42 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Laboratory Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Job ID: 890-1922-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1922-1

Receipt
The sample was received on 2/8/2022 3:44 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19048 and analytical batch 880-18980 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1919-A-1-C). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Client Sample ID: SS06

Date Collected: 02/08/22 13:10
Date Received: 02/08/22 15:44
Sample Depth: 0.5

Lab Sample ID: 890-1922-1

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		02/10/22 08:12	02/10/22 15:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/10/22 08:12	02/10/22 15:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/10/22 08:12	02/10/22 15:35	1
m-Xylene & p-Xylene	**0.00859**		0.00403		mg/Kg		02/10/22 08:12	02/10/22 15:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/10/22 08:12	02/10/22 15:35	1
Xylenes, Total	**0.00859**		0.00403		mg/Kg		02/10/22 08:12	02/10/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*02/10/22 08:12*	*02/10/22 15:35*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*02/10/22 08:12*	*02/10/22 15:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00859**		0.00403		mg/Kg			02/14/22 10:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/22 20:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 01:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 01:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*02/10/22 13:28*	*02/11/22 01:00*	*1*
o-Terphenyl	*114*		*70 - 130*	*02/10/22 13:28*	*02/11/22 01:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**342**		5.00		mg/Kg			02/16/22 04:54	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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)								
890-1920-A-1-B MS	Matrix Spike	126	100								
890-1920-A-1-C MSD	Matrix Spike Duplicate	120	89								
890-1922-1	SS06	112	82								
LCS 880-18966/1-A	Lab Control Sample	124	89								
LCSD 880-18966/2-A	Lab Control Sample Dup	125	99								
MB 880-19012/8	Method Blank	138 S1+	94								

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-1919-A-1-D MS	Matrix Spike	123	82								
890-1919-A-1-E MSD	Matrix Spike Duplicate	120	85								
890-1922-1	SS06	110	114								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO2	OTPH2								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCS 880-19048/2-A	Lab Control Sample	91	101								
LCSD 880-19048/3-A	Lab Control Sample Dup	100	112								
MB 880-19048/1-A	Method Blank	94	99								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 880-18966/1-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 18966

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09242		mg/Kg		92	70 - 130		
Toluene			0.100	0.1057		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1012		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2005		mg/Kg		100	70 - 130		
o-Xylene			0.100	0.09917		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-18966/2-A
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 18966

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09061		mg/Kg		91	70 - 130	2	35
Toluene			0.100	0.09656		mg/Kg		97	70 - 130	9	35
Ethylbenzene			0.100	0.1003		mg/Kg		100	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1956		mg/Kg		98	70 - 130	2	35
o-Xylene			0.100	0.09470		mg/Kg		95	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 880-19012/8
Matrix: Solid
Analysis Batch: 19012

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Toluene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			02/10/22 13:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			02/10/22 13:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			02/10/22 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*		*02/10/22 13:24*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*		*02/10/22 13:24*	*1*

Lab Sample ID: 890-1920-A-1-B MS
Matrix: Solid
Analysis Batch: 19012

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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

Lab Sample ID: 890-1920-A-1-B MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 19012

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-1920-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 19012

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-19048/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

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		02/10/22 13:28	02/10/22 20:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	02/10/22 13:28	02/10/22 20:24	1
o-Terphenyl	99		70 - 130	02/10/22 13:28	02/10/22 20:24	1

Lab Sample ID: LCS 880-19048/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	960.7		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-19048/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1022		mg/Kg		102	70 - 130	6	20

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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

Lab Sample ID: LCSD 880-19048/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-1919-A-1-D MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	532		1000	1613		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	2800	F1	1000	3100	F1	mg/Kg		30	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: 890-1919-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	532		998	1549		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	2800	F1	998	3065	F1	mg/Kg		26	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19069/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/22 02:07	1

Lab Sample ID: LCS 880-19069/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 19488

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			250	260.0		mg/Kg		104	90 - 110

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-19069/3-A
Matrix: Solid
Analysis Batch: 19488

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	240.1		mg/Kg		96	90 - 110	8	20

Lab Sample ID: 890-1914-A-5-D MS
Matrix: Solid
Analysis Batch: 19488

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	90.2		250	341.3		mg/Kg		101	90 - 110		

Lab Sample ID: 890-1914-A-5-E MSD
Matrix: Solid
Analysis Batch: 19488

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	90.2		250	348.6		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

GC VOA

Prep Batch: 18966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	5035	
LCS 880-18966/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18966/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 19012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	8021B	18966
MB 880-19012/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-18966/1-A	Lab Control Sample	Total/NA	Solid	8021B	18966
LCSD 880-18966/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18966
890-1920-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	
890-1920-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	

Analysis Batch: 19367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	8015B NM	19048
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015B NM	19048
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19048
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19048
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19048
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19048

Prep Batch: 19048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Soluble	Solid	DI Leach	
MB 880-19069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

HPLC/IC

Analysis Batch: 19488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1922-1	SS06	Soluble	Solid	300.0	19069
MB 880-19069/1-A	Method Blank	Soluble	Solid	300.0	19069
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	300.0	19069
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19069
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	19069
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19069

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Client Sample ID: SS06
Date Collected: 02/08/22 13:10
Date Received: 02/08/22 15:44

Lab Sample ID: 890-1922-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18966	02/10/22 08:12	KL	XEN MID
Total/NA	Analysis	8021B		1	19012	02/10/22 15:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	19367	02/14/22 10:01	KL	XEN MID
Total/NA	Analysis	8015 NM		1	19517	02/15/22 20:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19048	02/10/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18980	02/11/22 01:00	AJ	XEN MID
Soluble	Leach	DI Leach			19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1	19488	02/16/22 04:54	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-1922-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1922-1
SDG: TE012921041 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1922-1	SS06	Solid	02/08/22 13:10	02/08/22 15:44	0.5

Page 75 of 97

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 1

2/16/2022

Project Manager:	Kalei Jennings	Bill to: (if different)	Amy Ruth
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432 704 5178	Email:	amy.ruth@exxonmobil.com,aimee.cole@wsp.com

Work Order Comments

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

Project Name:	PLU 21 Lincoln Fee SWD 1	Turn Around	
Project Number:	TE012921041 Task 02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	12/1.0	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
~~Cooler Custody Seals:~~	Yes No (N/A)	~~Correction Factor:~~	-0.7	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS06	S	02/08/22	13:10	0.5'	1	X	X	X

890-1922 Chain of Custody

Work Order Notes

CC: 1986791001
API:30-015-474478

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

Sample Comments

Discrete

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		2/8/22 5:44	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 6/20/2022 1:36:28 PM

Released to Imaging: 10/27/2022 8:30:32 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1922-1
SDG Number: TE012921041 TASK 02

Login Number: 1922
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: 890-1922-1
SDG Number: TE012921041 TASK 02

Login Number: 1922
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/10/22 12:21 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1921-1
Laboratory Sample Delivery Group: TE012921041 TASK 02
Client Project/Site: PLU 21 Lincoln Fee SWD 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
2/21/2022 6:58:13 PM

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

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Laboratory Job ID: 890-1921-1
SDG: TE012921041 TASK 02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

Job ID: 890-1921-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-1921-1

Receipt
The sample was received on 2/8/2022 3:44 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-19048 and analytical batch 880-18980 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-1919-A-1-C). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

Client Sample ID: SS07

Date Collected: 02/08/22 13:40
Date Received: 02/08/22 15:44
Sample Depth: 0.5

Lab Sample ID: 890-1921-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 13:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 13:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 13:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 13:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/11/22 16:00	02/12/22 13:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/11/22 16:00	02/12/22 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*02/11/22 16:00*	*02/12/22 13:57*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/11/22 16:00*	*02/12/22 13:57*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/14/22 09:43	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/22 20:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 00:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 00:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/10/22 13:28	02/11/22 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/10/22 13:28*	*02/11/22 00:38*	*1*
o-Terphenyl	*94*		*70 - 130*	*02/10/22 13:28*	*02/11/22 00:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.79**		5.00		mg/Kg			02/20/22 16:39	1

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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)
880-11152-A-31-A MS	Matrix Spike	109	99
880-11152-A-31-B MSD	Matrix Spike Duplicate	106	114
890-1921-1	SS07	106	102
LCS 880-19036/1-A	Lab Control Sample	93	106
LCSD 880-19036/2-A	Lab Control Sample Dup	97	88
MB 880-19035/5-A	Method Blank	89	100
MB 880-19036/5-A	Method Blank	104	104

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)
890-1919-A-1-D MS	Matrix Spike	123	82
890-1919-A-1-E MSD	Matrix Spike Duplicate	120	85
890-1921-1	SS07	91	94

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-19048/2-A	Lab Control Sample	91	101
LCSD 880-19048/3-A	Lab Control Sample Dup	100	112
MB 880-19048/1-A	Method Blank	94	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19035/5-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19035

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 11:13	02/11/22 22:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 11:13	02/11/22 22:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*02/11/22 11:13*	*02/11/22 22:14*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/11/22 11:13*	*02/11/22 22:14*	*1*

Lab Sample ID: MB 880-19036/5-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19036

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/11/22 16:00	02/12/22 09:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/11/22 16:00	02/12/22 09:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/11/22 16:00*	*02/12/22 09:09*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*02/11/22 16:00*	*02/12/22 09:09*	*1*

Lab Sample ID: LCS 880-19036/1-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19036

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09249		mg/Kg		92	70 - 130		
Toluene			0.100	0.09207		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.09926		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.1837		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09006		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-19036/2-A
Matrix: Solid
Analysis Batch: 19116

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19036

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08701		mg/Kg		87	70 - 130	6	35

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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

Lab Sample ID: LCSD 880-19036/2-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 19116 **Prep Batch: 19036**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.08975		mg/Kg		90	70 - 130	3	35
Ethylbenzene			0.100	0.09948		mg/Kg		99	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1868		mg/Kg		93	70 - 130	2	35
o-Xylene			0.100	0.09313		mg/Kg		93	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-11152-A-31-A MS **Client Sample ID: Matrix Spike**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 19116 **Prep Batch: 19036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.0998	0.06812	F1	mg/Kg		68	70 - 130
Toluene	<0.00201	U	0.0998	0.07261		mg/Kg		73	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.08506		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1566		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.0998	0.08036		mg/Kg		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-11152-A-31-B MSD **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 19116 **Prep Batch: 19036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0998	0.08550		mg/Kg		86	70 - 130	23	35
Toluene	<0.00201	U	0.0998	0.08578		mg/Kg		86	70 - 130	17	35
Ethylbenzene	<0.00201	U	0.0998	0.09057		mg/Kg		91	70 - 130	6	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1705		mg/Kg		85	70 - 130	8	35
o-Xylene	<0.00201	U	0.0998	0.08550		mg/Kg		86	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

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

Lab Sample ID: MB 880-19048/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 18980 **Prep Batch: 19048**

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		02/10/22 13:28	02/10/22 20:24	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

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

Lab Sample ID: MB 880-19048/1-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19048

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/10/22 13:28	02/10/22 20:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/10/22 13:28*	*02/10/22 20:24*	*1*
o-Terphenyl	*99*		*70 - 130*	*02/10/22 13:28*	*02/10/22 20:24*	*1*

Lab Sample ID: LCS 880-19048/2-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	960.7		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	944.6		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: LCSD 880-19048/3-A
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19048

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1022		mg/Kg		102	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-1919-A-1-D MS
Matrix: Solid
Analysis Batch: 18980

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 19048

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	532		1000	1613		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	2800	F1	1000	3100	F1	mg/Kg		30	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

QC Sample Results

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

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

Lab Sample ID: 890-1919-A-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 18980 — **Prep Batch: 19048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	532		998	1549		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	2800	F1	998	3065	F1	mg/Kg		26	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/20/22 12:22	1

Lab Sample ID: LCS 880-19432/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.7		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-19432/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	249.8		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-11202-A-12-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	333		250	582.4		mg/Kg		100	90 - 110		

Lab Sample ID: 880-11202-A-12-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 19879

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	333		250	567.2		mg/Kg		94	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

GC VOA

Prep Batch: 19035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19035/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 19036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	5035	
MB 880-19036/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19036/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19036/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11152-A-31-A MS	Matrix Spike	Total/NA	Solid	5035	
880-11152-A-31-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 19116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	8021B	19036
MB 880-19035/5-A	Method Blank	Total/NA	Solid	8021B	19035
MB 880-19036/5-A	Method Blank	Total/NA	Solid	8021B	19036
LCS 880-19036/1-A	Lab Control Sample	Total/NA	Solid	8021B	19036
LCSD 880-19036/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19036
880-11152-A-31-A MS	Matrix Spike	Total/NA	Solid	8021B	19036
880-11152-A-31-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19036

Analysis Batch: 19350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	8015B NM	19048
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015B NM	19048
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19048
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19048
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	19048
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19048

Prep Batch: 19048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-19048/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19048/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19048/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1919-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1919-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1 SDG: TE012921041 TASK 02

HPLC/IC

Leach Batch: 19432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Soluble	Solid	DI Leach	
MB 880-19432/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19432/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19432/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11202-A-12-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11202-A-12-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1921-1	SS07	Soluble	Solid	300.0	19432
MB 880-19432/1-A	Method Blank	Soluble	Solid	300.0	19432
LCS 880-19432/2-A	Lab Control Sample	Soluble	Solid	300.0	19432
LCSD 880-19432/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19432
880-11202-A-12-D MS	Matrix Spike	Soluble	Solid	300.0	19432
880-11202-A-12-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19432

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

Client Sample ID: SS07

Date Collected: 02/08/22 13:40
Date Received: 02/08/22 15:44

Lab Sample ID: 890-1921-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			19036	02/11/22 16:00	KL	XEN MID
Total/NA	Analysis	8021B		1	19116	02/12/22 13:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	19350	02/14/22 09:43	KL	XEN MID
Total/NA	Analysis	8015 NM		1	19517	02/15/22 20:20	AJ	XEN MID
Total/NA	Prep	8015NM Prep			19048	02/10/22 13:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18980	02/11/22 00:38	AJ	XEN MID
Soluble	Leach	DI Leach			19432	02/14/22 14:26	SC	XEN MID
Soluble	Analysis	300.0		1	19879	02/20/22 16:39	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Job ID: 890-1921-1
Project/Site: PLU 21 Lincoln Fee SWD 1
SDG: TE012921041 TASK 02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 21 Lincoln Fee SWD 1

Job ID: 890-1921-1
SDG: TE012921041 TASK 02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1921-1	SS07	Solid	02/08/22 13:40	02/08/22 15:44	0.5

Page 94 of 97

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

2/21/2022

Project Manager:	Kalei Jennings	Bill to: (if different)	Amy Ruth
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432 704 5178	Email:	amy.ruth@exxonmobil.com,aimee.cole@wsp.com

Work Order Comments

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

Project Name:	PLU 21 Lincoln Fee SWD 1	Turn Around	
Project Number:	TE012921041 Task 02	Routine	✓
P.O. Number:		Rush:	
Sampler's Name:	Mercy Rotich.	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	1.2/1.0	Thermometer ID	T-NM-007	
Received Intact:	(Yes) No			
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SS07	S	02/08/22	13:40	0.5'	1	X	X	X	Discrete

890-1921 Chain of Custody

Work Order Notes

CC: 1986791001
API:30-015-474478

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

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		2/8/22 3:44	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Received by OCD: 6/20/2022 1:36:28 PM

Released to Imaging: 10/27/2022 8:30:32 AM

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1921-1
SDG Number: TE012921041 TASK 02

Login Number: 1921
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: 890-1921-1
SDG Number: TE012921041 TASK 02

Login Number: 1921
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/10/22 12:21 PM

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

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 118777

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 118777
	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 #NAPP2109156710 PLU 21 LINCOLN FEE SWD 1, thank you. This closure is approved.	10/27/2022