

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	NAPP2130837821
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Cause of Release

Incident ID	NAPP2130837821
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☐ The source of the release has been stopped.	
☐ The impacted area has been secured to protect human health and the environment.	
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Adrian Bates</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>11/8/2021</u>

NAPP2130837821

Location:	PLU Phantom Banks 25-25-30	
Spill Date:	11/1/2021	
Area 1		
Approximate Area =	1900.00	sq. ft.
Average Saturation (or depth) of spill =	1.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	1.27	bbls
Area 2		
Approximate Area =	2643.00	sq. ft.
Average Saturation (or depth) of spill =	2.00	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	722.35	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	723.62	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.00	bbls
Total Produced Water =	720.00	bbls

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

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

CONDITIONS

Action 60194

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 60194
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	None	11/8/2021

Incident ID	NAPP2130837821
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Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

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

Printed Name: Adrian BakerTitle: Environmental CoordinatorSignature: Adrian BakerDate: 01/30/2022Email: adrian.baker@exxonmobil.comTelephone: 432-236-3808**OCD Only**

Received by: _____

Date: _____

Incident ID	NAPP2130837821
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: 01/30/2022

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: Jennifer Nobui Date: 03/09/2022

Printed Name: Jennifer Nobui

Title: Environmental Specialist A



WSP USA

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

January 26, 2022

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

**RE: Closure Request
PLU Phantom Banks 25-25-30
Incident Number NAPP2130837821
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment, excavation, and soil sampling activities at the Poker Lake Unit (PLU) Phantom Banks 25-25-30 (Site) in Unit N, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of produced water at the Site. Based on the excavation activities and soil sample analytical results, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2130837821.

RELEASE BACKGROUND

On November 1, 2021, the tank level transmitter malfunctioned, causing the release of approximately 723.62 barrels (bbls) of produced water into the lined containment and onto the surface of the caliche well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, approximately 720 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on November 2, 2021. A Release Notification Form C-141 (Form C-141) was submitted on November 4, 2021, and the release was assigned Incident Number NAPP2130837821.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During February 2021, WSP installed a soil boring (C-04498) utilizing a truck-mounted auger drill rig approximately 0.5 miles northwest of the Site. Soil boring C-04498 was drilled to a depth of 109 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater



was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater at the borehole is greater than 109 feet. The borehole was properly abandoned with hydrated bentonite chips. The location of borehole C-04498 is provided on Figure 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent riverine, located approximately 125 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 20, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected five preliminary assessment soil samples (SS01 through SS05) within the release extent outside of the lined containment, from a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) and are presented on Figure 2.

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



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

Laboratory analytical results for preliminary soil samples SS01 through SS05 indicated that TPH and/or chloride concentrations exceeded the Closure Criteria; benzene and BTEX concentrations were compliant with the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

Between January 4, 2022 and January 11, 2022, WSP personnel were at the Site to oversee delineation and excavation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples.

Four potholes (PH01 through PH04) were advanced via trackhoe to depths ranging from 3 feet to 4 feet bgs within release extent to assess the vertical extent of impacted soil. Discrete delineation soil samples were collected from each pothole from depths ranging from 1-foot to 4 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The pothole and delineation soil sample locations are presented on Figure 3.

Based on field screening activities and laboratory analytical results for the preliminary and delineation soil samples, excavation activities were completed to remove the impacted soil. Excavation activities were performed using a track-mounted backhoe and transport vehicle. To direct excavation activities, WSP personnel screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavations were completed to depths ranging from 1-foot to 4 feet bgs. Photographic documentation was conducted during the Site visits. A photographic log is included in Attachment 3.

Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS23 were collected from the floor of the excavations, from depths ranging from 1-foot to 4 feet bgs. Composite sidewall samples SW01 through SW08 were collected from the sidewalls of the excavations, from depths ranging from the ground surface to 4 feet bgs. The excavation soil samples were collected, handled, and analyzed as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.



The final excavation areas measured approximately 4,562 square feet. A total of approximately 435 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After the completion of confirmation sampling, the excavation was secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS05 indicated that TPH and/or chloride concentrations exceeded the Closure Criteria; benzene and BTEX concentrations were compliant with the Closure Criteria.

Laboratory analytical results for delineation samples collected from potholes PH01 through PH04 indicated that chloride concentrations exceeded the Closure Criteria at depths ranging from 1-foot to 3 feet bgs; chloride concentrations were compliant with the Closure Criteria in the terminal sample from each pothole. Additionally, benzene, BTEX, and TPH concentrations were compliant with the Closure Criteria in all delineation samples. Based on laboratory analytical results for the delineation soil samples, the impacted soil was successfully defined and excavation was completed.

Laboratory analytical results for excavation floor samples FS01 through FS20 and excavation sidewall samples SW01 through SW08, collected from the final excavation extents, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the November 1, 2021 release of produced water. Laboratory analytical results for excavation soil samples, collected from the final excavation extents, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the excavation soil sample analytical results, no further remediation was required.

XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. As such, XTO respectfully requests NFA for Incident Number NAPP2130837821.

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

Sincerely,



District II
Page 5

WSP USA Inc.

A handwritten signature in black ink that reads 'Katoch' with a stylized flourish underneath.

Nihaar Katoch
Assistant Consultant, Geologist

A handwritten signature in black ink that reads 'Aimee Cole' in a cursive style.

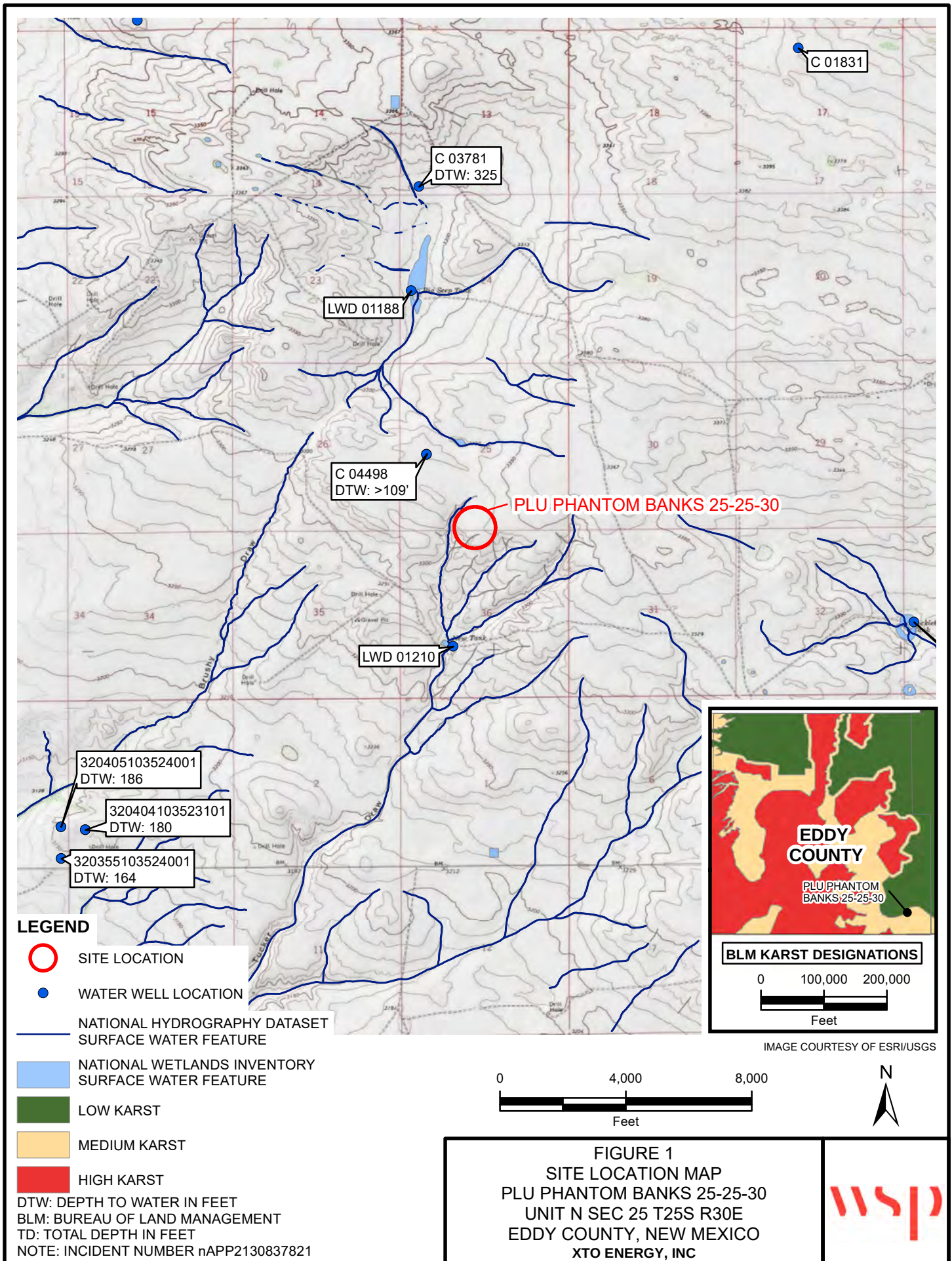
Aimee Cole
Sr. Consultant, Environmental Scientist

cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES



P:\XTO Energy\GIS\31403236 029 07_PLU PB 25-25-30\MXD\31403236 029 07_FIG01_SL_RECEPTOR_2021.mxd

**LEGEND**

- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT
- LINED CONTAINMENT

NOTE: INCIDENT NUMBER nAPP2130837821
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

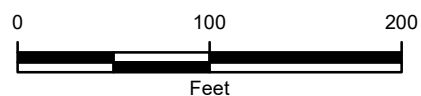


IMAGE COURTESY OF ESRI

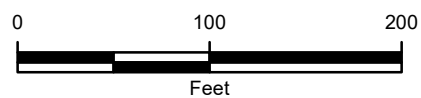
FIGURE 2
 PRELIMINARY SOIL SAMPLE LOCATIONS
 PLU PHANTOM BANKS 25-25-30
 UNIT N SEC 25 T25S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

IMAGE COURTESY OF ESRI

-  DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
-  RELEASE EXTENT
-  LINED CONTAINMENT



NOTE: INCIDENT NUMBER nAPP2130837821
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
 THAT WAS REMOVED

FIGURE 3
 DELINEATION SOIL SAMPLE LOCATIONS
 PLU PHANTOM BANKS 25-25-30
 UNIT N SEC 25 T25S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

- FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- EXCAVATION EXTENT
- LINED CONTAINMENT

NOTE: INCIDENT NUMBER nAPP2130837821
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

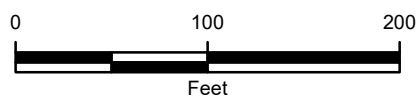


FIGURE 4
 EXCAVATION SOIL SAMPLE LOCATIONS
 PLU PHANTOM BANKS 25-25-30
 UNIT N SEC 25 T25S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLES

Table 1

Soil Analytical Results
PLU Phantom Banks 25-25-30
Incident Number nAPP2130837821
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Preliminary Soil Samples										
SS01	12/20/2021	0.5	<0.0401	0.229	4360	<49.8	<49.8	4,360	4,360	29,900
SS02	12/20/2021	0.5	<0.0402	0.42	7,160	63.4	<49.9	7,223.4	7,220	32,100
SS03	12/20/2021	0.5	<0.0403	<0.0806	<49.8	<49.8	<49.8	<49.8	<49.8	33,000
SS04	12/20/2021	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	48,600
SS05	12/20/2021	0.5	<0.00200	<0.00399	220	<50.0	<50.0	220	220	38,500
Delineation Soil Samples										
PH01	01/04/2022	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	6,890
PH01A	01/04/2022	3	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	639
PH01B	01/04/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	50.2
PH02	01/04/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	1,410
PH02A	01/04/2022	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	342
PH02B	01/04/2022	3	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	247
PH03	01/04/2022	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	4,090
PH03A	01/04/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	901
PH03B	01/04/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	285
PH04	01/04/2022	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,360
PH04A	01/04/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	128
PH04B	01/04/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	289

Table 1

Soil Analytical Results
 PLU Phantom Banks 25-25-30
 Incident Number nAPP2130837821
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Excavation Floor Samples										
FS01	01/05/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	115
FS02	01/05/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	65.9
FS03	01/05/2022	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	68.3
FS04	01/05/2022	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	77.9
FS05	01/05/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	44.4
FS06	01/05/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	80.1
FS07	01/06/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	493
FS08	01/07/2022	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	529
FS09	01/11/2022	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	82.8
FS10	01/11/2022	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	247
FS11	01/11/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	534
FS12	01/11/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	339
FS13	01/11/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	301
FS14	01/11/2022	2	<0.00200	0.00666	<50.0	<50.0	<50.0	<50.0	<50.0	246
FS15	01/11/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	280
FS16	01/11/2022	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	227
FS17	01/11/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	278
FS18	01/11/2022	2	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	303
FS19	01/11/2022	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	257
FS20	01/11/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	88.8
FS21	01/10/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	172
FS22	01/10/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	188

Table 1

Soil Analytical Results
 PLU Phantom Banks 25-25-30
 Incident Number nAPP2130837821
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
FS23	01/10/2022	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	220
Excavation Sidewall Samples										
SW01	01/05/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	358
SW02	01/05/2022	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	229
SW03	01/05/2022	0 - 4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	52.1
SW04	01/05/2022	0 - 4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	224
SW05	01/07/2022	0 - 2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	328
SW06	01/11/2022	0 - 2	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	168
SW07	01/11/2022	0 - 2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	121
SW08	01/11/2022	0 - 2	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	212

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 - 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: WELL RECORD AND LOG



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

03/11/2021

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

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4498 Pod1

To whom it may concern:

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

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

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive, flowing style.

Lucas Middleton

Enclosures: as noted above

DSE DII MAR 11 2021 PM 4:22





WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DTG 1/28/2022 PM 4:22

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4498			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32°	MINUTES 6'	SECONDS 1.96" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE -103°	50'	26.19" W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW NE Sec. 25 T25S R30E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 02/24/2021	DRILLING ENDED 02/24/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 109	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	109	±6.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

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

DSE DJT MPR 11 2021 PM 4:22

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES/NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	34	34	Caliche, tan, no odor, no stain, gravel, dry	Y ✓ N	
	34	40	6	sand/ caliche, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	40	56	16	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	56	72	16	sandstone, low consolidation, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	72	79	7	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	79	109	30	sandstone, low - medium consolidation, tan, no odor, m-f grained, well sorted, m	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  SIGNATURE OF DRILLER / PRINT SIGNEE NAME Jackie D. Atkins DATE					

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/2017)

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



PLUGGING RECORD



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

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4498- POD1

Well owner: XTO ENERGY (Kyle Littrell)

Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland

State: Texas

Zip code: 79707

II. WELL PLUGGING INFORMATION:

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

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

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

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

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

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

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

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

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

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

For each interval plugged, describe within the following columns:

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

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

III. SIGNATURE:

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

Jack Atkins

Signature of Well Driller

03/11/2021

Date

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

Final Audit Report

2021-03-11

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

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

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2021-03-11 - 7:17:39 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-03-11 - 7:18:18 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2021-03-11 - 7:29:33 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-03-11 - 7:31:05 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.
2021-03-11 - 7:31:05 PM GMT

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USGS Water Resources (Cooperator Access)

Data Category:

Groundwater

Geographic Area:

United States

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- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 320404103523101

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 320404103523101 26S.30E.05.343414

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13070001

Latitude 32°04'04", Longitude 103°52'31" NAD27

Land-surface elevation 3,173 feet above NAVD88

The depth of the well is 775 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

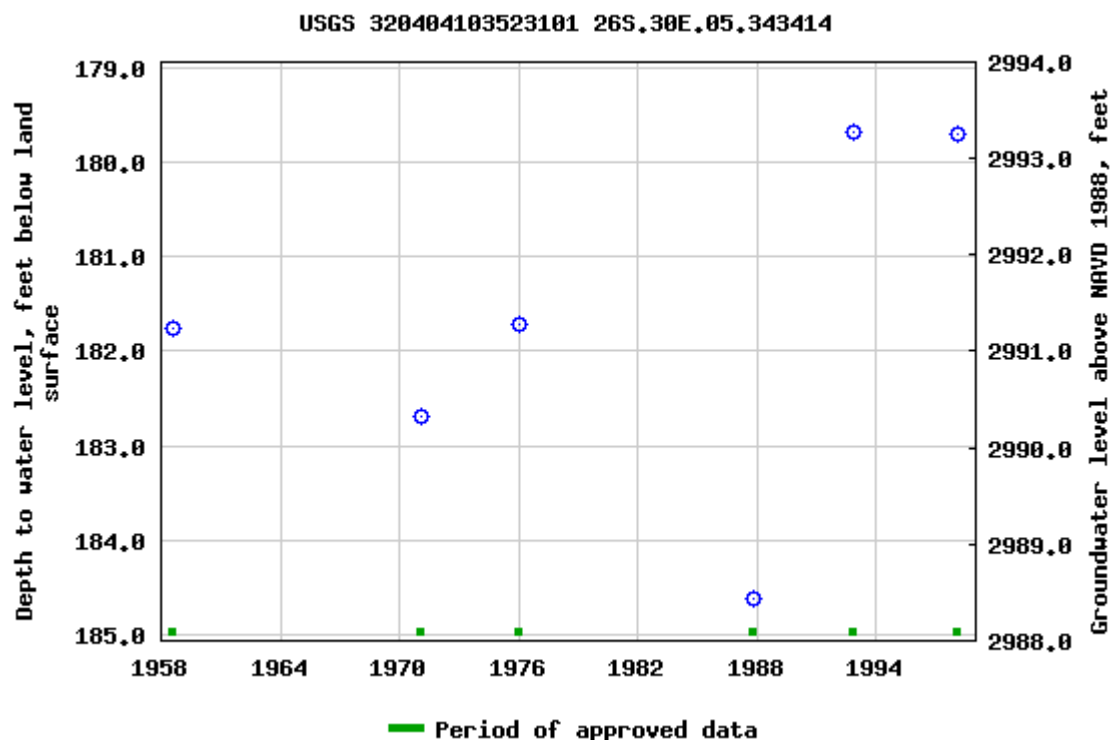
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Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2022-01-24 17:39:06 EST

0.69 0.51 nadww01



ATTACHMENT 2: LITHOLOGIC/SAMPLING LOGS

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH01		Date: 01/04/2022	
								Site Name: PLU Phantom Banks 25-25-30			
								RP or Incident Number NAPP2130837821			
								WSP Job Number: 31403236.029			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: CS		Method: Excavator	
Lat/Long: 32.0939644, -103.835585				Field Screening: Hach chloride strips, PID				Hole Diameter:		Total Depth: 4 feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	12,661	0.5	N	PH 01	1	1	SP-SM	Light brown/greyish brown sand with caliche gravel			
D	2,464	0.0	N	PH 01A	2	2	SP-SM	Dark brown sand with caliche			
D	812	1.2	N	PH 01B	3	3	CCHE	Caliche			
D	<179.2	0.0	N	PH 01C	4	4	CCHE	Caliche			
TD @ 4 feet bgs											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH02		Date: 01/04/2022	
								Site Name: PLU Phantom Banks 25-25-30			
								RP or Incident Number NAPP2130837821			
								WSP Job Number: 31403236.029			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: CS		Method: Excavator	
Lat/Long: 32.0945461, -103.8358712				Field Screening: Hach chloride strips, PID				Hole Diameter:		Total Depth: 3 feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	3,041	0.2	N	PH 02	1	1	CCHE	Caliche			
D	437	0.1	N	PH 02A	2	2	CCHE	Caliche			
D	386	0.1	N	PH 02B	3	3	CCHE	Caliche			
TD @ 3 feet bgs											

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH03		Date: 01/04/2022			
								Site Name: PLU Phantom Banks 25-25-30					
								RP or Incident Number: NAPP2130837821					
								WSP Job Number: 31403236.029					
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: CS		Method: Excavator			
Lat/Long: 32.094589, -103.835926						Field Screening: Hach chloride strips, PID				Hole Diameter:		Total Depth: 3 feet	
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks					
						0							
D	7,940	0.2	N	PH 03	1	1	CCHE	Caliche					
D	1,047	0.3	N	PH 03A	2	2	CCHE	Caliche					
D	437	0.3	N	PH 03B	3	3	CCHE	Caliche					
TD @ 3 feet bgs													

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: PH04		Date: 01/04/2022				
		Site Name: PLU Phantom Banks 25-25-30						
		RP or Incident Number NAPP2130837821						
		WSP Job Number: 31403236.029						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.0943756, -103.8357178			Field Screening: Hach chloride strips, PID		Logged By: CS Hole Diameter: Method: Hydrovac Total Depth: 3 feet			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	1,523	0.3	N	PH 04	1	1	CCHE	Caliche
D	179	0.2	N	PH 04A	2	2	CCHE	Caliche
D	386	0.3	N	PH 04B	3	3	CCHE	Caliche
TD @ 3 feet bgs								

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

XTO Energy, Inc.	PLU PHANTOM BANKS 25-25-30 EDDY COUNTY, NEW MEXICO	NAPP2130837821
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Photo No.	Date	
1	December 20, 2021	
View of release extent during initial site assessment		 A wide-angle photograph of a desert landscape. In the foreground, there is a large, flat, rocky area covered in gravel and small stones. To the left, a white satellite dish is mounted on a metal pole. In the background, there is a small, rounded mound of earth or gravel, and the horizon is flat under a clear blue sky.

Photo No.	Date	
2	December 20, 2021	
View of release extent during initial site assessment		 A photograph of an industrial site. In the foreground, there is a large, flat, sandy area with tire tracks. To the right, there are large, dark-colored storage tanks and yellow metal railings. In the background, there are several utility poles and a clear blue sky.



PHOTOGRAPHIC LOG

XTO Energy, Inc.	PLU PHANTOM BANKS 25-25-30 EDDY COUNTY, NEW MEXICO	NAPP2130837821
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Photo No.	Date	
3	January 05, 2022	
View of excavation activities		 A photograph showing an excavation site under a clear blue sky. A yellow CAT excavator is visible in the background, working on a dirt mound. A person is standing near the excavator. The foreground shows a dirt path with tire tracks and some red safety flags.

Photo No.	Date	
4	January 10, 2022	
View of excavation activities		 A photograph showing an excavation site under an overcast sky. A concrete mixer truck is parked on the right side of the site. In the background, there are several utility poles and a yellow excavator. The foreground shows a dirt path with tire tracks and some red safety flags.



PHOTOGRAPHIC LOG

XTO Energy, Inc.	PLU PHANTOM BANKS 25-25-30 EDDY COUNTY, NEW MEXICO	NAPP2130837821
------------------	---	----------------

Photo No.	Date	
5	January 11, 2022	
View of excavation activities		

Photo No.	Date	
6	January 11, 2022	
View of excavation activities		

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1746-1

Laboratory Sample Delivery Group: 31403236.029. Task 07.02
Client Project/Site: PLU PB 25-25-30

For:

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

Attn: Kalei Jennings

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

Authorized for release by:
12/28/2021 7:52:27 AM

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

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

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

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

Laboratory Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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Definitions/Glossary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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.
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.

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

Case Narrative

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Job ID: 890-1746-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1746-1****Receipt**

The samples were received on 12/21/2021 10:28 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-1746-1) and SS02 (890-1746-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15390 and analytical batch 880-15330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-15389 and analytical batch 880-15413 was outside the upper control limits.

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 PB 25-25-30

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS01

Lab Sample ID: 890-1746-1

Date Collected: 12/20/21 13:32

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401	mg/Kg		12/22/21 15:43	12/23/21 09:56	20
Toluene	<0.0401	U	0.0401	mg/Kg		12/22/21 15:43	12/23/21 09:56	20
Ethylbenzene	0.124		0.0401	mg/Kg		12/22/21 15:43	12/23/21 09:56	20
m-Xylene & p-Xylene	0.105		0.0802	mg/Kg		12/22/21 15:43	12/23/21 09:56	20
o-Xylene	<0.0401	U	0.0401	mg/Kg		12/22/21 15:43	12/23/21 09:56	20
Xylenes, Total	0.105		0.0802	mg/Kg		12/22/21 15:43	12/23/21 09:56	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	12/22/21 15:43	12/23/21 09:56	20
1,4-Difluorobenzene (Surr)	98		70 - 130	12/22/21 15:43	12/23/21 09:56	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.229		0.0802	mg/Kg			12/23/21 19:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4360		49.8	mg/Kg			12/23/21 12:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		12/22/21 15:41	12/23/21 14:22	1
Diesel Range Organics (Over C10-C28)	4360		49.8	mg/Kg		12/22/21 15:41	12/23/21 14:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/22/21 15:41	12/23/21 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			12/22/21 15:41	12/23/21 14:22	1
o-Terphenyl	114		70 - 130			12/22/21 15:41	12/23/21 14:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29900		251	mg/Kg			12/22/21 17:24	50

Client Sample ID: SS02

Lab Sample ID: 890-1746-2

Date Collected: 12/20/21 13:34

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0402	U	0.0402	mg/Kg		12/22/21 15:43	12/23/21 10:17	20
Toluene	<0.0402	U	0.0402	mg/Kg		12/22/21 15:43	12/23/21 10:17	20
Ethylbenzene	0.161		0.0402	mg/Kg		12/22/21 15:43	12/23/21 10:17	20
m-Xylene & p-Xylene	0.218		0.0805	mg/Kg		12/22/21 15:43	12/23/21 10:17	20
o-Xylene	0.0408		0.0402	mg/Kg		12/22/21 15:43	12/23/21 10:17	20
Xylenes, Total	0.259		0.0805	mg/Kg		12/22/21 15:43	12/23/21 10:17	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	12/22/21 15:43	12/23/21 10:17	20

Eurofins Xenco, Carlsbad

Client Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS02

Lab Sample ID: 890-1746-2

Date Collected: 12/20/21 13:34

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130	12/22/21 15:43	12/23/21 10:17	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.420		0.0805	mg/Kg			12/23/21 19:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7220		49.9	mg/Kg			12/21/21 15:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	63.4		49.9	mg/Kg		12/22/21 09:41	12/22/21 15:20	1
Diesel Range Organics (Over C10-C28)	7160		49.9	mg/Kg		12/22/21 09:41	12/22/21 15:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/22/21 09:41	12/22/21 15:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			12/22/21 09:41	12/22/21 15:20	1
o-Terphenyl	87		70 - 130			12/22/21 09:41	12/22/21 15:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32100		253	mg/Kg			12/22/21 17:54	50

Client Sample ID: SS03

Lab Sample ID: 890-1746-3

Date Collected: 12/20/21 13:36

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0403	U	0.0403	mg/Kg		12/22/21 15:43	12/23/21 10:37	20
Toluene	<0.0403	U	0.0403	mg/Kg		12/22/21 15:43	12/23/21 10:37	20
Ethylbenzene	<0.0403	U	0.0403	mg/Kg		12/22/21 15:43	12/23/21 10:37	20
m-Xylene & p-Xylene	<0.0806	U	0.0806	mg/Kg		12/22/21 15:43	12/23/21 10:37	20
o-Xylene	<0.0403	U	0.0403	mg/Kg		12/22/21 15:43	12/23/21 10:37	20
Xylenes, Total	<0.0806	U	0.0806	mg/Kg		12/22/21 15:43	12/23/21 10:37	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	12/22/21 15:43	12/23/21 10:37	20
1,4-Difluorobenzene (Surr)	106		70 - 130	12/22/21 15:43	12/23/21 10:37	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0806	U	0.0806	mg/Kg			12/23/21 19:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			12/21/21 15:44	1

Eurofins Xenco, Carlsbad

Client Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS03

Lab Sample ID: 890-1746-3

Date Collected: 12/20/21 13:36

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		12/22/21 09:41	12/22/21 15:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		12/22/21 09:41	12/22/21 15:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		12/22/21 09:41	12/22/21 15:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			12/22/21 09:41	12/22/21 15:43	1
o-Terphenyl	97		70 - 130			12/22/21 09:41	12/22/21 15:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33000		249	mg/Kg			12/22/21 18:04	50

Client Sample ID: SS04

Lab Sample ID: 890-1746-4

Date Collected: 12/20/21 13:38

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
Toluene	<0.00202	U	0.00202	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		12/22/21 15:43	12/23/21 11:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			12/22/21 15:43	12/23/21 11:59	1
1,4-Difluorobenzene (Surr)	101		70 - 130			12/22/21 15:43	12/23/21 11:59	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			12/23/21 19:53	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			12/21/21 15:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		12/22/21 09:41	12/22/21 16:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		12/22/21 09:41	12/22/21 16:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/22/21 09:41	12/22/21 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			12/22/21 09:41	12/22/21 16:03	1
o-Terphenyl	99		70 - 130			12/22/21 09:41	12/22/21 16:03	1

Eurofins Xenco, Carlsbad

Client Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS04

Lab Sample ID: 890-1746-4

Date Collected: 12/20/21 13:38

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48600		248	mg/Kg			12/22/21 18:13	50

Client Sample ID: SS05

Lab Sample ID: 890-1746-5

Date Collected: 12/20/21 13:40

Matrix: Solid

Date Received: 12/21/21 10:28

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/22/21 15:43	12/23/21 12:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130			12/22/21 15:43	12/23/21 12:19	1
1,4-Difluorobenzene (Surr)	84		70 - 130			12/22/21 15:43	12/23/21 12:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/23/21 19:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	220		50.0	mg/Kg			12/21/21 15:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/22/21 09:41	12/22/21 16:24	1
Diesel Range Organics (Over C10-C28)	220		50.0	mg/Kg		12/22/21 09:41	12/22/21 16:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/22/21 09:41	12/22/21 16:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			12/22/21 09:41	12/22/21 16:24	1
o-Terphenyl	99		70 - 130			12/22/21 09:41	12/22/21 16:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38500		252	mg/Kg			12/22/21 18:23	50

Eurofins Xenco, Carlsbad

Surrogate Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-9652-A-1-A MS	Matrix Spike	110	90
880-9652-A-1-B MSD	Matrix Spike Duplicate	125	97
890-1746-1	SS01	139 S1+	98
890-1746-2	SS02	164 S1+	114
890-1746-3	SS03	117	106
890-1746-4	SS04	130	101
890-1746-5	SS05	133 S1+	84
LCS 880-15390/1-A	Lab Control Sample	104	96
LCSD 880-15390/2-A	Lab Control Sample Dup	103	100
MB 880-15329/5-A	Method Blank	104	100
MB 880-15390/5-A	Method Blank	114	113
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-9573-A-1-F MS	Matrix Spike	102	100
880-9573-A-1-G MSD	Matrix Spike Duplicate	99	99
890-1743-A-1-D MS	Matrix Spike	92	87
890-1743-A-1-E MSD	Matrix Spike Duplicate	103	101
890-1746-1	SS01	102	114
890-1746-2	SS02	123	87
890-1746-3	SS03	98	97
890-1746-4	SS04	101	99
890-1746-5	SS05	102	99
LCS 880-15389/2-A	Lab Control Sample	115	125
LCSD 880-15389/3-A	Lab Control Sample Dup	100	112
MB 880-15389/1-A	Method Blank	147 S1+	174 S1+
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)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-15317/2-A	Lab Control Sample	110	115
LCSD 880-15317/3-A	Lab Control Sample Dup	119	114
MB 880-15317/1-A	Method Blank	115	120
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15329/5-A

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15329

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/22/21 10:08	12/22/21 13:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/22/21 10:08	12/22/21 13:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/22/21 10:08	12/22/21 13:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/22/21 10:08	12/22/21 13:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/22/21 10:08	12/22/21 13:22	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/22/21 10:08	12/22/21 13:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	12/22/21 10:08	12/22/21 13:22	1
1,4-Difluorobenzene (Surr)	100		70 - 130	12/22/21 10:08	12/22/21 13:22	1

Lab Sample ID: MB 880-15390/5-A

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15390

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 00:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 00:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 00:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/22/21 15:43	12/23/21 00:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/22/21 15:43	12/23/21 00:14	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/22/21 15:43	12/23/21 00:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	12/22/21 15:43	12/23/21 00:14	1
1,4-Difluorobenzene (Surr)	113		70 - 130	12/22/21 15:43	12/23/21 00:14	1

Lab Sample ID: LCS 880-15390/1-A

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09001		mg/Kg		90	70 - 130
Toluene	0.100	0.08111		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07903		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	0.200	0.1664		mg/Kg		83	70 - 130
o-Xylene	0.100	0.08688		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-15390/2-A

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1001		mg/Kg		100	70 - 130	11	35

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QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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

Lab Sample ID: LCSD 880-15390/2-A

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.09060		mg/Kg		91	70 - 130	11	35
Ethylbenzene	0.100	0.08897		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1869		mg/Kg		93	70 - 130	12	35
o-Xylene	0.100	0.08892		mg/Kg		89	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-9652-A-1-A MS

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.06215	F1	mg/Kg		62	70 - 130
Toluene	<0.00200	U F1	0.0998	0.06085	F1	mg/Kg		60	70 - 130
Ethylbenzene	<0.00200	U F1	0.0998	0.05113	F1	mg/Kg		50	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.200	0.1093	F1	mg/Kg		55	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.05817	F1	mg/Kg		58	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 880-9652-A-1-B MSD

Matrix: Solid

Analysis Batch: 15330

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0994	0.04462	F1	mg/Kg		45	70 - 130	33	35
Toluene	<0.00200	U F1	0.0994	0.04573	F1	mg/Kg		45	70 - 130	28	35
Ethylbenzene	<0.00200	U F1	0.0994	0.04471	F1	mg/Kg		44	70 - 130	13	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.09392	F1	mg/Kg		47	70 - 130	15	35
o-Xylene	<0.00200	U F1	0.0994	0.05648	F1	mg/Kg		57	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-15317/1-A

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15317

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		12/22/21 09:41	12/22/21 11:15	1

Eurofins Xenco, Carlsbad

QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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

Lab Sample ID: MB 880-15317/1-A

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15317

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		12/22/21 09:41	12/22/21 11:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/22/21 09:41	12/22/21 11:15	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			12/22/21 09:41	12/22/21 11:15	1
o-Terphenyl	120		70 - 130			12/22/21 09:41	12/22/21 11:15	1

Lab Sample ID: LCS 880-15317/2-A

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	791.8		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1008		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	110		70 - 130				
o-Terphenyl	115		70 - 130				

Lab Sample ID: LCSD 880-15317/3-A

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	869.0		mg/Kg		87	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	114		70 - 130						

Lab Sample ID: 890-1743-A-1-D MS

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1031		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	126		996	1014		mg/Kg		89	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	87		70 - 130						

Eurofins Xenco, Carlsbad

QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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

Lab Sample ID: 890-1743-A-1-E MSD

Matrix: Solid

Analysis Batch: 15328

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15317

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	995	1002		mg/Kg		98	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	126		995	1192		mg/Kg		107	70 - 130	16	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	103		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: MB 880-15389/1-A

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15389

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		12/22/21 15:41	12/23/21 11:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/22/21 15:41	12/23/21 11:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/22/21 15:41	12/23/21 11:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	147	S1+	70 - 130			12/22/21 15:41	12/23/21 11:06	1
o-Terphenyl	174	S1+	70 - 130			12/22/21 15:41	12/23/21 11:06	1

Lab Sample ID: LCS 880-15389/2-A

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15389

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	861.3		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	814.2		mg/Kg		81	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	115		70 - 130						
o-Terphenyl	125		70 - 130						

Lab Sample ID: LCSD 880-15389/3-A

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15389

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	981.1		mg/Kg		98	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	741.9		mg/Kg		74	70 - 130	9	20

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QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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

Lab Sample ID: LCSD 880-15389/3-A

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15389

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

Lab Sample ID: 880-9573-A-1-F MS

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15389

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	996	2206	F1	mg/Kg		221	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	999.0		mg/Kg		100	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	102		70 - 130							
o-Terphenyl	100		70 - 130							

Lab Sample ID: 880-9573-A-1-G MSD

Matrix: Solid

Analysis Batch: 15413

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15389

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	995	1450	F1 F2	mg/Kg		146	70 - 130	41	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	995	961.6		mg/Kg		97	70 - 130	4	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	99		70 - 130									
o-Terphenyl	99		70 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15371/1-A

Matrix: Solid

Analysis Batch: 15402

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00	mg/Kg			12/22/21 16:54	1		

Lab Sample ID: LCS 880-15371/2-A

Matrix: Solid

Analysis Batch: 15402

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	253.6		mg/Kg		101	90 - 110		

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QC Sample Results

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-15371/3-A

Matrix: Solid

Analysis Batch: 15402

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	253.3		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-1746-1 MS

Matrix: Solid

Analysis Batch: 15402

Client Sample ID: SS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	29900		12600	42750		mg/Kg		102	90 - 110		

Lab Sample ID: 890-1746-1 MSD

Matrix: Solid

Analysis Batch: 15402

Client Sample ID: SS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	29900		12600	42610		mg/Kg		101	90 - 110	0	20

QC Association Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

GC VOA

Prep Batch: 15329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15329/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 15330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	8021B	15390
890-1746-2	SS02	Total/NA	Solid	8021B	15390
890-1746-3	SS03	Total/NA	Solid	8021B	15390
890-1746-4	SS04	Total/NA	Solid	8021B	15390
890-1746-5	SS05	Total/NA	Solid	8021B	15390
MB 880-15329/5-A	Method Blank	Total/NA	Solid	8021B	15329
MB 880-15390/5-A	Method Blank	Total/NA	Solid	8021B	15390
LCS 880-15390/1-A	Lab Control Sample	Total/NA	Solid	8021B	15390
LCSD 880-15390/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15390
880-9652-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	15390
880-9652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15390

Prep Batch: 15390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	5035	
890-1746-2	SS02	Total/NA	Solid	5035	
890-1746-3	SS03	Total/NA	Solid	5035	
890-1746-4	SS04	Total/NA	Solid	5035	
890-1746-5	SS05	Total/NA	Solid	5035	
MB 880-15390/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15390/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15390/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9652-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-9652-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 15505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	Total BTEX	
890-1746-2	SS02	Total/NA	Solid	Total BTEX	
890-1746-3	SS03	Total/NA	Solid	Total BTEX	
890-1746-4	SS04	Total/NA	Solid	Total BTEX	
890-1746-5	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 15281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-2	SS02	Total/NA	Solid	8015 NM	
890-1746-3	SS03	Total/NA	Solid	8015 NM	
890-1746-4	SS04	Total/NA	Solid	8015 NM	
890-1746-5	SS05	Total/NA	Solid	8015 NM	

Prep Batch: 15317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-2	SS02	Total/NA	Solid	8015NM Prep	
890-1746-3	SS03	Total/NA	Solid	8015NM Prep	
890-1746-4	SS04	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Carlsbad

QC Association Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

GC Semi VOA (Continued)

Prep Batch: 15317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-15317/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15317/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1743-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-2	SS02	Total/NA	Solid	8015B NM	15317
890-1746-3	SS03	Total/NA	Solid	8015B NM	15317
890-1746-4	SS04	Total/NA	Solid	8015B NM	15317
890-1746-5	SS05	Total/NA	Solid	8015B NM	15317
MB 880-15317/1-A	Method Blank	Total/NA	Solid	8015B NM	15317
LCS 880-15317/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15317
LCSD 880-15317/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15317
890-1743-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	15317
890-1743-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15317

Prep Batch: 15389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-15389/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15389/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15389/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9573-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9573-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	8015B NM	15389
MB 880-15389/1-A	Method Blank	Total/NA	Solid	8015B NM	15389
LCS 880-15389/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15389
LCSD 880-15389/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15389
880-9573-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	15389
880-9573-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15389

Analysis Batch: 15468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Soluble	Solid	DI Leach	
890-1746-2	SS02	Soluble	Solid	DI Leach	
890-1746-3	SS03	Soluble	Solid	DI Leach	
890-1746-4	SS04	Soluble	Solid	DI Leach	
890-1746-5	SS05	Soluble	Solid	DI Leach	
MB 880-15371/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad

QC Association Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

HPLC/IC (Continued)

Leach Batch: 15371 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-15371/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15371/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1746-1 MS	SS01	Soluble	Solid	DI Leach	
890-1746-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 15402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1746-1	SS01	Soluble	Solid	300.0	15371
890-1746-2	SS02	Soluble	Solid	300.0	15371
890-1746-3	SS03	Soluble	Solid	300.0	15371
890-1746-4	SS04	Soluble	Solid	300.0	15371
890-1746-5	SS05	Soluble	Solid	300.0	15371
MB 880-15371/1-A	Method Blank	Soluble	Solid	300.0	15371
LCS 880-15371/2-A	Lab Control Sample	Soluble	Solid	300.0	15371
LCSD 880-15371/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15371
890-1746-1 MS	SS01	Soluble	Solid	300.0	15371
890-1746-1 MSD	SS01	Soluble	Solid	300.0	15371

Lab Chronicle

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS01

Lab Sample ID: 890-1746-1

Date Collected: 12/20/21 13:32

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15390	12/22/21 15:43	MR	XEN MID
Total/NA	Analysis	8021B		20	15330	12/23/21 09:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	15505	12/23/21 19:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15468	12/23/21 12:30	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15389	12/22/21 15:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15413	12/23/21 14:22	AJ	XEN MID
Soluble	Leach	DI Leach			15371	12/22/21 11:12	CA	XEN MID
Soluble	Analysis	300.0		50	15402	12/22/21 17:24	SC	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1746-2

Date Collected: 12/20/21 13:34

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15390	12/22/21 15:43	MR	XEN MID
Total/NA	Analysis	8021B		20	15330	12/23/21 10:17	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	15505	12/23/21 19:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15281	12/21/21 15:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15317	12/22/21 09:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15328	12/22/21 15:20	AJ	XEN MID
Soluble	Leach	DI Leach			15371	12/22/21 11:12	CA	XEN MID
Soluble	Analysis	300.0		50	15402	12/22/21 17:54	SC	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1746-3

Date Collected: 12/20/21 13:36

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15390	12/22/21 15:43	MR	XEN MID
Total/NA	Analysis	8021B		20	15330	12/23/21 10:37	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	15505	12/23/21 19:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15281	12/21/21 15:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15317	12/22/21 09:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15328	12/22/21 15:43	AJ	XEN MID
Soluble	Leach	DI Leach			15371	12/22/21 11:12	CA	XEN MID
Soluble	Analysis	300.0		50	15402	12/22/21 18:04	SC	XEN MID

Client Sample ID: SS04

Lab Sample ID: 890-1746-4

Date Collected: 12/20/21 13:38

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15390	12/22/21 15:43	MR	XEN MID
Total/NA	Analysis	8021B		1	15330	12/23/21 11:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	15505	12/23/21 19:53	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Client Sample ID: SS04

Lab Sample ID: 890-1746-4

Date Collected: 12/20/21 13:38

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	15281	12/21/21 15:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15317	12/22/21 09:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15328	12/22/21 16:03	AJ	XEN MID
Soluble	Leach	DI Leach			15371	12/22/21 11:12	CA	XEN MID
Soluble	Analysis	300.0		50	15402	12/22/21 18:13	SC	XEN MID

Client Sample ID: SS05

Lab Sample ID: 890-1746-5

Date Collected: 12/20/21 13:40

Matrix: Solid

Date Received: 12/21/21 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15390	12/22/21 15:43	MR	XEN MID
Total/NA	Analysis	8021B		1	15330	12/23/21 12:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	15505	12/23/21 19:53	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	15281	12/21/21 15:44	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15317	12/22/21 09:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15328	12/22/21 16:24	AJ	XEN MID
Soluble	Leach	DI Leach			15371	12/22/21 11:12	CA	XEN MID
Soluble	Analysis	300.0		50	15402	12/22/21 18:23	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	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 PB 25-25-30

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

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

Sample Summary

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

Job ID: 890-1746-1
SDG: 31403236.029. Task 07.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1746-1	SS01	Solid	12/20/21 13:32	12/21/21 10:28	0.5
890-1746-2	SS02	Solid	12/20/21 13:34	12/21/21 10:28	0.5
890-1746-3	SS03	Solid	12/20/21 13:36	12/21/21 10:28	0.5
890-1746-4	SS04	Solid	12/20/21 13:38	12/21/21 10:28	0.5
890-1746-5	SS05	Solid	12/20/21 13:40	12/21/21 10:28	0.5

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

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Chain of Custody

Work Order No: _____

Project Manager:		Kalei Jennings	Bill to: (if different)	Adrian Baker	
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:		720-384-7365	Email:		Adrian.Baker@exxonnobil.com, Kalei.Jennings@wsp.com

Work Order Comments				
Program: UST/PST ☐ RP ☐ Growfields ☐ RC ☐ Superfund ☐				
State of Project:				
Reporting Level II ☐ Level III ☐ T/U/ST ☐ RP ☐ Level IV ☐				
Deliverables: EDD ☐ ADaPT ☐ Other: ☐				

Project Name:	PLU PB 25-25-30	Turn Around	ANALYSIS REQUEST					Work Order Notes
Project Number:	31403236.029 Task 07.02	Routine ☐						
P.O. Number:	Napp2130837821	Rush: 3 days						CC:1140221001
Sampler's Name:	Mercy Fotich.	Due Date:						

SAMPLE RECEIPT		Temp Blank:	Yes	No	Well Ice:	Yes	No
Temperature (°C):	1.8 / 1.6				Thermometer ID		
Received Intact:	Yes	No					
Cooler Custody Seals:	Yes	No	N/A		Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No	N/A		Total Containers:		

Number of Containers

PA 8015)

EPA 0=8021)

e (EPA 300.0)

890-1746 Chain of Custody

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

[illegible]

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

Notice: Signature of 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 sent and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Negei</i>	<i>A. Shur</i>	12/21/21 10:28			
3		4			
5		6			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1746-1

SDG Number: 31403236.029. Task 07.02

Login Number: 1746

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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: 890-1746-1

SDG Number: 31403236.029. Task 07.02

Login Number: 1746

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 12/22/21 01:46 PM

Creator: Rodriguez, Leticia

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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1802-1
Laboratory Sample Delivery Group: 314-3236.029
Client Project/Site: PLU PB 25-25-30

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

Attn: Benjamin Belill

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

Authorized for release by:
1/10/2022 12:08:34 PM

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

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

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

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

Laboratory Job ID: 890-1802-1
SDG: 314-3236.029

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Definitions/Glossary

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

Job ID: 890-1802-1
SDG: 314-3236.029

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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-1802-1
SDG: 314-3236.029

Job ID: 890-1802-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative
890-1802-1

Receipt

The samples were received on 1/6/2022 8:21 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-16231 and analytical batch 880-16330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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 PB 25-25-30

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH01

Lab Sample ID: 890-1802-1

Date Collected: 01/04/22 09:45

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 15:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 15:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 15:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 15:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 15:57	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	01/07/22 08:00	01/07/22 15:57	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/07/22 08:00	01/07/22 15:57	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/10/22 11:51	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			01/10/22 12:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 18:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 18:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	01/07/22 08:54	01/07/22 18:31	1
o-Terphenyl	95		70 - 130	01/07/22 08:54	01/07/22 18:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6890		50.5	mg/Kg			01/07/22 19:43	10

Client Sample ID: PH01

Lab Sample ID: 890-1802-2

Date Collected: 01/04/22 10:10

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 16:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 16:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 16:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 16:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 16:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	01/07/22 08:00	01/07/22 16:18	1

Eurofins Xenco

Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH01

Lab Sample ID: 890-1802-2

Date Collected: 01/04/22 10:10

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	124		70 - 130	01/07/22 08:00	01/07/22 16:18	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			01/10/22 11:51	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			01/10/22 12:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 18:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 18:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 18:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			01/07/22 08:54	01/07/22 18:51	1
o-Terphenyl	96		70 - 130			01/07/22 08:54	01/07/22 18:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	639		4.95	mg/Kg			01/07/22 19:51	1

Client Sample ID: PH01

Lab Sample ID: 890-1802-3

Date Collected: 01/04/22 10:20

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 16:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 16:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 16:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 16:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 16:38	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	01/07/22 08:00	01/07/22 16:38	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/07/22 08:00	01/07/22 16:38	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			01/10/22 11:51	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			01/10/22 12:40	1

Eurofins Xenco

Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH01

Lab Sample ID: 890-1802-3

Date Collected: 01/04/22 10:20

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			01/07/22 08:54	01/07/22 19:11	1
o-Terphenyl	94		70 - 130			01/07/22 08:54	01/07/22 19:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.2		4.98	mg/Kg			01/07/22 20:16	1

Client Sample ID: PH02

Lab Sample ID: 890-1802-4

Date Collected: 01/04/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 18:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130			01/07/22 08:00	01/07/22 18:00	1
1,4-Difluorobenzene (Surr)	113		70 - 130			01/07/22 08:00	01/07/22 18:00	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/10/22 11:51	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			01/10/22 12:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 19:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 19:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 08:54	01/07/22 19:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			01/07/22 08:54	01/07/22 19:31	1
o-Terphenyl	96		70 - 130			01/07/22 08:54	01/07/22 19:31	1

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Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH02

Lab Sample ID: 890-1802-4

Date Collected: 01/04/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1410		25.0	mg/Kg			01/07/22 20:25	5

Client Sample ID: PH02

Lab Sample ID: 890-1802-5

Date Collected: 01/04/22 12:15

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/07/22 18:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130			01/07/22 08:00	01/07/22 18:21	1
1,4-Difluorobenzene (Surr)	100		70 - 130			01/07/22 08:00	01/07/22 18:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/10/22 11:51	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			01/10/22 12:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			01/07/22 08:54	01/07/22 19:51	1
o-Terphenyl	95		70 - 130			01/07/22 08:54	01/07/22 19:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	342		25.0	mg/Kg			01/07/22 20:33	5

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Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH02

Lab Sample ID: 890-1802-6

Date Collected: 01/04/22 13:25

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/07/22 18:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/07/22 18:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/07/22 18:41	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/07/22 08:00	01/07/22 18:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/07/22 18:41	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/07/22 08:00	01/07/22 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	01/07/22 08:00	01/07/22 18:41	1
1,4-Difluorobenzene (Surr)	104		70 - 130	01/07/22 08:00	01/07/22 18:41	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			01/10/22 11:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		01/07/22 08:54	01/07/22 20:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/07/22 08:54	01/07/22 20:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/07/22 08:54	01/07/22 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	01/07/22 08:54	01/07/22 20:11	1
o-Terphenyl	94		70 - 130	01/07/22 08:54	01/07/22 20:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	247		49.7	mg/Kg			01/07/22 20:41	10

Client Sample ID: PH03

Lab Sample ID: 890-1802-7

Date Collected: 01/04/22 12:45

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 19:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 19:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 19:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 19:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 19:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130	01/07/22 08:00	01/07/22 19:01	1

Eurofins Xenco

Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH03

Lab Sample ID: 890-1802-7

Date Collected: 01/04/22 12:45

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	01/07/22 08:00	01/07/22 19:01	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			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 21:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 21:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			01/07/22 14:05	01/08/22 21:55	1
o-Terphenyl	114		70 - 130			01/07/22 14:05	01/08/22 21:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4090		49.5	mg/Kg			01/07/22 20:50	10

Client Sample ID: PH03

Lab Sample ID: 890-1802-8

Date Collected: 01/04/22 12:50

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 19:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 19:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 19:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 19:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 19:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/07/22 08:00	01/07/22 19:22	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/07/22 08:00	01/07/22 19:22	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			01/10/22 11:51	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			01/10/22 12:59	1

Eurofins Xenco

Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH03

Lab Sample ID: 890-1802-8

Date Collected: 01/04/22 12:50

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 2

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		01/07/22 14:05	01/08/22 22:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 22:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 22:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			01/07/22 14:05	01/08/22 22:57	1
o-Terphenyl	112		70 - 130			01/07/22 14:05	01/08/22 22:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	901	F1	49.9	mg/Kg			01/07/22 20:58	10

Client Sample ID: PH03

Lab Sample ID: 890-1802-9

Date Collected: 01/04/22 13:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/07/22 19:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130			01/07/22 08:00	01/07/22 19:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130			01/07/22 08:00	01/07/22 19:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			01/07/22 14:05	01/08/22 23:18	1
o-Terphenyl	118		70 - 130			01/07/22 14:05	01/08/22 23:18	1

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Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH03

Lab Sample ID: 890-1802-9

Date Collected: 01/04/22 13:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	285		25.3	mg/Kg			01/07/22 21:23	5

Client Sample ID: PH04

Lab Sample ID: 890-1802-10

Date Collected: 01/04/22 14:15

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 20:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			01/07/22 08:00	01/07/22 20:03	1
1,4-Difluorobenzene (Surr)	75		70 - 130			01/07/22 08:00	01/07/22 20:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/08/22 23:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			01/07/22 14:05	01/08/22 23:39	1
o-Terphenyl	111		70 - 130			01/07/22 14:05	01/08/22 23:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1360		24.8	mg/Kg			01/07/22 21:32	5

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Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH04

Lab Sample ID: 890-1802-11

Date Collected: 01/04/22 14:20

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:23	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 20:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 20:23	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/07/22 08:00	01/07/22 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	01/07/22 08:00	01/07/22 20:23	1
1,4-Difluorobenzene (Surr)	83		70 - 130	01/07/22 08:00	01/07/22 20:23	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 23:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 23:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	01/07/22 14:05	01/08/22 23:59	1
o-Terphenyl	112		70 - 130	01/07/22 14:05	01/08/22 23:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	128		25.3	mg/Kg			01/07/22 21:57	5

Client Sample ID: PH04

Lab Sample ID: 890-1802-12

Date Collected: 01/04/22 14:35

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 20:43	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 20:43	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 20:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 20:43	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/07/22 20:43	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/07/22 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	01/07/22 08:00	01/07/22 20:43	1

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Client Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH04

Lab Sample ID: 890-1802-12

Date Collected: 01/04/22 14:35

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	01/07/22 08:00	01/07/22 20:43	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			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			01/07/22 14:05	01/09/22 00:20	1
o-Terphenyl	117		70 - 130			01/07/22 14:05	01/09/22 00:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	289		25.0	mg/Kg			01/07/22 22:05	5

Surrogate Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1802-1	PH01	112	99
890-1802-2	PH01	159 S1+	124
890-1802-3	PH01	128	95
890-1802-4	PH02	132 S1+	113
890-1802-5	PH02	131 S1+	100
890-1802-6	PH02	110	104
890-1802-7	PH03	132 S1+	102
890-1802-8	PH03	115	95
890-1802-9	PH03	117	103
890-1802-10	PH04	115	75
890-1802-11	PH04	133 S1+	83
890-1802-12	PH04	113	96
890-1806-A-1-A MS	Matrix Spike	102	108
890-1806-A-1-B MSD	Matrix Spike Duplicate	97	101
LCS 880-16162/1-A	Lab Control Sample	99	99
LCSD 880-16162/2-A	Lab Control Sample Dup	100	92
MB 880-16162/5-A	Method Blank	109	105
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-9941-A-63-C MS	Matrix Spike	81	74
880-9941-A-63-D MSD	Matrix Spike Duplicate	81	76
890-1802-1	PH01	91	95
890-1802-2	PH01	92	96
890-1802-3	PH01	90	94
890-1802-4	PH02	91	96
890-1802-5	PH02	92	95
890-1802-6	PH02	91	94
890-1802-7	PH03	112	114
890-1802-7 MS	PH03	103	97
890-1802-7 MSD	PH03	102	97
890-1802-8	PH03	115	112
890-1802-9	PH03	120	118
890-1802-10	PH04	112	111
890-1802-11	PH04	110	112
890-1802-12	PH04	120	117
LCS 880-16212/2-A	Lab Control Sample	120	116
LCSD 880-16212/3-A	Lab Control Sample Dup	114	109
MB 880-16212/1-A	Method Blank	89	93
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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Surrogate Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

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 880-16265/2-A	Lab Control Sample	100	103				
LCSD 880-16265/3-A	Lab Control Sample Dup	113	111				
MB 880-16265/1-A	Method Blank	100	102				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16162/5-A

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16162

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 13:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 13:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 13:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 13:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 13:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	01/07/22 08:00	01/07/22 13:13	1
1,4-Difluorobenzene (Surr)	105		70 - 130	01/07/22 08:00	01/07/22 13:13	1

Lab Sample ID: LCS 880-16162/1-A

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09372		mg/Kg		94	70 - 130
Toluene	0.100	0.08444		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08430		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1763		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08514		mg/Kg		85	70 - 130

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

Lab Sample ID: LCSD 880-16162/2-A

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09237		mg/Kg		92	70 - 130	1	35
Toluene	0.100	0.08810		mg/Kg		88	70 - 130	4	35
Ethylbenzene	0.100	0.08612		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1791		mg/Kg		90	70 - 130	2	35
o-Xylene	0.100	0.08656		mg/Kg		87	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-1806-A-1-A MS

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0994	0.1030		mg/Kg		104	70 - 130
Toluene	<0.00200	U	0.0994	0.09423		mg/Kg		95	70 - 130

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QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

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

Lab Sample ID: 890-1806-A-1-A MS

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U	0.0994	0.09378		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1944		mg/Kg		98	70 - 130
o-Xylene	<0.00200	U	0.0994	0.09444		mg/Kg		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-1806-A-1-B MSD

Matrix: Solid

Analysis Batch: 16203

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.09825		mg/Kg		99	70 - 130	5	35
Toluene	<0.00200	U	0.0996	0.09048		mg/Kg		91	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.0996	0.08758		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1817		mg/Kg		91	70 - 130	7	35
o-Xylene	<0.00200	U	0.0996	0.08992		mg/Kg		90	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-16212/1-A

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16212

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		01/07/22 08:54	01/07/22 11:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 11:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 08:54	01/07/22 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	01/07/22 08:54	01/07/22 11:13	1
o-Terphenyl	93		70 - 130	01/07/22 08:54	01/07/22 11:13	1

Lab Sample ID: LCS 880-16212/2-A

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	891.2		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1013		mg/Kg		101	70 - 130

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QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

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

Lab Sample ID: LCS 880-16212/2-A

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16212

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: LCSD 880-16212/3-A

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16212

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	881.7		mg/Kg		88	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	989.3		mg/Kg		99	70 - 130	2	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	114		70 - 130								
o-Terphenyl	109		70 - 130								

Lab Sample ID: 880-9941-A-63-C MS

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16212

	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	911.9		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	953.9		mg/Kg		93	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	81		70 - 130								
o-Terphenyl	74		70 - 130								

Lab Sample ID: 880-9941-A-63-D MSD

Matrix: Solid

Analysis Batch: 16217

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16212

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	892.8		mg/Kg		86	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	978.6		mg/Kg		95	70 - 130	3	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	81		70 - 130								
o-Terphenyl	76		70 - 130								

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QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

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

Lab Sample ID: MB 880-16265/1-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16265

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		01/07/22 14:05	01/08/22 20:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 20:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 20:53	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			01/07/22 14:05	01/08/22 20:53	1
o-Terphenyl	102		70 - 130			01/07/22 14:05	01/08/22 20:53	1

Lab Sample ID: LCS 880-16265/2-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	862.8		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1017		mg/Kg		102	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	100		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-16265/3-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	892.7		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1021		mg/Kg		102	70 - 130	0	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	111		70 - 130						

Lab Sample ID: 890-1802-7 MS

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: PH03

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1125		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1237		mg/Kg		124	70 - 130

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QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

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

Lab Sample ID: 890-1802-7 MS

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: PH03

Prep Type: Total/NA

Prep Batch: 16265

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-1802-7 MSD

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: PH03

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1128		mg/Kg		110	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1247		mg/Kg		125	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	97		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16231/1-A

Matrix: Solid

Analysis Batch: 16330

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/07/22 18:36	1

Lab Sample ID: LCS 880-16231/2-A

Matrix: Solid

Analysis Batch: 16330

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	225.1		mg/Kg		90	90 - 110

Lab Sample ID: LCSD 880-16231/3-A

Matrix: Solid

Analysis Batch: 16330

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	226.3		mg/Kg		91	90 - 110	1	20

Lab Sample ID: 890-1802-8 MS

Matrix: Solid

Analysis Batch: 16330

Client Sample ID: PH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	901	F1	2500	2795	F1	mg/Kg		76	90 - 110

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QC Sample Results

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

Job ID: 890-1802-1
SDG: 314-3236.029

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1802-8 MSD					Client Sample ID: PH03							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 16330												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	901	F1	2500	2761	F1	mg/Kg		75	90 - 110	1	20	

QC Association Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

GC VOA

Prep Batch: 16162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	5035	
890-1802-2	PH01	Total/NA	Solid	5035	
890-1802-3	PH01	Total/NA	Solid	5035	
890-1802-4	PH02	Total/NA	Solid	5035	
890-1802-5	PH02	Total/NA	Solid	5035	
890-1802-6	PH02	Total/NA	Solid	5035	
890-1802-7	PH03	Total/NA	Solid	5035	
890-1802-8	PH03	Total/NA	Solid	5035	
890-1802-9	PH03	Total/NA	Solid	5035	
890-1802-10	PH04	Total/NA	Solid	5035	
890-1802-11	PH04	Total/NA	Solid	5035	
890-1802-12	PH04	Total/NA	Solid	5035	
MB 880-16162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1806-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-1806-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 16203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	8021B	16162
890-1802-2	PH01	Total/NA	Solid	8021B	16162
890-1802-3	PH01	Total/NA	Solid	8021B	16162
890-1802-4	PH02	Total/NA	Solid	8021B	16162
890-1802-5	PH02	Total/NA	Solid	8021B	16162
890-1802-6	PH02	Total/NA	Solid	8021B	16162
890-1802-7	PH03	Total/NA	Solid	8021B	16162
890-1802-8	PH03	Total/NA	Solid	8021B	16162
890-1802-9	PH03	Total/NA	Solid	8021B	16162
890-1802-10	PH04	Total/NA	Solid	8021B	16162
890-1802-11	PH04	Total/NA	Solid	8021B	16162
890-1802-12	PH04	Total/NA	Solid	8021B	16162
MB 880-16162/5-A	Method Blank	Total/NA	Solid	8021B	16162
LCS 880-16162/1-A	Lab Control Sample	Total/NA	Solid	8021B	16162
LCSD 880-16162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16162
890-1806-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	16162
890-1806-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16162

Analysis Batch: 16426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	Total BTEX	
890-1802-2	PH01	Total/NA	Solid	Total BTEX	
890-1802-3	PH01	Total/NA	Solid	Total BTEX	
890-1802-4	PH02	Total/NA	Solid	Total BTEX	
890-1802-5	PH02	Total/NA	Solid	Total BTEX	
890-1802-6	PH02	Total/NA	Solid	Total BTEX	
890-1802-7	PH03	Total/NA	Solid	Total BTEX	
890-1802-8	PH03	Total/NA	Solid	Total BTEX	
890-1802-9	PH03	Total/NA	Solid	Total BTEX	
890-1802-10	PH04	Total/NA	Solid	Total BTEX	
890-1802-11	PH04	Total/NA	Solid	Total BTEX	

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QC Association Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

GC VOA (Continued)

Analysis Batch: 16426 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-12	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 16212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	8015NM Prep	
890-1802-2	PH01	Total/NA	Solid	8015NM Prep	
890-1802-3	PH01	Total/NA	Solid	8015NM Prep	
890-1802-4	PH02	Total/NA	Solid	8015NM Prep	
890-1802-5	PH02	Total/NA	Solid	8015NM Prep	
890-1802-6	PH02	Total/NA	Solid	8015NM Prep	
MB 880-16212/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16212/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16212/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9941-A-63-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9941-A-63-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	8015B NM	16212
890-1802-2	PH01	Total/NA	Solid	8015B NM	16212
890-1802-3	PH01	Total/NA	Solid	8015B NM	16212
890-1802-4	PH02	Total/NA	Solid	8015B NM	16212
890-1802-5	PH02	Total/NA	Solid	8015B NM	16212
890-1802-6	PH02	Total/NA	Solid	8015B NM	16212
MB 880-16212/1-A	Method Blank	Total/NA	Solid	8015B NM	16212
LCS 880-16212/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16212
LCSD 880-16212/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16212
880-9941-A-63-C MS	Matrix Spike	Total/NA	Solid	8015B NM	16212
880-9941-A-63-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	16212

Prep Batch: 16265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-7	PH03	Total/NA	Solid	8015NM Prep	
890-1802-8	PH03	Total/NA	Solid	8015NM Prep	
890-1802-9	PH03	Total/NA	Solid	8015NM Prep	
890-1802-10	PH04	Total/NA	Solid	8015NM Prep	
890-1802-11	PH04	Total/NA	Solid	8015NM Prep	
890-1802-12	PH04	Total/NA	Solid	8015NM Prep	
MB 880-16265/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16265/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1802-7 MS	PH03	Total/NA	Solid	8015NM Prep	
890-1802-7 MSD	PH03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-7	PH03	Total/NA	Solid	8015B NM	16265
890-1802-8	PH03	Total/NA	Solid	8015B NM	16265
890-1802-9	PH03	Total/NA	Solid	8015B NM	16265

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QC Association Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

GC Semi VOA (Continued)

Analysis Batch: 16329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-10	PH04	Total/NA	Solid	8015B NM	16265
890-1802-11	PH04	Total/NA	Solid	8015B NM	16265
890-1802-12	PH04	Total/NA	Solid	8015B NM	16265
MB 880-16265/1-A	Method Blank	Total/NA	Solid	8015B NM	16265
LCS 880-16265/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16265
LCSD 880-16265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16265
890-1802-7 MS	PH03	Total/NA	Solid	8015B NM	16265
890-1802-7 MSD	PH03	Total/NA	Solid	8015B NM	16265

Analysis Batch: 16428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Total/NA	Solid	8015 NM	
890-1802-2	PH01	Total/NA	Solid	8015 NM	
890-1802-3	PH01	Total/NA	Solid	8015 NM	
890-1802-4	PH02	Total/NA	Solid	8015 NM	
890-1802-5	PH02	Total/NA	Solid	8015 NM	
890-1802-6	PH02	Total/NA	Solid	8015 NM	
890-1802-7	PH03	Total/NA	Solid	8015 NM	
890-1802-8	PH03	Total/NA	Solid	8015 NM	
890-1802-9	PH03	Total/NA	Solid	8015 NM	
890-1802-10	PH04	Total/NA	Solid	8015 NM	
890-1802-11	PH04	Total/NA	Solid	8015 NM	
890-1802-12	PH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 16231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Soluble	Solid	DI Leach	
890-1802-2	PH01	Soluble	Solid	DI Leach	
890-1802-3	PH01	Soluble	Solid	DI Leach	
890-1802-4	PH02	Soluble	Solid	DI Leach	
890-1802-5	PH02	Soluble	Solid	DI Leach	
890-1802-6	PH02	Soluble	Solid	DI Leach	
890-1802-7	PH03	Soluble	Solid	DI Leach	
890-1802-8	PH03	Soluble	Solid	DI Leach	
890-1802-9	PH03	Soluble	Solid	DI Leach	
890-1802-10	PH04	Soluble	Solid	DI Leach	
890-1802-11	PH04	Soluble	Solid	DI Leach	
890-1802-12	PH04	Soluble	Solid	DI Leach	
MB 880-16231/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16231/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16231/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1802-8 MS	PH03	Soluble	Solid	DI Leach	
890-1802-8 MSD	PH03	Soluble	Solid	DI Leach	

Analysis Batch: 16330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-1	PH01	Soluble	Solid	300.0	16231
890-1802-2	PH01	Soluble	Solid	300.0	16231
890-1802-3	PH01	Soluble	Solid	300.0	16231

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QC Association Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

HPLC/IC (Continued)

Analysis Batch: 16330 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1802-4	PH02	Soluble	Solid	300.0	16231
890-1802-5	PH02	Soluble	Solid	300.0	16231
890-1802-6	PH02	Soluble	Solid	300.0	16231
890-1802-7	PH03	Soluble	Solid	300.0	16231
890-1802-8	PH03	Soluble	Solid	300.0	16231
890-1802-9	PH03	Soluble	Solid	300.0	16231
890-1802-10	PH04	Soluble	Solid	300.0	16231
890-1802-11	PH04	Soluble	Solid	300.0	16231
890-1802-12	PH04	Soluble	Solid	300.0	16231
MB 880-16231/1-A	Method Blank	Soluble	Solid	300.0	16231
LCS 880-16231/2-A	Lab Control Sample	Soluble	Solid	300.0	16231
LCSD 880-16231/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16231
890-1802-8 MS	PH03	Soluble	Solid	300.0	16231
890-1802-8 MSD	PH03	Soluble	Solid	300.0	16231

Lab Chronicle

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH01

Lab Sample ID: 890-1802-1

Date Collected: 01/04/22 09:45

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 15:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		10	16330	01/07/22 19:43	CH	XEN MID

Client Sample ID: PH01

Lab Sample ID: 890-1802-2

Date Collected: 01/04/22 10:10

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 16:18	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 18:51	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 19:51	CH	XEN MID

Client Sample ID: PH01

Lab Sample ID: 890-1802-3

Date Collected: 01/04/22 10:20

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 16:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 19:11	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 20:16	CH	XEN MID

Client Sample ID: PH02

Lab Sample ID: 890-1802-4

Date Collected: 01/04/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 18:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID

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Lab Chronicle

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH02

Lab Sample ID: 890-1802-4

Date Collected: 01/04/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 19:31	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 20:25	CH	XEN MID

Client Sample ID: PH02

Lab Sample ID: 890-1802-5

Date Collected: 01/04/22 12:15

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 18:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:40	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 19:51	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 20:33	CH	XEN MID

Client Sample ID: PH02

Lab Sample ID: 890-1802-6

Date Collected: 01/04/22 13:25

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 18:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16212	01/07/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16217	01/07/22 20:11	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		10	16330	01/07/22 20:41	CH	XEN MID

Client Sample ID: PH03

Lab Sample ID: 890-1802-7

Date Collected: 01/04/22 12:45

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 19:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/08/22 21:55	AJ	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH03

Lab Sample ID: 890-1802-7

Date Collected: 01/04/22 12:45

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		10	16330	01/07/22 20:50	CH	XEN MID

Client Sample ID: PH03

Lab Sample ID: 890-1802-8

Date Collected: 01/04/22 12:50

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 19:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/08/22 22:57	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		10	16330	01/07/22 20:58	CH	XEN MID

Client Sample ID: PH03

Lab Sample ID: 890-1802-9

Date Collected: 01/04/22 13:05

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 19:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/08/22 23:18	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 21:23	CH	XEN MID

Client Sample ID: PH04

Lab Sample ID: 890-1802-10

Date Collected: 01/04/22 14:15

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 20:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/08/22 23:39	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 21:32	CH	XEN MID

Eurofins Xenco

Lab Chronicle

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

Job ID: 890-1802-1
SDG: 314-3236.029

Client Sample ID: PH04

Lab Sample ID: 890-1802-11

Date Collected: 01/04/22 14:20

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 20:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/08/22 23:59	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 21:57	CH	XEN MID

Client Sample ID: PH04

Lab Sample ID: 890-1802-12

Date Collected: 01/04/22 14:35

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16162	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16203	01/07/22 20:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 00:20	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		5	16330	01/07/22 22:05	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

Laboratory: Eurofins Xenco

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

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

Method Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

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

Sample Summary

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

Job ID: 890-1802-1
SDG: 314-3236.029

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1802-1	PH01	Solid	01/04/22 09:45	01/06/22 08:21	1
890-1802-2	PH01	Solid	01/04/22 10:10	01/06/22 08:21	3
890-1802-3	PH01	Solid	01/04/22 10:20	01/06/22 08:21	4
890-1802-4	PH02	Solid	01/04/22 12:05	01/06/22 08:21	1
890-1802-5	PH02	Solid	01/04/22 12:15	01/06/22 08:21	2
890-1802-6	PH02	Solid	01/04/22 13:25	01/06/22 08:21	3
890-1802-7	PH03	Solid	01/04/22 12:45	01/06/22 08:21	1
890-1802-8	PH03	Solid	01/04/22 12:50	01/06/22 08:21	2
890-1802-9	PH03	Solid	01/04/22 13:05	01/06/22 08:21	3
890-1802-10	PH04	Solid	01/04/22 14:15	01/06/22 08:21	1
890-1802-11	PH04	Solid	01/04/22 14:20	01/06/22 08:21	2
890-1802-12	PH04	Solid	01/04/22 14:35	01/06/22 08:21	3



Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No:

www.xenco.com Page 1 of 2

Project Manager:	Benjamin Belli	Bill to: (if different)	ADRIAN BAKER
Company Name:	WSP USA INC.	Company Name:	XTO ENERGY
Address:	508 W STEVENS ST.	Address:	3104 E GREEN STREET
City, State ZIP:	Carlsbad NM, 88220	City, State ZIP:	Carlsbad NM 88220
Phone:	989-854-0852	Email:	Ben.Belli@wsp.com

Project Name:	PLU PB 25-25-30	Turn Around	☒ Routine ☐ Rush	Prior. Code	
Project Number:	3140236,039	Due Date:	3 Day		
Project Location:	CC 114023601	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Conner Shore				
P.O. #:					

SAMPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	RM-007		
Cooler Custody Seals:	Yes No	Correction Factor:	-0.2		
Sample Custody Seals:	Yes No	Temperature Reading:	3.0		
Total Containers:		Corrected Temperature:	2.8		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Analysis Request	Preservative Codes	Sample Comments
PH01	S	01/04	945	1'	G	1			None: NO	DI Water: H ₂ O
PH01	S	01/04	1030	3'					Cool: Cool	MeOH: Me
PH01	S	01/04	1020	4'					HCL: HC	HNO ₃ : HN
PH02	S	01/04	1205	1'					H ₂ SO ₄ : H ₂	NaOH: Na
PH02	S	01/04	1215	2'					H ₃ PO ₄ : HP	
PH02	S	01/04	1235	3'					NaHSO ₄ : NABIS	
PH03	S	01/04	1245	1'					Na ₂ S ₂ O ₅ : NaSO ₃	
PH03	S	01/04	1250	2'					Zn Acetate+NaOH: Zn	
PH03	S	01/04	1305	3'					NaOH+Ascorbic Acid: SACP	
PH04	S	01/04	1415	1'						

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
3		
5		

Revised Date 08/25/2020 Rev. 20202

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing
 Xenco

Work Order No:

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Project Manager:	Bill to: (if different)
Company Name:	Company Name:
Address:	Address:
City, State ZIP:	City, State ZIP:
Phone:	Email:

Project Name:	PLU PB 25-25-30
Project Number:	314 03234.029
Project Location:	CC: 114032 1001
Sampler's Name:	Connor Shore
P.O. #:	

SAMPLE RECEIPT				Turn Around				Parameters				ANALYSIS REQUEST				Preservative Codes			
Temp Blank:		Yes No		Thermometer:		Yes No		Wet Ice:		Yes No		Pres. Code		None: NO		DI Water: H ₂ O			
Samples Received Intact:		Yes No		Cooler Custody Seals:		Yes No N/A		Temperature Reading:		Corrected Temperature:		Due Date:		TAT starts the day received by the lab, if received by 4:30pm		Cool: Cool			
Sample Custody Seals:		Yes No N/A		Total Containers:												MeOH: Me			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont													
PH04	S	01/04	1420	2'	6	1													
PH04	S	01/04	1435	3'	6	1													
Chlorides																			
BTEX																			
TBT																			
CS																			

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>CS</i>	<i>Connor Shore</i>	1-6-22 0821			
3		4			
5		6			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1802-1

SDG Number: 314-3236.029

Login Number: 1802

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco

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: 890-1802-1

SDG Number: 314-3236.029

Login Number: 1802

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco

List Creation: 01/07/22 12:52 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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1803-1

Laboratory Sample Delivery Group: 314-3236.029

Client Project/Site: PLU PB 25-25-30

For:

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

Attn: Benjamin Belill

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

Authorized for release by:
1/11/2022 3:22:56 PM

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

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

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

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

Laboratory Job ID: 890-1803-1
SDG: 314-3236.029

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Definitions/Glossary

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

Job ID: 890-1803-1
SDG: 314-3236.029

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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-1803-1
SDG: 314-3236.029

Job ID: 890-1803-1

Laboratory: Eurofins Carlsbad

Narrative	Job Narrative 890-1803-1
-----------	-----------------------------

Receipt

The samples were received on 1/6/2022 8:21 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-16231 and analytical batch 880-16330 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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 PB 25-25-30

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS01

Lab Sample ID: 890-1803-1

Date Collected: 01/05/22 11:00

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 23:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	204	S1+	70 - 130	01/07/22 08:00	01/07/22 23:10	1
1,4-Difluorobenzene (Surr)	86		70 - 130	01/07/22 08:00	01/07/22 23:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	01/07/22 14:05	01/09/22 00:40	1
o-Terphenyl	110		70 - 130	01/07/22 14:05	01/09/22 00:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		4.98	mg/Kg			01/07/22 22:14	1

Client Sample ID: FS02

Lab Sample ID: 890-1803-2

Date Collected: 01/05/22 11:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 23:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 23:37	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/07/22 08:00	01/07/22 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	229	S1+	70 - 130	01/07/22 08:00	01/07/22 23:37	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS02

Lab Sample ID: 890-1803-2

Date Collected: 01/05/22 11:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	01/07/22 08:00	01/07/22 23:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			01/07/22 14:05	01/09/22 01:01	1
o-Terphenyl	111		70 - 130			01/07/22 14:05	01/09/22 01:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.9		4.96	mg/Kg			01/07/22 22:22	1

Client Sample ID: FS03

Lab Sample ID: 890-1803-3

Date Collected: 01/05/22 11:10

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 00:03	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 00:03	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 00:03	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		01/07/22 08:00	01/08/22 00:03	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 00:03	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		01/07/22 08:00	01/08/22 00:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	229	S1+	70 - 130	01/07/22 08:00	01/08/22 00:03	1
1,4-Difluorobenzene (Surr)	111		70 - 130	01/07/22 08:00	01/08/22 00:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS03

Lab Sample ID: 890-1803-3

Date Collected: 01/05/22 11:10

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 01:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 01:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 01:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			01/07/22 14:05	01/09/22 01:22	1
o-Terphenyl	112		70 - 130			01/07/22 14:05	01/09/22 01:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.3		4.96	mg/Kg			01/07/22 22:30	1

Client Sample ID: FS04

Lab Sample ID: 890-1803-4

Date Collected: 01/05/22 11:25

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/08/22 00:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	231	S1+	70 - 130			01/07/22 08:00	01/08/22 00:30	1
1,4-Difluorobenzene (Surr)	107		70 - 130			01/07/22 08:00	01/08/22 00:30	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 01:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			01/07/22 14:05	01/09/22 01:42	1
o-Terphenyl	108		70 - 130			01/07/22 14:05	01/09/22 01:42	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS04

Lab Sample ID: 890-1803-4

Date Collected: 01/05/22 11:25

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.9		4.95	mg/Kg			01/07/22 22:39	1

Client Sample ID: FS05

Lab Sample ID: 890-1803-5

Date Collected: 01/05/22 11:30

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 00:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	234	S1+	70 - 130			01/07/22 08:00	01/08/22 00:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130			01/07/22 08:00	01/08/22 00:56	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			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 02:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 02:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 02:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			01/07/22 14:05	01/09/22 02:23	1
o-Terphenyl	112		70 - 130			01/07/22 14:05	01/09/22 02:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.4		5.00	mg/Kg			01/07/22 22:47	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS06

Lab Sample ID: 890-1803-6

Date Collected: 01/05/22 11:35

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:23	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:23	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 01:23	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:23	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 01:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	260	S1+	70 - 130	01/07/22 08:00	01/08/22 01:23	1
1,4-Difluorobenzene (Surr)	111		70 - 130	01/07/22 08:00	01/08/22 01:23	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			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 02:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 02:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 02:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	01/07/22 14:05	01/09/22 02:44	1
o-Terphenyl	124		70 - 130	01/07/22 14:05	01/09/22 02:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80.1		4.95	mg/Kg			01/11/22 11:14	1

Client Sample ID: SW01

Lab Sample ID: 890-1803-7

Date Collected: 01/05/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 01:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 01:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	234	S1+	70 - 130	01/07/22 08:00	01/08/22 01:49	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: SW01

Lab Sample ID: 890-1803-7

Date Collected: 01/05/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	01/07/22 08:00	01/08/22 01:49	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			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			01/07/22 14:05	01/09/22 03:05	1
o-Terphenyl	115		70 - 130			01/07/22 14:05	01/09/22 03:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	358		4.96	mg/Kg			01/11/22 11:22	1

Client Sample ID: SW02

Lab Sample ID: 890-1803-8

Date Collected: 01/05/22 13:00

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 02:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 02:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 02:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 02:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/07/22 08:00	01/08/22 02:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/07/22 08:00	01/08/22 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	261	S1+	70 - 130	01/07/22 08:00	01/08/22 02:16	1
1,4-Difluorobenzene (Surr)	81		70 - 130	01/07/22 08:00	01/08/22 02:16	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			01/10/22 11:51	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			01/10/22 12:59	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: SW02

Lab Sample ID: 890-1803-8

Date Collected: 01/05/22 13:00

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/07/22 14:05	01/09/22 03:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			01/07/22 14:05	01/09/22 03:25	1
o-Terphenyl	118		70 - 130			01/07/22 14:05	01/09/22 03:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	229		4.99	mg/Kg			01/11/22 11:31	1

Client Sample ID: SW03

Lab Sample ID: 890-1803-9

Date Collected: 01/05/22 12:15

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/07/22 08:00	01/08/22 02:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	241	S1+	70 - 130			01/07/22 08:00	01/08/22 02:42	1
1,4-Difluorobenzene (Surr)	116		70 - 130			01/07/22 08:00	01/08/22 02:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 03:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 03:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 03:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			01/07/22 14:05	01/09/22 03:46	1
o-Terphenyl	112		70 - 130			01/07/22 14:05	01/09/22 03:46	1

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Client Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: SW03

Lab Sample ID: 890-1803-9

Date Collected: 01/05/22 12:15

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.1		5.01	mg/Kg			01/11/22 11:39	1

Client Sample ID: SW04

Lab Sample ID: 890-1803-10

Date Collected: 01/05/22 13:05

Matrix: Solid

Date Received: 01/06/22 08:21

Sample Depth: 1 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/07/22 08:00	01/08/22 03:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	256	S1+	70 - 130			01/07/22 08:00	01/08/22 03:09	1
1,4-Difluorobenzene (Surr)	114		70 - 130			01/07/22 08:00	01/08/22 03:09	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/10/22 11:51	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			01/10/22 12:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 04:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 04:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/09/22 04:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			01/07/22 14:05	01/09/22 04:07	1
o-Terphenyl	113		70 - 130			01/07/22 14:05	01/09/22 04:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	224		5.02	mg/Kg			01/11/22 11:47	1

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Surrogate Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1801-A-1-B MSD	Matrix Spike Duplicate	179 S1+	127
890-1801-A-1-E MS	Matrix Spike	201 S1+	86
890-1803-1	FS01	204 S1+	86
890-1803-2	FS02	229 S1+	100
890-1803-3	FS03	229 S1+	111
890-1803-4	FS04	231 S1+	107
890-1803-5	FS05	234 S1+	100
890-1803-6	FS06	260 S1+	111
890-1803-7	SW01	234 S1+	105
890-1803-8	SW02	261 S1+	81
890-1803-9	SW03	241 S1+	116
890-1803-10	SW04	256 S1+	114
LCS 880-16152/1-A	Lab Control Sample	223 S1+	104
LCSD 880-16152/2-A	Lab Control Sample Dup	217 S1+	95
MB 880-16152/5-A	Method Blank	136 S1+	92
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1802-A-7-G MS	Matrix Spike	103	97
890-1802-A-7-H MSD	Matrix Spike Duplicate	102	97
890-1803-1	FS01	108	110
890-1803-2	FS02	108	111
890-1803-3	FS03	114	112
890-1803-4	FS04	105	108
890-1803-5	FS05	110	112
890-1803-6	FS06	125	124
890-1803-7	SW01	115	115
890-1803-8	SW02	119	118
890-1803-9	SW03	113	112
890-1803-10	SW04	112	113
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)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
LCS 880-16265/2-A	Lab Control Sample	100	103
LCSD 880-16265/3-A	Lab Control Sample Dup	113	111

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Surrogate Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)
MB 880-16265/1-A	Method Blank	100	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16152/5-A

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16152

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 17:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 17:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 17:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 17:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/07/22 08:00	01/07/22 17:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/07/22 08:00	01/07/22 17:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130	01/07/22 08:00	01/07/22 17:01	1
1,4-Difluorobenzene (Surr)	92		70 - 130	01/07/22 08:00	01/07/22 17:01	1

Lab Sample ID: LCS 880-16152/1-A

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16152

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1071		mg/Kg		107	70 - 130
Toluene	0.100	0.1162		mg/Kg		116	70 - 130
Ethylbenzene	0.100	0.1175		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	0.200	0.2408		mg/Kg		120	70 - 130
o-Xylene	0.100	0.1066		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	223	S1+	70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-16152/2-A

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16152

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1018		mg/Kg		102	70 - 130	5	35
Toluene	0.100	0.1093		mg/Kg		109	70 - 130	6	35
Ethylbenzene	0.100	0.1088		mg/Kg		109	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2217		mg/Kg		111	70 - 130	8	35
o-Xylene	0.100	0.09806		mg/Kg		98	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	217	S1+	70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-1801-A-1-B MSD

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16152

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08563		mg/Kg		85	70 - 130	27	35
Toluene	<0.00202	U	0.100	0.09396		mg/Kg		94	70 - 130	5	35

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QC Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

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

Lab Sample ID: 890-1801-A-1-B MSD

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16152

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	<0.00202	U	0.100	0.09475		mg/Kg		94	70 - 130	5	35
m-Xylene & p-Xylene	<0.00403	U	0.201	0.1830		mg/Kg		91	70 - 130	9	35
o-Xylene	<0.00202	U	0.100	0.08136		mg/Kg		81	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	179	S1+	70 - 130
1,4-Difluorobenzene (Surr)	127		70 - 130

Lab Sample ID: 890-1801-A-1-E MS

Matrix: Solid

Analysis Batch: 16263

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16152

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.100	0.1129		mg/Kg		112	70 - 130
Toluene	<0.00202	U	0.100	0.09897		mg/Kg		99	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.09984		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.201	0.2002		mg/Kg		100	70 - 130
o-Xylene	<0.00202	U	0.100	0.08668		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	201	S1+	70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

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

Lab Sample ID: MB 880-16265/1-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16265

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		01/07/22 14:05	01/08/22 20:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 20:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/07/22 14:05	01/08/22 20:53	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	01/07/22 14:05	01/08/22 20:53	1
o-Terphenyl	102		70 - 130	01/07/22 14:05	01/08/22 20:53	1

Lab Sample ID: LCS 880-16265/2-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	862.8		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1017		mg/Kg		102	70 - 130

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QC Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

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

Lab Sample ID: LCS 880-16265/2-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16265

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-16265/3-A

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	892.7		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1021		mg/Kg		102	70 - 130	0	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 890-1802-A-7-G MS

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1125		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1237		mg/Kg		124	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-1802-A-7-H MSD

Matrix: Solid

Analysis Batch: 16329

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1128		mg/Kg		110	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1247		mg/Kg		125	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	97		70 - 130

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QC Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16231/1-A

Matrix: Solid

Analysis Batch: 16330

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/07/22 18:36	1

Lab Sample ID: LCS 880-16231/2-A

Matrix: Solid

Analysis Batch: 16330

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	225.1		mg/Kg		90	90 - 110

Lab Sample ID: LCSD 880-16231/3-A

Matrix: Solid

Analysis Batch: 16330

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	226.3		mg/Kg		91	90 - 110	1	20

Lab Sample ID: 880-9941-A-61-B MS

Matrix: Solid

Analysis Batch: 16330

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	46.7	F1	249	223.3	F1	mg/Kg		71	90 - 110

Lab Sample ID: 880-9941-A-61-C MSD

Matrix: Solid

Analysis Batch: 16330

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	46.7	F1	249	234.6	F1	mg/Kg		75	90 - 110	5	20

Lab Sample ID: MB 880-16232/1-A

Matrix: Solid

Analysis Batch: 16479

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/11/22 00:38	1

Lab Sample ID: LCS 880-16232/2-A

Matrix: Solid

Analysis Batch: 16479

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	247.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-16232/3-A

Matrix: Solid

Analysis Batch: 16479

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	249.2		mg/Kg		100	90 - 110	1	20

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QC Sample Results

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

Job ID: 890-1803-1
SDG: 314-3236.029

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-9921-A-20-C MS
Matrix: Solid
Analysis Batch: 16479

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	310		249	537.3		mg/Kg		91	90 - 110		

Lab Sample ID: 880-9921-A-20-D MSD
Matrix: Solid
Analysis Batch: 16479

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	310		249	536.6		mg/Kg		91	90 - 110	0	20

QC Association Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

GC VOA

Prep Batch: 16152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	5035	
890-1803-2	FS02	Total/NA	Solid	5035	
890-1803-3	FS03	Total/NA	Solid	5035	
890-1803-4	FS04	Total/NA	Solid	5035	
890-1803-5	FS05	Total/NA	Solid	5035	
890-1803-6	FS06	Total/NA	Solid	5035	
890-1803-7	SW01	Total/NA	Solid	5035	
890-1803-8	SW02	Total/NA	Solid	5035	
890-1803-9	SW03	Total/NA	Solid	5035	
890-1803-10	SW04	Total/NA	Solid	5035	
MB 880-16152/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16152/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16152/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1801-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
890-1801-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	

Analysis Batch: 16263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	8021B	16152
890-1803-2	FS02	Total/NA	Solid	8021B	16152
890-1803-3	FS03	Total/NA	Solid	8021B	16152
890-1803-4	FS04	Total/NA	Solid	8021B	16152
890-1803-5	FS05	Total/NA	Solid	8021B	16152
890-1803-6	FS06	Total/NA	Solid	8021B	16152
890-1803-7	SW01	Total/NA	Solid	8021B	16152
890-1803-8	SW02	Total/NA	Solid	8021B	16152
890-1803-9	SW03	Total/NA	Solid	8021B	16152
890-1803-10	SW04	Total/NA	Solid	8021B	16152
MB 880-16152/5-A	Method Blank	Total/NA	Solid	8021B	16152
LCS 880-16152/1-A	Lab Control Sample	Total/NA	Solid	8021B	16152
LCSD 880-16152/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16152
890-1801-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16152
890-1801-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	16152

Analysis Batch: 16426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	Total BTEX	
890-1803-2	FS02	Total/NA	Solid	Total BTEX	
890-1803-3	FS03	Total/NA	Solid	Total BTEX	
890-1803-4	FS04	Total/NA	Solid	Total BTEX	
890-1803-5	FS05	Total/NA	Solid	Total BTEX	
890-1803-6	FS06	Total/NA	Solid	Total BTEX	
890-1803-7	SW01	Total/NA	Solid	Total BTEX	
890-1803-8	SW02	Total/NA	Solid	Total BTEX	
890-1803-9	SW03	Total/NA	Solid	Total BTEX	
890-1803-10	SW04	Total/NA	Solid	Total BTEX	

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QC Association Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

GC Semi VOA

Prep Batch: 16265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	8015NM Prep	
890-1803-2	FS02	Total/NA	Solid	8015NM Prep	
890-1803-3	FS03	Total/NA	Solid	8015NM Prep	
890-1803-4	FS04	Total/NA	Solid	8015NM Prep	
890-1803-5	FS05	Total/NA	Solid	8015NM Prep	
890-1803-6	FS06	Total/NA	Solid	8015NM Prep	
890-1803-7	SW01	Total/NA	Solid	8015NM Prep	
890-1803-8	SW02	Total/NA	Solid	8015NM Prep	
890-1803-9	SW03	Total/NA	Solid	8015NM Prep	
890-1803-10	SW04	Total/NA	Solid	8015NM Prep	
MB 880-16265/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16265/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1802-A-7-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1802-A-7-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	8015B NM	16265
890-1803-2	FS02	Total/NA	Solid	8015B NM	16265
890-1803-3	FS03	Total/NA	Solid	8015B NM	16265
890-1803-4	FS04	Total/NA	Solid	8015B NM	16265
890-1803-5	FS05	Total/NA	Solid	8015B NM	16265
890-1803-6	FS06	Total/NA	Solid	8015B NM	16265
890-1803-7	SW01	Total/NA	Solid	8015B NM	16265
890-1803-8	SW02	Total/NA	Solid	8015B NM	16265
890-1803-9	SW03	Total/NA	Solid	8015B NM	16265
890-1803-10	SW04	Total/NA	Solid	8015B NM	16265
MB 880-16265/1-A	Method Blank	Total/NA	Solid	8015B NM	16265
LCS 880-16265/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16265
LCSD 880-16265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16265
890-1802-A-7-G MS	Matrix Spike	Total/NA	Solid	8015B NM	16265
890-1802-A-7-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	16265

Analysis Batch: 16428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Total/NA	Solid	8015 NM	
890-1803-2	FS02	Total/NA	Solid	8015 NM	
890-1803-3	FS03	Total/NA	Solid	8015 NM	
890-1803-4	FS04	Total/NA	Solid	8015 NM	
890-1803-5	FS05	Total/NA	Solid	8015 NM	
890-1803-6	FS06	Total/NA	Solid	8015 NM	
890-1803-7	SW01	Total/NA	Solid	8015 NM	
890-1803-8	SW02	Total/NA	Solid	8015 NM	
890-1803-9	SW03	Total/NA	Solid	8015 NM	
890-1803-10	SW04	Total/NA	Solid	8015 NM	

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QC Association Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

HPLC/IC

Leach Batch: 16231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Soluble	Solid	DI Leach	
890-1803-2	FS02	Soluble	Solid	DI Leach	
890-1803-3	FS03	Soluble	Solid	DI Leach	
890-1803-4	FS04	Soluble	Solid	DI Leach	
890-1803-5	FS05	Soluble	Solid	DI Leach	
MB 880-16231/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16231/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16231/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9941-A-61-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9941-A-61-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 16232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-6	FS06	Soluble	Solid	DI Leach	
890-1803-7	SW01	Soluble	Solid	DI Leach	
890-1803-8	SW02	Soluble	Solid	DI Leach	
890-1803-9	SW03	Soluble	Solid	DI Leach	
890-1803-10	SW04	Soluble	Solid	DI Leach	
MB 880-16232/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16232/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16232/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9921-A-20-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9921-A-20-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 16330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-1	FS01	Soluble	Solid	300.0	16231
890-1803-2	FS02	Soluble	Solid	300.0	16231
890-1803-3	FS03	Soluble	Solid	300.0	16231
890-1803-4	FS04	Soluble	Solid	300.0	16231
890-1803-5	FS05	Soluble	Solid	300.0	16231
MB 880-16231/1-A	Method Blank	Soluble	Solid	300.0	16231
LCS 880-16231/2-A	Lab Control Sample	Soluble	Solid	300.0	16231
LCSD 880-16231/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16231
880-9941-A-61-B MS	Matrix Spike	Soluble	Solid	300.0	16231
880-9941-A-61-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	16231

Analysis Batch: 16479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1803-6	FS06	Soluble	Solid	300.0	16232
890-1803-7	SW01	Soluble	Solid	300.0	16232
890-1803-8	SW02	Soluble	Solid	300.0	16232
890-1803-9	SW03	Soluble	Solid	300.0	16232
890-1803-10	SW04	Soluble	Solid	300.0	16232
MB 880-16232/1-A	Method Blank	Soluble	Solid	300.0	16232
LCS 880-16232/2-A	Lab Control Sample	Soluble	Solid	300.0	16232
LCSD 880-16232/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16232
880-9921-A-20-C MS	Matrix Spike	Soluble	Solid	300.0	16232
880-9921-A-20-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	16232

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Lab Chronicle

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS01

Lab Sample ID: 890-1803-1

Date Collected: 01/05/22 11:00

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/07/22 23:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 00:40	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 22:14	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 890-1803-2

Date Collected: 01/05/22 11:05

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/07/22 23:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 01:01	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 22:22	CH	XEN MID

Client Sample ID: FS03

Lab Sample ID: 890-1803-3

Date Collected: 01/05/22 11:10

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 00:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 01:22	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 22:30	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 890-1803-4

Date Collected: 01/05/22 11:25

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 00:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID

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Lab Chronicle

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: FS04

Lab Sample ID: 890-1803-4

Date Collected: 01/05/22 11:25

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 01:42	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 22:39	CH	XEN MID

Client Sample ID: FS05

Lab Sample ID: 890-1803-5

Date Collected: 01/05/22 11:30

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 00:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 02:23	AJ	XEN MID
Soluble	Leach	DI Leach			16231	01/07/22 10:10	CH	XEN MID
Soluble	Analysis	300.0		1	16330	01/07/22 22:47	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 890-1803-6

Date Collected: 01/05/22 11:35

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 01:23	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 02:44	AJ	XEN MID
Soluble	Leach	DI Leach			16232	01/07/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1	16479	01/11/22 11:14	CH	XEN MID

Client Sample ID: SW01

Lab Sample ID: 890-1803-7

Date Collected: 01/05/22 12:05

Matrix: Solid

Date Received: 01/06/22 08:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 01:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 03:05	AJ	XEN MID

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Lab Chronicle

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

Job ID: 890-1803-1
SDG: 314-3236.029

Client Sample ID: SW01**Lab Sample ID: 890-1803-7****Date Collected: 01/05/22 12:05****Matrix: Solid****Date Received: 01/06/22 08:21**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			16232	01/07/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1	16479	01/11/22 11:22	CH	XEN MID

Client Sample ID: SW02**Lab Sample ID: 890-1803-8****Date Collected: 01/05/22 13:00****Matrix: Solid****Date Received: 01/06/22 08:21**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 02:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 03:25	AJ	XEN MID
Soluble	Leach	DI Leach			16232	01/07/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1	16479	01/11/22 11:31	CH	XEN MID

Client Sample ID: SW03**Lab Sample ID: 890-1803-9****Date Collected: 01/05/22 12:15****Matrix: Solid****Date Received: 01/06/22 08:21**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 02:42	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 03:46	AJ	XEN MID
Soluble	Leach	DI Leach			16232	01/07/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1	16479	01/11/22 11:39	CH	XEN MID

Client Sample ID: SW04**Lab Sample ID: 890-1803-10****Date Collected: 01/05/22 13:05****Matrix: Solid****Date Received: 01/06/22 08:21**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16152	01/07/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	16263	01/08/22 03:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16426	01/10/22 11:51	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16428	01/10/22 12:59	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16265	01/07/22 14:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16329	01/09/22 04:07	AJ	XEN MID
Soluble	Leach	DI Leach			16232	01/07/22 10:13	CH	XEN MID
Soluble	Analysis	300.0		1	16479	01/11/22 11:47	CH	XEN MID

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Lab Chronicle

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

Job ID: 890-1803-1
SDG: 314-3236.029

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

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Accreditation/Certification Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

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

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

Method Summary

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

Job ID: 890-1803-1
SDG: 314-3236.029

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 PB 25-25-30

Job ID: 890-1803-1
SDG: 314-3236.029

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1803-1	FS01	Solid	01/05/22 11:00	01/06/22 08:21	4
890-1803-2	FS02	Solid	01/05/22 11:05	01/06/22 08:21	4
890-1803-3	FS03	Solid	01/05/22 11:10	01/06/22 08:21	4
890-1803-4	FS04	Solid	01/05/22 11:25	01/06/22 08:21	4
890-1803-5	FS05	Solid	01/05/22 11:30	01/06/22 08:21	4
890-1803-6	FS06	Solid	01/05/22 11:35	01/06/22 08:21	4
890-1803-7	SW01	Solid	01/05/22 12:05	01/06/22 08:21	1 - 4
890-1803-8	SW02	Solid	01/05/22 13:00	01/06/22 08:21	1 - 4
890-1803-9	SW03	Solid	01/05/22 12:15	01/06/22 08:21	1 - 4
890-1803-10	SW04	Solid	01/05/22 13:05	01/06/22 08:21	1 - 4

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco

Work Order No:

Page _____ of _____
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Project Manager: Benjamin Belili		Bill to: (if different)		ADRIAN BAKER	
Company Name: WSP USA INC		Company Name:		XTO ENERGY	
Address: 503 W STEVENS ST.		Address:		3104 E. GREEN STREET	
City, State ZIP: CLEVELAND, NM 88720		City, State ZIP:		CLEVELAND NM, 88720	
Phone: 989.854.0857		Email: Ben.Belili@wsp.com			
Project Name: PLU PB 05-05-30		Turn Around			
Project Number: 31403236.079		☐ Routine ☒ Rush			
Project Location: CC. 1140001001		Due Date: 3 Day			
Sampler's Name: Connor Shore		TAT starts the day received by the lab, if received by 4:30pm			
PO #:					
SAMPLE RECEIPT		Temp Blank: ☒ Yes ☒ No		Wet-See: ☒ Yes ☒ No	
Samples Received Intact:		Thermometer ID: NM-007			
Cooler Custody Seals: Yes ☒ No ☒ N/A		Correction Factor: -0.2			
Sample Custody Seals: Yes ☒ No ☒ N/A		Temperature Reading: 3.0			
Total Containers:		Corrected Temperature: 2.8			
Sample Identification		Date Sampled	Matrix	Time Sampled	Depth
FS01		01/05	S	1100	4'
FS02				1105	4'
FS03				1110	4'
FS04				1125	4'
FS05				1130	4'
FS06				1135	4'
SW01				1205	1-4'
SW02				1300	1-4'
SW03				1215	1-4'
SW04				1305	1-4'
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 Ti 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 Ti U		Hg: 1631 / 245.1 / 7470 / 7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.					
Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
[Signature]		[Signature]		1.6.22 0821	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1803-1

SDG Number: 314-3236.029

Login Number: 1803

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: 890-1803-1

SDG Number: 314-3236.029

Login Number: 1803

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/07/22 12:52 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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1824-1

Laboratory Sample Delivery Group: 31403236.029.07

Client Project/Site: PLU PB 25-25-30

For:

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

Attn: Benjamin Belill

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

Authorized for release by:
1/18/2022 11:12:43 AM

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

LINKS

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

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

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

Laboratory Job ID: 890-1824-1
SDG: 31403236.029.07

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Definitions/Glossary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Job ID: 890-1824-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-1824-1****Receipt**

The samples were received on 1/12/2022 11:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-16734 and analytical batch 880-16738 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS07 (890-1824-2), SS08 (890-1824-3), SS09 (890-1824-4), SS10 (890-1824-5), SS12 (890-1824-7), (890-1824-A-1-E MS) and (890-1824-A-1-F MSD). 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 PB 25-25-30

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS06

Lab Sample ID: 890-1824-1

Date Collected: 01/06/22 10:05

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:28	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:28	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:28	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		01/14/22 07:30	01/15/22 12:28	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:28	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		01/14/22 07:30	01/15/22 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/14/22 07:30	01/15/22 12:28	1
1,4-Difluorobenzene (Surr)	93		70 - 130	01/14/22 07:30	01/15/22 12:28	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/14/22 22:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/14/22 22:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/14/22 22:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	01/13/22 13:55	01/14/22 22:19	1
o-Terphenyl	76		70 - 130	01/13/22 13:55	01/14/22 22:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		4.98	mg/Kg			01/14/22 20:22	1

Client Sample ID: SS07

Lab Sample ID: 890-1824-2

Date Collected: 01/06/22 10:00

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 12:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 12:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 12:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 12:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 12:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	01/14/22 07:30	01/15/22 12:48	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS07

Lab Sample ID: 890-1824-2

Date Collected: 01/06/22 10:00

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	01/14/22 07:30	01/15/22 12:48	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			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/14/22 23:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/14/22 23:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/14/22 23:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/13/22 13:55	01/14/22 23:22	1
o-Terphenyl	74		70 - 130			01/13/22 13:55	01/14/22 23:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	205		4.96	mg/Kg			01/14/22 20:28	1

Client Sample ID: SS08

Lab Sample ID: 890-1824-3

Date Collected: 01/06/22 10:10

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 04:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:55	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 04:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/13/22 10:00	01/14/22 04:55	1
1,4-Difluorobenzene (Surr)	102		70 - 130	01/13/22 10:00	01/14/22 04:55	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS08

Lab Sample ID: 890-1824-3

Date Collected: 01/06/22 10:10

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/14/22 23:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/14/22 23:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/14/22 23:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130			01/13/22 13:55	01/14/22 23:42	1
o-Terphenyl	76		70 - 130			01/13/22 13:55	01/14/22 23:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.5		5.04	mg/Kg			01/14/22 21:02	1

Client Sample ID: SS09

Lab Sample ID: 890-1824-4

Date Collected: 01/06/22 11:15

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 05:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130			01/13/22 10:00	01/14/22 05:16	1
1,4-Difluorobenzene (Surr)	99		70 - 130			01/13/22 10:00	01/14/22 05:16	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			01/17/22 14:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2320		49.9	mg/Kg			01/17/22 14:06	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	78.3		49.9	mg/Kg		01/13/22 13:55	01/15/22 09:17	1
Diesel Range Organics (Over C10-C28)	2240		49.9	mg/Kg		01/13/22 13:55	01/15/22 09:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 09:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130			01/13/22 13:55	01/15/22 09:17	1
o-Terphenyl	2	S1-	70 - 130			01/13/22 13:55	01/15/22 09:17	1

Eurofins Carlsbad

Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS09

Lab Sample ID: 890-1824-4

Date Collected: 01/06/22 11:15

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		4.97	mg/Kg			01/14/22 23:56	1

Client Sample ID: SS10

Lab Sample ID: 890-1824-5

Date Collected: 01/06/22 11:20

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 05:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			01/13/22 10:00	01/14/22 05:36	1
1,4-Difluorobenzene (Surr)	78		70 - 130			01/13/22 10:00	01/14/22 05:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/15/22 00:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 00:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 00:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/13/22 13:55	01/15/22 00:22	1
o-Terphenyl	68	S1-	70 - 130			01/13/22 13:55	01/15/22 00:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.7		4.95	mg/Kg			01/14/22 21:15	1

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Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS11

Lab Sample ID: 890-1824-6

Date Collected: 01/06/22 11:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 05:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 05:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 05:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	01/13/22 10:00	01/14/22 05:57	1
1,4-Difluorobenzene (Surr)	94		70 - 130	01/13/22 10:00	01/14/22 05:57	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			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/15/22 00:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 00:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 00:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/13/22 13:55	01/15/22 00:42	1
o-Terphenyl	71		70 - 130	01/13/22 13:55	01/15/22 00:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.8		5.01	mg/Kg			01/14/22 21:21	1

Client Sample ID: SS12

Lab Sample ID: 890-1824-7

Date Collected: 01/06/22 11:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 06:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 06:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 06:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 06:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 06:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 06:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130	01/13/22 10:00	01/14/22 06:17	1

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Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS12

Lab Sample ID: 890-1824-7

Date Collected: 01/06/22 11:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	115		70 - 130	01/13/22 10:00	01/14/22 06:17	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:55	01/15/22 01:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 01:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 01:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130			01/13/22 13:55	01/15/22 01:03	1
o-Terphenyl	67	S1-	70 - 130			01/13/22 13:55	01/15/22 01:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	366		4.99	mg/Kg			01/15/22 00:04	1

Client Sample ID: SS13

Lab Sample ID: 890-1824-8

Date Collected: 01/07/22 11:50

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 06:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 06:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 06:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 06:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 06:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 06:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	01/13/22 10:00	01/14/22 06:38	1
1,4-Difluorobenzene (Surr)	101		70 - 130	01/13/22 10:00	01/14/22 06:38	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS13

Lab Sample ID: 890-1824-8

Date Collected: 01/07/22 11:50

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 01:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 01:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 01:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			01/13/22 13:55	01/15/22 01:23	1
o-Terphenyl	83		70 - 130			01/13/22 13:55	01/15/22 01:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.3		4.98	mg/Kg			01/14/22 21:33	1

Surrogate Summary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1823-A-1-A MS	Matrix Spike	691 S1+	94
890-1823-A-1-B MSD	Matrix Spike Duplicate	578 S1+	35 S1-
890-1824-1	SS06	114	93
890-1824-2	SS07	119	102
890-1824-3	SS08	114	102
890-1824-4	SS09	117	99
890-1824-5	SS10	101	78
890-1824-6	SS11	110	94
890-1824-7	SS12	143 S1+	115
890-1824-8	SS13	120	101
890-1825-A-1-F MS	Matrix Spike	120	110
890-1825-A-1-G MSD	Matrix Spike Duplicate	123	112
LCS 880-16734/1-A	Lab Control Sample	107	96
LCS 880-16737/1-A	Lab Control Sample	104	101
LCSD 880-16734/2-A	Lab Control Sample Dup	115	105
LCSD 880-16737/2-A	Lab Control Sample Dup	114	99
MB 880-16730/5-A	Method Blank	118	99
MB 880-16734/5-A	Method Blank	126	116
MB 880-16737/5-A	Method Blank	113	95
MB 880-16823/5-A	Method Blank	114	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1824-1	SS06	75	76
890-1824-1 MS	SS06	67 S1-	62 S1-
890-1824-1 MSD	SS06	66 S1-	62 S1-
890-1824-2	SS07	68 S1-	74
890-1824-3	SS08	69 S1-	76
890-1824-4	SS09	65 S1-	2 S1-
890-1824-5	SS10	68 S1-	68 S1-
890-1824-6	SS11	73	71
890-1824-7	SS12	65 S1-	67 S1-
890-1824-8	SS13	76	83
LCS 880-16787/2-A	Lab Control Sample	93	87
LCSD 880-16787/3-A	Lab Control Sample Dup	90	86
MB 880-16787/1-A	Method Blank	74	85
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16730/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16730

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/13/22 11:00	01/13/22 15:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/13/22 11:00	01/13/22 15:48	1

Lab Sample ID: MB 880-16734/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16734

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/13/22 10:00	01/14/22 03:25	1
1,4-Difluorobenzene (Surr)	116		70 - 130	01/13/22 10:00	01/14/22 03:25	1

Lab Sample ID: LCS 880-16734/1-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07868		mg/Kg		79	70 - 130
Toluene	0.100	0.08474		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09796		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1848		mg/Kg		92	70 - 130
o-Xylene	0.100	0.08974		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09943		mg/Kg		99	70 - 130	23	35

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1085		mg/Kg		109	70 - 130	25	35
Ethylbenzene	0.100	0.1145		mg/Kg		114	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.2223		mg/Kg		111	70 - 130	18	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-1823-A-1-A MS

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0998	0.03705	F1	mg/Kg		37	70 - 130
Toluene	<0.00199	U F2 F1	0.0998	0.3163	F1	mg/Kg		317	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.1822	F1	mg/Kg		183	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.3598	F1	mg/Kg		180	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0998	0.1645	F1	mg/Kg		165	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	691	S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-1823-A-1-B MSD

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0996	0.07644	F2	mg/Kg		77	70 - 130	69	35
Toluene	<0.00199	U F2 F1	0.0996	0.05419	F1 F2	mg/Kg		54	70 - 130	141	35
Ethylbenzene	<0.00199	U F1 F2	0.0996	0.06866	F1 F2	mg/Kg		69	70 - 130	91	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.3008	F1	mg/Kg		151	70 - 130	18	35
o-Xylene	<0.00199	U F2 F1	0.0996	0.3488	F1 F2	mg/Kg		350	70 - 130	72	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	578	S1+	70 - 130
1,4-Difluorobenzene (Surr)	35	S1-	70 - 130

Lab Sample ID: MB 880-16737/5-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16737

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 03:40	1

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

Lab Sample ID: MB 880-16737/5-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16737

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 03:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	01/14/22 07:30	01/15/22 03:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/14/22 07:30	01/15/22 03:40	1

Lab Sample ID: LCS 880-16737/1-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08363		mg/Kg		84	70 - 130
Toluene	0.100	0.09440		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09891		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1887		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09064		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-16737/2-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09548		mg/Kg		95	70 - 130	13	35
Toluene	0.100	0.09404		mg/Kg		94	70 - 130	0	35
Ethylbenzene	0.100	0.09695		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1884		mg/Kg		94	70 - 130	0	35
o-Xylene	0.100	0.09451		mg/Kg		95	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1825-A-1-F MS

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.100	0.08382		mg/Kg		83	70 - 130
Toluene	<0.00199	U	0.100	0.09000		mg/Kg		90	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.08576		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1699		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.100	0.08366		mg/Kg		83	70 - 130

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

Lab Sample ID: 890-1825-A-1-F MS

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16737

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-1825-A-1-G MSD

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08325		mg/Kg		83	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.09170		mg/Kg		92	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09846		mg/Kg		98	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1793		mg/Kg		89	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130	8	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-16823/5-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16823

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 10:00	01/14/22 16:05	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	114		70 - 130	01/14/22 10:00	01/14/22 16:05	1		
1,4-Difluorobenzene (Surr)	100		70 - 130	01/14/22 10:00	01/14/22 16:05	1		

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

Lab Sample ID: MB 880-16787/1-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16787

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		01/13/22 13:55	01/14/22 21:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/14/22 21:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/14/22 21:18	1

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

Lab Sample ID: MB 880-16787/1-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16787

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac			
1-Chlorooctane	74		70 - 130	01/13/22 13:55	01/14/22 21:18	1				
o-Terphenyl	85		70 - 130	01/13/22 13:55	01/14/22 21:18	1				

Lab Sample ID: LCS 880-16787/2-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16787

			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	967.2		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	804.8		mg/Kg		80	70 - 130		

	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	93		70 - 130								
o-Terphenyl	87		70 - 130								

Lab Sample ID: LCSD 880-16787/3-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16787

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	945.2		mg/Kg		95	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)			1000	796.1		mg/Kg		80	70 - 130	1	20	

	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	90		70 - 130									
o-Terphenyl	86		70 - 130									

Lab Sample ID: 890-1824-1 MS

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: SS06

Prep Type: Total/NA

Prep Batch: 16787

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1114		mg/Kg		108	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U	996	945.9		mg/Kg		93	70 - 130			

	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	67	S1-	70 - 130									
o-Terphenyl	62	S1-	70 - 130									

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QC Sample Results

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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

Lab Sample ID: 890-1824-1 MSD

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: SS06

Prep Type: Total/NA

Prep Batch: 16787

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1084		mg/Kg		104	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	951.7		mg/Kg		93	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	66	S1-	70 - 130								
o-Terphenyl	62	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16752/1-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/14/22 19:33	1

Lab Sample ID: LCS 880-16752/2-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Chloride	250	270.0		mg/Kg		108	90 - 110	

Lab Sample ID: LCSD 880-16752/3-A

Matrix: Solid

Analysis Batch: 16868

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	274.6		mg/Kg		110	90 - 110	2	20

Lab Sample ID: 890-1824-8 MS

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: SS13

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	65.3		249	325.3		mg/Kg		104	90 - 110		

Lab Sample ID: 890-1824-8 MSD

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: SS13

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	65.3		249	325.8		mg/Kg		105	90 - 110	0	20

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QC Association Summary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

GC VOA

Prep Batch: 16730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16730/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 16734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-3	SS08	Total/NA	Solid	5035	
890-1824-4	SS09	Total/NA	Solid	5035	
890-1824-5	SS10	Total/NA	Solid	5035	
890-1824-6	SS11	Total/NA	Solid	5035	
890-1824-7	SS12	Total/NA	Solid	5035	
890-1824-8	SS13	Total/NA	Solid	5035	
MB 880-16734/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1823-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-1823-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 16737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	5035	
890-1824-2	SS07	Total/NA	Solid	5035	
MB 880-16737/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16737/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16737/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1825-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-1825-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 16738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-3	SS08	Total/NA	Solid	8021B	16734
890-1824-4	SS09	Total/NA	Solid	8021B	16734
890-1824-5	SS10	Total/NA	Solid	8021B	16734
890-1824-6	SS11	Total/NA	Solid	8021B	16734
890-1824-7	SS12	Total/NA	Solid	8021B	16734
890-1824-8	SS13	Total/NA	Solid	8021B	16734
MB 880-16730/5-A	Method Blank	Total/NA	Solid	8021B	16730
MB 880-16734/5-A	Method Blank	Total/NA	Solid	8021B	16734
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	8021B	16734
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16734
890-1823-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	16734
890-1823-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16734

Prep Batch: 16823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16823/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 16837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	8021B	16737
890-1824-2	SS07	Total/NA	Solid	8021B	16737
MB 880-16737/5-A	Method Blank	Total/NA	Solid	8021B	16737
MB 880-16823/5-A	Method Blank	Total/NA	Solid	8021B	16823

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QC Association Summary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

GC VOA (Continued)

Analysis Batch: 16837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-16737/1-A	Lab Control Sample	Total/NA	Solid	8021B	16737
LCSD 880-16737/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16737
890-1825-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	16737
890-1825-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16737

Analysis Batch: 17056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	Total BTEX	
890-1824-2	SS07	Total/NA	Solid	Total BTEX	
890-1824-3	SS08	Total/NA	Solid	Total BTEX	
890-1824-4	SS09	Total/NA	Solid	Total BTEX	
890-1824-5	SS10	Total/NA	Solid	Total BTEX	
890-1824-6	SS11	Total/NA	Solid	Total BTEX	
890-1824-7	SS12	Total/NA	Solid	Total BTEX	
890-1824-8	SS13	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 16787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	8015NM Prep	
890-1824-2	SS07	Total/NA	Solid	8015NM Prep	
890-1824-3	SS08	Total/NA	Solid	8015NM Prep	
890-1824-4	SS09	Total/NA	Solid	8015NM Prep	
890-1824-5	SS10	Total/NA	Solid	8015NM Prep	
890-1824-6	SS11	Total/NA	Solid	8015NM Prep	
890-1824-7	SS12	Total/NA	Solid	8015NM Prep	
890-1824-8	SS13	Total/NA	Solid	8015NM Prep	
MB 880-16787/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16787/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16787/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1824-1 MS	SS06	Total/NA	Solid	8015NM Prep	
890-1824-1 MSD	SS06	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	8015B NM	16787
890-1824-2	SS07	Total/NA	Solid	8015B NM	16787
890-1824-3	SS08	Total/NA	Solid	8015B NM	16787
890-1824-4	SS09	Total/NA	Solid	8015B NM	16787
890-1824-5	SS10	Total/NA	Solid	8015B NM	16787
890-1824-6	SS11	Total/NA	Solid	8015B NM	16787
890-1824-7	SS12	Total/NA	Solid	8015B NM	16787
890-1824-8	SS13	Total/NA	Solid	8015B NM	16787
MB 880-16787/1-A	Method Blank	Total/NA	Solid	8015B NM	16787
LCS 880-16787/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16787
LCSD 880-16787/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16787
890-1824-1 MS	SS06	Total/NA	Solid	8015B NM	16787
890-1824-1 MSD	SS06	Total/NA	Solid	8015B NM	16787

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QC Association Summary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

GC Semi VOA

Analysis Batch: 17055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Total/NA	Solid	8015 NM	
890-1824-2	SS07	Total/NA	Solid	8015 NM	
890-1824-3	SS08	Total/NA	Solid	8015 NM	
890-1824-4	SS09	Total/NA	Solid	8015 NM	
890-1824-5	SS10	Total/NA	Solid	8015 NM	
890-1824-6	SS11	Total/NA	Solid	8015 NM	
890-1824-7	SS12	Total/NA	Solid	8015 NM	
890-1824-8	SS13	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 16752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Soluble	Solid	DI Leach	
890-1824-2	SS07	Soluble	Solid	DI Leach	
890-1824-3	SS08	Soluble	Solid	DI Leach	
890-1824-4	SS09	Soluble	Solid	DI Leach	
890-1824-5	SS10	Soluble	Solid	DI Leach	
890-1824-6	SS11	Soluble	Solid	DI Leach	
890-1824-7	SS12	Soluble	Solid	DI Leach	
890-1824-8	SS13	Soluble	Solid	DI Leach	
MB 880-16752/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1824-8 MS	SS13	Soluble	Solid	DI Leach	
890-1824-8 MSD	SS13	Soluble	Solid	DI Leach	

Analysis Batch: 16868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1824-1	SS06	Soluble	Solid	300.0	16752
890-1824-2	SS07	Soluble	Solid	300.0	16752
890-1824-3	SS08	Soluble	Solid	300.0	16752
890-1824-4	SS09	Soluble	Solid	300.0	16752
890-1824-5	SS10	Soluble	Solid	300.0	16752
890-1824-6	SS11	Soluble	Solid	300.0	16752
890-1824-7	SS12	Soluble	Solid	300.0	16752
890-1824-8	SS13	Soluble	Solid	300.0	16752
MB 880-16752/1-A	Method Blank	Soluble	Solid	300.0	16752
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	300.0	16752
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16752
890-1824-8 MS	SS13	Soluble	Solid	300.0	16752
890-1824-8 MSD	SS13	Soluble	Solid	300.0	16752

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Lab Chronicle

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS06

Lab Sample ID: 890-1824-1

Date Collected: 01/06/22 10:05

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 12:28	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/14/22 22:19	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 20:22	CH	XEN MID

Client Sample ID: SS07

Lab Sample ID: 890-1824-2

Date Collected: 01/06/22 10:00

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 12:48	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/14/22 23:22	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 20:28	CH	XEN MID

Client Sample ID: SS08

Lab Sample ID: 890-1824-3

Date Collected: 01/06/22 10:10

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 04:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/14/22 23:42	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 21:02	CH	XEN MID

Client Sample ID: SS09

Lab Sample ID: 890-1824-4

Date Collected: 01/06/22 11:15

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 05:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS09

Lab Sample ID: 890-1824-4

Date Collected: 01/06/22 11:15

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 09:17	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 23:56	CH	XEN MID

Client Sample ID: SS10

Lab Sample ID: 890-1824-5

Date Collected: 01/06/22 11:20

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 05:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 00:22	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 21:15	CH	XEN MID

Client Sample ID: SS11

Lab Sample ID: 890-1824-6

Date Collected: 01/06/22 11:25

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 05:57	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 00:42	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 21:21	CH	XEN MID

Client Sample ID: SS12

Lab Sample ID: 890-1824-7

Date Collected: 01/06/22 11:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 06:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 01:03	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1824-1
SDG: 31403236.029.07

Client Sample ID: SS12

Lab Sample ID: 890-1824-7

Date Collected: 01/06/22 11:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 00:04	CH	XEN MID

Client Sample ID: SS13

Lab Sample ID: 890-1824-8

Date Collected: 01/07/22 11:50

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 06:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 01:23	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 21:33	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.
Project/Site: PLU PB 25-25-30

Job ID: 890-1824-1
SDG: 31403236.029.07

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

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

Method Summary

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

Job ID: 890-1824-1
SDG: 31403236.029.07

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 PB 25-25-30

Job ID: 890-1824-1
SDG: 31403236.029.07

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1824-1	SS06	Solid	01/06/22 10:05	01/12/22 11:53	0.5
890-1824-2	SS07	Solid	01/06/22 10:00	01/12/22 11:53	0.5
890-1824-3	SS08	Solid	01/06/22 10:10	01/12/22 11:53	0.5
890-1824-4	SS09	Solid	01/06/22 11:15	01/12/22 11:53	0.5
890-1824-5	SS10	Solid	01/06/22 11:20	01/12/22 11:53	0.5
890-1824-6	SS11	Solid	01/06/22 11:25	01/12/22 11:53	0.5
890-1824-7	SS12	Solid	01/06/22 11:30	01/12/22 11:53	0.5
890-1824-8	SS13	Solid	01/07/22 11:50	01/12/22 11:53	0.5

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco

Work Order No:

www.xenco.com Page 1 of 1

Project Manager: Ben Belili
 Company Name: WSP USA Inc
 Address: 508 W. Stevens St.
 City, State ZIP: Carlsbad, NM, 88220
 Phone: 989-854-0852

Bill to: (if different)
 Company Name: ADRIAN BAKER
 Address: XTO ENERGY
 City, State ZIP: 3104 E GREENE STREET
 Carlsbad, NM, 88220
 Email: Ben.Belili@wsp.com

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

Project Name: PLU PR 25-25-30
 Project Number: 31403274.029.P7
 Project Location: 66 114 027-1001
 Sampler's Name: Conner Shore
 PO #: TASH 07.02

Temp Blank: Yes No
 Thermometer ID: 7M-007
 Correction Factor: -0.2
 Temperature Reading: 1.8
 Corrected Temperature: 1.4

Turn Around: ☐ Routine ☒ Rush
 Due Date: 3 DAY
 TAT starts the day received by the lab, if received by 4:30pm

Wet Ice: Yes No
 Thermometer ID: 7M-007
 Correction Factor: -0.2
 Temperature Reading: 1.8
 Corrected Temperature: 1.4

ANALYSIS REQUEST

Preservative Codes

None: NO
 DI Water: H₂O
 Cool: Cool
 MeOH: Me
 HCL: HC
 H₂SO₄: H₂
 H₃PO₄: HP
 NaHSO₄: NABIS
 Na₂S₂O₃: NaSO₃
 Zn Acetate+NaOH: Zn
 NaOH+Ascorbic Acid: SAPC

890-1824 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code
S506	S	01/06	1005	0.5'	G	1	BTX (EPA 8216)	
S507	S	01/06	1000				TPH (EPA 8216)	
S508	S	01/06	1010				CHLORIDES (EPA 8216)	
S509	S	01/06	1115					
S510	S	01/06	1120					
S511	S	01/06	1125					
S512	S	01/06	1130					
S513	S	01/06	1150					

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 Ti 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 Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature) Anne Byers Date/Time 1/12/22 @ 11:00
 Received by: (Signature) CUE Gaf Date/Time 1-12-22 11:53

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1824-1
SDG Number: 31403236.029.07Login Number: 1824
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: 890-1824-1
SDG Number: 31403236.029.07

Login Number: 1824

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 01/13/22 11:26 AM

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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1823-1

Laboratory Sample Delivery Group: 31403236.029.07

Client Project/Site: PLU PB 25-25-30

For:

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

Attn: Benjamin Belill

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

Authorized for release by:
1/18/2022 11:12:41 AM

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

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

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

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

Laboratory Job ID: 890-1823-1
SDG: 31403236.029.07

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Definitions/Glossary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Job ID: 890-1823-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-1823-1****Receipt**

The samples were received on 1/12/2022 11:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-16734 and analytical batch 880-16738 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS21 (890-1823-1), FS23 (890-1823-3), (890-1824-A-1-E MS) and (890-1824-A-1-F MSD). 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 PB 25-25-30

Job ID: 890-1823-1
SDG: 31403236.029.07

Client Sample ID: FS21

Lab Sample ID: 890-1823-1

Date Collected: 01/10/22 09:20

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199	mg/Kg		01/13/22 10:00	01/14/22 03:54	1
Toluene	<0.00199	U F2 F1	0.00199	mg/Kg		01/13/22 10:00	01/14/22 03:54	1
Ethylbenzene	<0.00199	U F1 F2	0.00199	mg/Kg		01/13/22 10:00	01/14/22 03:54	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398	mg/Kg		01/13/22 10:00	01/14/22 03:54	1
o-Xylene	<0.00199	U F2 F1	0.00199	mg/Kg		01/13/22 10:00	01/14/22 03:54	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		01/13/22 10:00	01/14/22 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	01/13/22 10:00	01/14/22 03:54	1
1,4-Difluorobenzene (Surr)	88		70 - 130	01/13/22 10:00	01/14/22 03:54	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			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/15/22 01:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 01:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 01:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130	01/13/22 13:55	01/15/22 01:43	1
o-Terphenyl	70		70 - 130	01/13/22 13:55	01/15/22 01:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172		4.95	mg/Kg			01/17/22 16:35	1

Client Sample ID: FS22

Lab Sample ID: 890-1823-2

Date Collected: 01/10/22 09:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 04:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 04:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 04:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	01/13/22 10:00	01/14/22 04:14	1

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Client Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Client Sample ID: FS22

Lab Sample ID: 890-1823-2

Date Collected: 01/10/22 09:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	01/13/22 10:00	01/14/22 04:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 13:55	01/15/22 02:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 02:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:55	01/15/22 02:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130			01/13/22 13:55	01/15/22 02:04	1
o-Terphenyl	73		70 - 130			01/13/22 13:55	01/15/22 02:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	188		5.00	mg/Kg			01/14/22 23:47	1

Client Sample ID: FS23

Lab Sample ID: 890-1823-3

Date Collected: 01/10/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 04:35	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 04:35	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 04:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/13/22 10:00	01/14/22 04:35	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 04:35	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/13/22 10:00	01/14/22 04:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	01/13/22 10:00	01/14/22 04:35	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/13/22 10:00	01/14/22 04:35	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Client Sample ID: FS23

Lab Sample ID: 890-1823-3

Date Collected: 01/10/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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		01/13/22 13:55	01/15/22 02:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 02:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/15/22 02:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/13/22 13:55	01/15/22 02:46	1
o-Terphenyl	74		70 - 130			01/13/22 13:55	01/15/22 02:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	220		4.99	mg/Kg			01/17/22 17:00	1

Surrogate Summary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1823-1	FS21	83	88
890-1823-1 MS	FS21	691 S1+	94
890-1823-1 MSD	FS21	578 S1+	35 S1-
890-1823-2	FS22	108	98
890-1823-3	FS23	116	95
LCS 880-16734/1-A	Lab Control Sample	107	96
LCSD 880-16734/2-A	Lab Control Sample Dup	115	105
MB 880-16730/5-A	Method Blank	118	99
MB 880-16734/5-A	Method Blank	126	116
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1823-1	FS21	68 S1-	70
890-1823-2	FS22	70	73
890-1823-3	FS23	68 S1-	74
890-1824-A-1-E MS	Matrix Spike	67 S1-	62 S1-
890-1824-A-1-F MSD	Matrix Spike Duplicate	66 S1-	62 S1-
LCS 880-16787/2-A	Lab Control Sample	93	87
LCSD 880-16787/3-A	Lab Control Sample Dup	90	86
MB 880-16787/1-A	Method Blank	74	85
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16730/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16730

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/13/22 11:00	01/13/22 15:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/13/22 11:00	01/13/22 15:48	1

Lab Sample ID: MB 880-16734/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16734

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/13/22 10:00	01/14/22 03:25	1
1,4-Difluorobenzene (Surr)	116		70 - 130	01/13/22 10:00	01/14/22 03:25	1

Lab Sample ID: LCS 880-16734/1-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07868		mg/Kg		79	70 - 130
Toluene	0.100	0.08474		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09796		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1848		mg/Kg		92	70 - 130
o-Xylene	0.100	0.08974		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09943		mg/Kg		99	70 - 130	23	35

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QC Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1085		mg/Kg		109	70 - 130	25	35
Ethylbenzene	0.100	0.1145		mg/Kg		114	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.2223		mg/Kg		111	70 - 130	18	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-1823-1 MS

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: FS21

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0998	0.03705	F1	mg/Kg		37	70 - 130
Toluene	<0.00199	U F2 F1	0.0998	0.3163	F1	mg/Kg		317	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.1822	F1	mg/Kg		183	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.3598	F1	mg/Kg		180	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0998	0.1645	F1	mg/Kg		165	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	691	S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-1823-1 MSD

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: FS21

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0996	0.07644	F2	mg/Kg		77	70 - 130	69	35
Toluene	<0.00199	U F2 F1	0.0996	0.05419	F1 F2	mg/Kg		54	70 - 130	141	35
Ethylbenzene	<0.00199	U F1 F2	0.0996	0.06866	F1 F2	mg/Kg		69	70 - 130	91	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.3008	F1	mg/Kg		151	70 - 130	18	35
o-Xylene	<0.00199	U F2 F1	0.0996	0.3488	F1 F2	mg/Kg		350	70 - 130	72	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	578	S1+	70 - 130
1,4-Difluorobenzene (Surr)	35	S1-	70 - 130

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

Lab Sample ID: MB 880-16787/1-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16787

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		01/13/22 13:55	01/14/22 21:18	1

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QC Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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

Lab Sample ID: MB 880-16787/1-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16787

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		01/13/22 13:55	01/14/22 21:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:55	01/14/22 21:18	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			01/13/22 13:55	01/14/22 21:18	1
o-Terphenyl	85		70 - 130			01/13/22 13:55	01/14/22 21:18	1

Lab Sample ID: LCS 880-16787/2-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16787

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	967.2		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	804.8		mg/Kg		80	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	87		70 - 130				

Lab Sample ID: LCSD 880-16787/3-A

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16787

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	945.2		mg/Kg		95	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	796.1		mg/Kg		80	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	86		70 - 130						

Lab Sample ID: 890-1824-A-1-E MS

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16787

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1114		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	945.9		mg/Kg		93	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	67	S1-	70 - 130						
o-Terphenyl	62	S1-	70 - 130						

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QC Sample Results

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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

Lab Sample ID: 890-1824-A-1-F MSD

Matrix: Solid

Analysis Batch: 16815

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16787

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1084		mg/Kg		104	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	951.7		mg/Kg		93	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	66	S1-	70 - 130								
o-Terphenyl	62	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16752/1-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/14/22 19:33	1

Lab Sample ID: LCS 880-16752/2-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.0		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-16752/3-A

Matrix: Solid

Analysis Batch: 16868

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	274.6		mg/Kg		110	90 - 110	2	20

Lab Sample ID: 890-1823-1 MS

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: FS21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	172		248	419.7		mg/Kg		100	90 - 110

Lab Sample ID: 890-1823-1 MSD

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: FS21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	172		248	418.1		mg/Kg		99	90 - 110	0	20

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QC Association Summary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

GC VOA

Prep Batch: 16730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16730/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 16734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	5035	
890-1823-2	FS22	Total/NA	Solid	5035	
890-1823-3	FS23	Total/NA	Solid	5035	
MB 880-16734/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1823-1 MS	FS21	Total/NA	Solid	5035	
890-1823-1 MSD	FS21	Total/NA	Solid	5035	

Analysis Batch: 16738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	8021B	16734
890-1823-2	FS22	Total/NA	Solid	8021B	16734
890-1823-3	FS23	Total/NA	Solid	8021B	16734
MB 880-16730/5-A	Method Blank	Total/NA	Solid	8021B	16730
MB 880-16734/5-A	Method Blank	Total/NA	Solid	8021B	16734
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	8021B	16734
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16734
890-1823-1 MS	FS21	Total/NA	Solid	8021B	16734
890-1823-1 MSD	FS21	Total/NA	Solid	8021B	16734

Analysis Batch: 17056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	Total BTEX	
890-1823-2	FS22	Total/NA	Solid	Total BTEX	
890-1823-3	FS23	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 16787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	8015NM Prep	
890-1823-2	FS22	Total/NA	Solid	8015NM Prep	
890-1823-3	FS23	Total/NA	Solid	8015NM Prep	
MB 880-16787/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16787/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16787/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1824-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1824-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 16815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	8015B NM	16787
890-1823-2	FS22	Total/NA	Solid	8015B NM	16787
890-1823-3	FS23	Total/NA	Solid	8015B NM	16787
MB 880-16787/1-A	Method Blank	Total/NA	Solid	8015B NM	16787
LCS 880-16787/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16787

Eurofins Carlsbad

QC Association Summary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

GC Semi VOA (Continued)

Analysis Batch: 16815 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-16787/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16787
890-1824-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	16787
890-1824-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	16787

Analysis Batch: 17055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Total/NA	Solid	8015 NM	
890-1823-2	FS22	Total/NA	Solid	8015 NM	
890-1823-3	FS23	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 16752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Soluble	Solid	DI Leach	
890-1823-2	FS22	Soluble	Solid	DI Leach	
890-1823-3	FS23	Soluble	Solid	DI Leach	
MB 880-16752/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1823-1 MS	FS21	Soluble	Solid	DI Leach	
890-1823-1 MSD	FS21	Soluble	Solid	DI Leach	

Analysis Batch: 16868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1823-1	FS21	Soluble	Solid	300.0	16752
890-1823-2	FS22	Soluble	Solid	300.0	16752
890-1823-3	FS23	Soluble	Solid	300.0	16752
MB 880-16752/1-A	Method Blank	Soluble	Solid	300.0	16752
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	300.0	16752
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16752
890-1823-1 MS	FS21	Soluble	Solid	300.0	16752
890-1823-1 MSD	FS21	Soluble	Solid	300.0	16752

Lab Chronicle

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

Job ID: 890-1823-1
SDG: 31403236.029.07

Client Sample ID: FS21

Lab Sample ID: 890-1823-1

Date Collected: 01/10/22 09:20

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 03:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 01:43	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/17/22 16:35	CH	XEN MID

Client Sample ID: FS22

Lab Sample ID: 890-1823-2

Date Collected: 01/10/22 09:25

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 04:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 02:04	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 23:47	CH	XEN MID

Client Sample ID: FS23

Lab Sample ID: 890-1823-3

Date Collected: 01/10/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 04:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16787	01/13/22 13:55	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16815	01/15/22 02:46	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/17/22 17:00	CH	XEN MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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

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

Method Summary

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

Job ID: 890-1823-1
SDG: 31403236.029.07

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 PB 25-25-30

Job ID: 890-1823-1
SDG: 31403236.029.07

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1823-1	FS21	Solid	01/10/22 09:20	01/12/22 11:53	2
890-1823-2	FS22	Solid	01/10/22 09:25	01/12/22 11:53	2
890-1823-3	FS23	Solid	01/10/22 09:30	01/12/22 11:53	2

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

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing

Xenco

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	BEN BELILL	Bill to: (if different)	APRIAN BAKER
Company Name:	WSP USA INC.	Company Name:	XTD ENERGY
Address:	508 W STEVENS ST	Address:	3104 E. GREENE ST
City, State ZIP:	CARLSBAD, NM 88508	City, State ZIP:	CARLSBAD, NM 88526
Phone:	989-854-0852	Email:	BEN. BELILL @ WSP.COM

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

ANALYSIS REQUEST									
Project Name:	Turn Around	Pres. Code	Parameters						
Project Number:	PLU PB 25-25-30								
Project Location:	31403230.029.07								
Sampler's Name:	EDDY COUNTY								
P.O. #:	CORNER STORE								
SAMPLE RECEIPT			890-1823 Chain of Custody						
Samples Received Intact:	Temp Blank: ☒ Yes ☒ No	Wet Ice: ☒ Yes ☒ No							
Cooler Custody Seals:	Thermometer ID: TM-007	Correction Factor: -0.2							
Sample Custody Seals:	Yes ☒ No ☒ N/A	Temperature Reading: 1.8							
Total Containers:	Corrected Temperature: 1.6								
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Sample Comments		
F521	S	1/10/22	1920	2'	Comp	1	Cost Center #:		
F522	S	1/10/22	1925	2'	↓	1	1140221001		
F523	S	1/10/22	1930	2'	↓	1	Incident ID:		
							NAPP213003+821		

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U	Hg: 1631/245.1/7470/7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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 Corner Store	Anna Byers	1/12/22 @ 1100	2 XTD Energy	Cure Gaps	1-12-22 1155
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1823-1
SDG Number: 31403236.029.07Login Number: 1823
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: 890-1823-1
SDG Number: 31403236.029.07

Login Number: 1823

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/13/22 11:26 AM

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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1825-1

Laboratory Sample Delivery Group: 31403236.029.07

Client Project/Site: PLU PB 25-25-30

Revision: 1

For:

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

Attn: Benjamin Belill

Authorized for release by:

1/19/2022 11:54:46 AM

Jessica Kramer, Project Manager
(432)704-5440

jessica.kramer@eurofinset.com

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results through

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

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

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

Laboratory Job ID: 890-1825-1
SDG: 31403236.029.07

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Definitions/Glossary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

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
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Job ID: 890-1825-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-1825-1

REVISION

The report being provided is a revision of the original report sent on 1/18/2022. The report (revision 1) is being revised due to Per client request, review chloride data for FS07 - FS15.

Report revision history

Receipt

The samples were received on 1/12/2022 11:53 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW05 (890-1825-15). 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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: FS18 (890-1825-12). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS08 (890-1825-2), FS09 (890-1825-3), (890-1825-A-1-J MS) and (890-1825-A-1-K MSD). 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 PB 25-25-30

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS07

Lab Sample ID: 890-1825-1

Date Collected: 01/06/22 12:05

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 04:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 04:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 04:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 04:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 04:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 04:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	01/14/22 07:30	01/15/22 04:09	1
1,4-Difluorobenzene (Surr)	103		70 - 130	01/14/22 07:30	01/15/22 04:09	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 06:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 06:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 06:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	01/13/22 13:59	01/14/22 06:38	1
o-Terphenyl	80		70 - 130	01/13/22 13:59	01/14/22 06:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	493		5.00	mg/Kg			01/14/22 21:52	1

Client Sample ID: FS08

Lab Sample ID: 890-1825-2

Date Collected: 01/07/22 12:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 04:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 04:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 04:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 04:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 04:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 04:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	01/14/22 07:30	01/15/22 04:30	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS08

Lab Sample ID: 890-1825-2

Date Collected: 01/07/22 12:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	01/14/22 07:30	01/15/22 04:30	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 07:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 07:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 07:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/13/22 13:59	01/14/22 07:40	1
o-Terphenyl	72		70 - 130			01/13/22 13:59	01/14/22 07:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	529		4.97	mg/Kg			01/15/22 00:13	1

Client Sample ID: FS09

Lab Sample ID: 890-1825-3

Date Collected: 01/11/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 04:50	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 04:50	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 04:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 04:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 04:50	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	01/14/22 07:30	01/15/22 04:50	1
1,4-Difluorobenzene (Surr)	101		70 - 130	01/14/22 07:30	01/15/22 04:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS09

Lab Sample ID: 890-1825-3

Date Collected: 01/11/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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		01/13/22 13:59	01/14/22 08:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130			01/13/22 13:59	01/14/22 08:01	1
o-Terphenyl	69	S1-	70 - 130			01/13/22 13:59	01/14/22 08:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.8		4.95	mg/Kg			01/14/22 22:32	1

Client Sample ID: FS10

Lab Sample ID: 890-1825-4

Date Collected: 01/11/22 09:35

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130			01/14/22 07:30	01/15/22 05:10	1
1,4-Difluorobenzene (Surr)	104		70 - 130			01/14/22 07:30	01/15/22 05:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 08:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130			01/13/22 13:59	01/14/22 08:22	1
o-Terphenyl	78		70 - 130			01/13/22 13:59	01/14/22 08:22	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS10

Lab Sample ID: 890-1825-4

Date Collected: 01/11/22 09:35

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	247		4.95	mg/Kg			01/15/22 00:38	1

Client Sample ID: FS11

Lab Sample ID: 890-1825-5

Date Collected: 01/11/22 09:40

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			01/14/22 07:30	01/15/22 05:31	1
1,4-Difluorobenzene (Surr)	95		70 - 130			01/14/22 07:30	01/15/22 05:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 08:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 08:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 08:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			01/13/22 13:59	01/14/22 08:43	1
o-Terphenyl	84		70 - 130			01/13/22 13:59	01/14/22 08:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	534		5.04	mg/Kg			01/15/22 00:46	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS12

Lab Sample ID: 890-1825-6

Date Collected: 01/11/22 10:20

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 05:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 05:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/14/22 07:30	01/15/22 05:51	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/14/22 07:30	01/15/22 05:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 09:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 09:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 09:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	01/13/22 13:59	01/14/22 09:04	1
o-Terphenyl	87		70 - 130	01/13/22 13:59	01/14/22 09:04	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	339		4.99	mg/Kg			01/15/22 00:54	1

Client Sample ID: FS13

Lab Sample ID: 890-1825-7

Date Collected: 01/11/22 12:20

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 06:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 06:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 06:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 06:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 06:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 06:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	01/14/22 07:30	01/15/22 06:12	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS13

Lab Sample ID: 890-1825-7

Date Collected: 01/11/22 12:20

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	89		70 - 130	01/14/22 07:30	01/15/22 06:12	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 09:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 09:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 09:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			01/13/22 13:59	01/14/22 09:25	1
o-Terphenyl	99		70 - 130			01/13/22 13:59	01/14/22 09:25	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	301		5.00	mg/Kg			01/15/22 01:03	1

Client Sample ID: FS14

Lab Sample ID: 890-1825-8

Date Collected: 01/11/22 12:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 06:32	1
Toluene	0.00666		0.00200	mg/Kg		01/14/22 07:30	01/15/22 06:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 06:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 06:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 06:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	01/14/22 07:30	01/15/22 06:32	1
1,4-Difluorobenzene (Surr)	97		70 - 130	01/14/22 07:30	01/15/22 06:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00666		0.00400	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS14

Lab Sample ID: 890-1825-8

Date Collected: 01/11/22 12:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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		01/13/22 13:59	01/14/22 09:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 09:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 09:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130			01/13/22 13:59	01/14/22 09:45	1
o-Terphenyl	85		70 - 130			01/13/22 13:59	01/14/22 09:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	246		4.97	mg/Kg			01/15/22 01:11	1

Client Sample ID: FS15

Lab Sample ID: 890-1825-9

Date Collected: 01/11/22 12:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/14/22 07:30	01/15/22 06:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			01/14/22 07:30	01/15/22 06:53	1
1,4-Difluorobenzene (Surr)	100		70 - 130			01/14/22 07:30	01/15/22 06:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 05:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 05:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			01/13/22 13:59	01/14/22 05:31	1
o-Terphenyl	87		70 - 130			01/13/22 13:59	01/14/22 05:31	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS15

Date Collected: 01/11/22 12:30

Date Received: 01/12/22 11:53

Sample Depth: 2

Lab Sample ID: 890-1825-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		5.05	mg/Kg			01/15/22 01:19	1

Client Sample ID: FS16

Date Collected: 01/11/22 12:40

Date Received: 01/12/22 11:53

Sample Depth: 2

Lab Sample ID: 890-1825-10

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		01/14/22 07:30	01/15/22 07:13	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 07:13	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 07:13	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 07:13	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 07:13	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 07:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			01/14/22 07:30	01/15/22 07:13	1
1,4-Difluorobenzene (Surr)	83		70 - 130			01/14/22 07:30	01/15/22 07:13	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 05:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 05:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 05:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130			01/13/22 13:59	01/14/22 05:54	1
o-Terphenyl	91		70 - 130			01/13/22 13:59	01/14/22 05:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		25.2	mg/Kg			01/16/22 15:57	5

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS17

Lab Sample ID: 890-1825-11

Date Collected: 01/11/22 12:45

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 09:03	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 09:03	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 09:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 09:03	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 09:03	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/14/22 07:30	01/15/22 09:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/14/22 07:30	01/15/22 09:03	1
1,4-Difluorobenzene (Surr)	98		70 - 130	01/14/22 07:30	01/15/22 09:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 06:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 06:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 06:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	01/13/22 13:59	01/14/22 06:17	1
o-Terphenyl	89		70 - 130	01/13/22 13:59	01/14/22 06:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	278		4.97	mg/Kg			01/16/22 16:04	1

Client Sample ID: FS18

Lab Sample ID: 890-1825-12

Date Collected: 01/11/22 12:50

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:24	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:24	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:24	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		01/14/22 07:30	01/15/22 09:24	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:24	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		01/14/22 07:30	01/15/22 09:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	01/14/22 07:30	01/15/22 09:24	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS18

Lab Sample ID: 890-1825-12

Date Collected: 01/11/22 12:50

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	01/14/22 07:30	01/15/22 09:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 06:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 06:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 06:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130			01/13/22 13:59	01/14/22 06:38	1
o-Terphenyl	83		70 - 130			01/13/22 13:59	01/14/22 06:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	303		4.95	mg/Kg			01/16/22 16:25	1

Client Sample ID: FS19

Lab Sample ID: 890-1825-13

Date Collected: 01/11/22 13:10

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:44	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:44	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 09:44	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/14/22 07:30	01/15/22 09:44	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		01/14/22 07:30	01/15/22 09:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	01/14/22 07:30	01/15/22 09:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130	01/14/22 07:30	01/15/22 09:44	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS19

Lab Sample ID: 890-1825-13

Date Collected: 01/11/22 13:10

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

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		01/13/22 13:59	01/14/22 06:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 06:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 06:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			01/13/22 13:59	01/14/22 06:59	1
o-Terphenyl	101		70 - 130			01/13/22 13:59	01/14/22 06:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	257		4.95	mg/Kg			01/16/22 16:32	1

Client Sample ID: FS20

Lab Sample ID: 890-1825-14

Date Collected: 01/11/22 13:15

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 10:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			01/14/22 07:30	01/15/22 10:45	1
1,4-Difluorobenzene (Surr)	90		70 - 130			01/14/22 07:30	01/15/22 10:45	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 07:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 07:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 07:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			01/13/22 13:59	01/14/22 07:19	1
o-Terphenyl	88		70 - 130			01/13/22 13:59	01/14/22 07:19	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS20

Lab Sample ID: 890-1825-14

Date Collected: 01/11/22 13:15

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.8		5.04	mg/Kg			01/16/22 16:40	1

Client Sample ID: SW05

Lab Sample ID: 890-1825-15

Date Collected: 01/07/22 12:15

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/14/22 07:30	01/15/22 11:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130			01/14/22 07:30	01/15/22 11:06	1
1,4-Difluorobenzene (Surr)	111		70 - 130			01/14/22 07:30	01/15/22 11:06	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 07:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 07:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 07:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			01/13/22 13:59	01/14/22 07:40	1
o-Terphenyl	91		70 - 130			01/13/22 13:59	01/14/22 07:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	328		4.99	mg/Kg			01/16/22 16:47	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: SW06

Lab Sample ID: 890-1825-16

Date Collected: 01/11/22 13:25

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 11:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 11:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 11:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 11:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 11:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 11:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	01/14/22 07:30	01/15/22 11:26	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/14/22 07:30	01/15/22 11:26	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 08:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	01/13/22 13:59	01/14/22 08:01	1
o-Terphenyl	99		70 - 130	01/13/22 13:59	01/14/22 08:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		25.0	mg/Kg			01/16/22 16:54	5

Client Sample ID: SW07

Lab Sample ID: 890-1825-17

Date Collected: 01/11/22 13:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 11:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 11:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 11:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 11:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/14/22 07:30	01/15/22 11:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/14/22 07:30	01/15/22 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/14/22 07:30	01/15/22 11:47	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: SW07

Lab Sample ID: 890-1825-17

Date Collected: 01/11/22 13:30

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	01/14/22 07:30	01/15/22 11:47	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			01/17/22 14:46	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			01/17/22 14:06	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		01/13/22 13:59	01/14/22 08:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 08:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 08:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			01/13/22 13:59	01/14/22 08:22	1
o-Terphenyl	97		70 - 130			01/13/22 13:59	01/14/22 08:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		24.9	mg/Kg			01/16/22 17:01	5

Client Sample ID: SW08

Lab Sample ID: 890-1825-18

Date Collected: 01/11/22 10:45

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:07	1
Toluene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:07	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		01/14/22 07:30	01/15/22 12:07	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		01/14/22 07:30	01/15/22 12:07	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		01/14/22 07:30	01/15/22 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	01/14/22 07:30	01/15/22 12:07	1
1,4-Difluorobenzene (Surr)	94		70 - 130	01/14/22 07:30	01/15/22 12:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			01/17/22 14:46	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			01/17/22 14:06	1

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Client Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: SW08

Lab Sample ID: 890-1825-18

Date Collected: 01/11/22 10:45

Matrix: Solid

Date Received: 01/12/22 11:53

Sample Depth: 0 - 2

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		01/13/22 13:59	01/14/22 08:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 13:59	01/14/22 08:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			01/13/22 13:59	01/14/22 08:43	1
o-Terphenyl	88		70 - 130			01/13/22 13:59	01/14/22 08:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	212		5.05	mg/Kg			01/16/22 17:08	1

Surrogate Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1825-1	FS07	117	103
890-1825-1 MS	FS07	120	110
890-1825-1 MSD	FS07	123	112
890-1825-2	FS08	103	103
890-1825-3	FS09	128	101
890-1825-4	FS10	117	104
890-1825-5	FS11	113	95
890-1825-6	FS12	115	95
890-1825-7	FS13	94	89
890-1825-8	FS14	111	97
890-1825-9	FS15	126	100
890-1825-10	FS16	118	83
890-1825-11	FS17	114	98
890-1825-12	FS18	117	106
890-1825-13	FS19	116	96
890-1825-14	FS20	106	90
890-1825-15	SW05	138 S1+	111
890-1825-16	SW06	122	99
890-1825-17	SW07	114	110
890-1825-18	SW08	92	94
LCS 880-16737/1-A	Lab Control Sample	104	101
LCSD 880-16737/2-A	Lab Control Sample Dup	114	99
MB 880-16737/5-A	Method Blank	113	95
MB 880-16823/5-A	Method Blank	114	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1825-1	FS07	76	80
890-1825-1 MS	FS07	73	69 S1-
890-1825-1 MSD	FS07	72	68 S1-
890-1825-2	FS08	68 S1-	72
890-1825-3	FS09	67 S1-	69 S1-
890-1825-4	FS10	71	78
890-1825-5	FS11	75	84
890-1825-6	FS12	78	87
890-1825-7	FS13	84	99
890-1825-8	FS14	77	85
890-1825-9	FS15	73	87
890-1825-10	FS16	77	91
890-1825-11	FS17	74	89
890-1825-12	FS18	69 S1-	83
890-1825-13	FS19	83	101

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Surrogate Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1825-14	FS20	73	88
890-1825-15	SW05	76	91
890-1825-16	SW06	82	99
890-1825-17	SW07	81	97
890-1825-18	SW08	75	88
LCS 880-16788/2-A	Lab Control Sample	108	104
LCSD 880-16788/3-A	Lab Control Sample Dup	102	98
MB 880-16788/1-A	Method Blank	92	102

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-16737/5-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16737

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 07:30	01/15/22 03:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 07:30	01/15/22 03:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	01/14/22 07:30	01/15/22 03:40	1
1,4-Difluorobenzene (Surr)	95		70 - 130	01/14/22 07:30	01/15/22 03:40	1

Lab Sample ID: LCS 880-16737/1-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08363		mg/Kg		84	70 - 130
Toluene	0.100	0.09440		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09891		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1887		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09064		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-16737/2-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09548		mg/Kg		95	70 - 130	13	35
Toluene	0.100	0.09404		mg/Kg		94	70 - 130	0	35
Ethylbenzene	0.100	0.09695		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1884		mg/Kg		94	70 - 130	0	35
o-Xylene	0.100	0.09451		mg/Kg		95	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1825-1 MS

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.100	0.08382		mg/Kg		83	70 - 130
Toluene	<0.00199	U	0.100	0.09000		mg/Kg		90	70 - 130

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QC Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

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

Lab Sample ID: 890-1825-1 MS

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.100	0.08576		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1699		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.100	0.08366		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-1825-1 MSD

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 16737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.08325		mg/Kg		83	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.09170		mg/Kg		92	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09846		mg/Kg		98	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1793		mg/Kg		89	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: MB 880-16823/5-A

Matrix: Solid

Analysis Batch: 16837

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16823

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/14/22 10:00	01/14/22 16:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/14/22 10:00	01/14/22 16:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/14/22 10:00	01/14/22 16:05	1
1,4-Difluorobenzene (Surr)	100		70 - 130	01/14/22 10:00	01/14/22 16:05	1

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

Lab Sample ID: MB 880-16788/1-A

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16788

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		01/13/22 13:59	01/14/22 05:31	1

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QC Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

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

Lab Sample ID: MB 880-16788/1-A

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16788

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		01/13/22 13:59	01/14/22 05:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 13:59	01/14/22 05:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			01/13/22 13:59	01/14/22 05:31	1
o-Terphenyl	102		70 - 130			01/13/22 13:59	01/14/22 05:31	1

Lab Sample ID: LCS 880-16788/2-A

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1106		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1042		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	108		70 - 130				
o-Terphenyl	104		70 - 130				

Lab Sample ID: LCSD 880-16788/3-A

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16788

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1077		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	98		70 - 130						

Lab Sample ID: 890-1825-1 MS

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 16788

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1133		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1037		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	73		70 - 130						
o-Terphenyl	69	S1-	70 - 130						

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QC Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

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

Lab Sample ID: 890-1825-1 MSD

Matrix: Solid

Analysis Batch: 16700

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 16788

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1149		mg/Kg		115	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1030		mg/Kg		101	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	72		70 - 130								
o-Terphenyl	68	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16752/1-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/14/22 19:33	1

Lab Sample ID: LCS 880-16752/2-A

Matrix: Solid

Analysis Batch: 16868

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.0		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-16752/3-A

Matrix: Solid

Analysis Batch: 16868

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	274.6		mg/Kg		110	90 - 110	2	20

Lab Sample ID: 890-1824-A-8-C MS

Matrix: Solid

Analysis Batch: 16868

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	65.3		249	325.3		mg/Kg		104	90 - 110

Lab Sample ID: 890-1824-A-8-D MSD

Matrix: Solid

Analysis Batch: 16868

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	65.3		249	325.8		mg/Kg		105	90 - 110	0	20

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QC Sample Results

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-16760/1-A

Matrix: Solid

Analysis Batch: 16931

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			01/16/22 13:36	1

Lab Sample ID: LCS 880-16760/2-A

Matrix: Solid

Analysis Batch: 16931

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	268.4		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-16760/3-A

Matrix: Solid

Analysis Batch: 16931

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	267.8		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-10168-A-2-D MS

Matrix: Solid

Analysis Batch: 16931

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	57.3		253	313.4		mg/Kg		101	90 - 110

Lab Sample ID: 880-10168-A-2-E MSD

Matrix: Solid

Analysis Batch: 16931

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	57.3		253	319.4		mg/Kg		104	90 - 110	2	20

Eurofins Carlsbad

QC Association Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

GC VOA

Prep Batch: 16737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	5035	
890-1825-2	FS08	Total/NA	Solid	5035	
890-1825-3	FS09	Total/NA	Solid	5035	
890-1825-4	FS10	Total/NA	Solid	5035	
890-1825-5	FS11	Total/NA	Solid	5035	
890-1825-6	FS12	Total/NA	Solid	5035	
890-1825-7	FS13	Total/NA	Solid	5035	
890-1825-8	FS14	Total/NA	Solid	5035	
890-1825-9	FS15	Total/NA	Solid	5035	
890-1825-10	FS16	Total/NA	Solid	5035	
890-1825-11	FS17	Total/NA	Solid	5035	
890-1825-12	FS18	Total/NA	Solid	5035	
890-1825-13	FS19	Total/NA	Solid	5035	
890-1825-14	FS20	Total/NA	Solid	5035	
890-1825-15	SW05	Total/NA	Solid	5035	
890-1825-16	SW06	Total/NA	Solid	5035	
890-1825-17	SW07	Total/NA	Solid	5035	
890-1825-18	SW08	Total/NA	Solid	5035	
MB 880-16737/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16737/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16737/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1825-1 MS	FS07	Total/NA	Solid	5035	
890-1825-1 MSD	FS07	Total/NA	Solid	5035	

Prep Batch: 16823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16823/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 16837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	8021B	16737
890-1825-2	FS08	Total/NA	Solid	8021B	16737
890-1825-3	FS09	Total/NA	Solid	8021B	16737
890-1825-4	FS10	Total/NA	Solid	8021B	16737
890-1825-5	FS11	Total/NA	Solid	8021B	16737
890-1825-6	FS12	Total/NA	Solid	8021B	16737
890-1825-7	FS13	Total/NA	Solid	8021B	16737
890-1825-8	FS14	Total/NA	Solid	8021B	16737
890-1825-9	FS15	Total/NA	Solid	8021B	16737
890-1825-10	FS16	Total/NA	Solid	8021B	16737
890-1825-11	FS17	Total/NA	Solid	8021B	16737
890-1825-12	FS18	Total/NA	Solid	8021B	16737
890-1825-13	FS19	Total/NA	Solid	8021B	16737
890-1825-14	FS20	Total/NA	Solid	8021B	16737
890-1825-15	SW05	Total/NA	Solid	8021B	16737
890-1825-16	SW06	Total/NA	Solid	8021B	16737
890-1825-17	SW07	Total/NA	Solid	8021B	16737
890-1825-18	SW08	Total/NA	Solid	8021B	16737
MB 880-16737/5-A	Method Blank	Total/NA	Solid	8021B	16737
MB 880-16823/5-A	Method Blank	Total/NA	Solid	8021B	16823
LCS 880-16737/1-A	Lab Control Sample	Total/NA	Solid	8021B	16737

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QC Association Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

GC VOA (Continued)

Analysis Batch: 16837 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-16737/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16737
890-1825-1 MS	FS07	Total/NA	Solid	8021B	16737
890-1825-1 MSD	FS07	Total/NA	Solid	8021B	16737

Analysis Batch: 17056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	Total BTEX	
890-1825-2	FS08	Total/NA	Solid	Total BTEX	
890-1825-3	FS09	Total/NA	Solid	Total BTEX	
890-1825-4	FS10	Total/NA	Solid	Total BTEX	
890-1825-5	FS11	Total/NA	Solid	Total BTEX	
890-1825-6	FS12	Total/NA	Solid	Total BTEX	
890-1825-7	FS13	Total/NA	Solid	Total BTEX	
890-1825-8	FS14	Total/NA	Solid	Total BTEX	
890-1825-9	FS15	Total/NA	Solid	Total BTEX	
890-1825-10	FS16	Total/NA	Solid	Total BTEX	
890-1825-11	FS17	Total/NA	Solid	Total BTEX	
890-1825-12	FS18	Total/NA	Solid	Total BTEX	
890-1825-13	FS19	Total/NA	Solid	Total BTEX	
890-1825-14	FS20	Total/NA	Solid	Total BTEX	
890-1825-15	SW05	Total/NA	Solid	Total BTEX	
890-1825-16	SW06	Total/NA	Solid	Total BTEX	
890-1825-17	SW07	Total/NA	Solid	Total BTEX	
890-1825-18	SW08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 16700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	8015B NM	16788
890-1825-2	FS08	Total/NA	Solid	8015B NM	16788
890-1825-3	FS09	Total/NA	Solid	8015B NM	16788
890-1825-4	FS10	Total/NA	Solid	8015B NM	16788
890-1825-5	FS11	Total/NA	Solid	8015B NM	16788
890-1825-6	FS12	Total/NA	Solid	8015B NM	16788
890-1825-7	FS13	Total/NA	Solid	8015B NM	16788
890-1825-8	FS14	Total/NA	Solid	8015B NM	16788
MB 880-16788/1-A	Method Blank	Total/NA	Solid	8015B NM	16788
LCS 880-16788/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16788
LCSD 880-16788/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16788
890-1825-1 MS	FS07	Total/NA	Solid	8015B NM	16788
890-1825-1 MSD	FS07	Total/NA	Solid	8015B NM	16788

Analysis Batch: 16702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-9	FS15	Total/NA	Solid	8015B NM	16788
890-1825-10	FS16	Total/NA	Solid	8015B NM	16788
890-1825-11	FS17	Total/NA	Solid	8015B NM	16788
890-1825-12	FS18	Total/NA	Solid	8015B NM	16788
890-1825-13	FS19	Total/NA	Solid	8015B NM	16788
890-1825-14	FS20	Total/NA	Solid	8015B NM	16788

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QC Association Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

GC Semi VOA (Continued)

Analysis Batch: 16702 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-15	SW05	Total/NA	Solid	8015B NM	16788
890-1825-16	SW06	Total/NA	Solid	8015B NM	16788
890-1825-17	SW07	Total/NA	Solid	8015B NM	16788
890-1825-18	SW08	Total/NA	Solid	8015B NM	16788

Prep Batch: 16788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	8015NM Prep	
890-1825-2	FS08	Total/NA	Solid	8015NM Prep	
890-1825-3	FS09	Total/NA	Solid	8015NM Prep	
890-1825-4	FS10	Total/NA	Solid	8015NM Prep	
890-1825-5	FS11	Total/NA	Solid	8015NM Prep	
890-1825-6	FS12	Total/NA	Solid	8015NM Prep	
890-1825-7	FS13	Total/NA	Solid	8015NM Prep	
890-1825-8	FS14	Total/NA	Solid	8015NM Prep	
890-1825-9	FS15	Total/NA	Solid	8015NM Prep	
890-1825-10	FS16	Total/NA	Solid	8015NM Prep	
890-1825-11	FS17	Total/NA	Solid	8015NM Prep	
890-1825-12	FS18	Total/NA	Solid	8015NM Prep	
890-1825-13	FS19	Total/NA	Solid	8015NM Prep	
890-1825-14	FS20	Total/NA	Solid	8015NM Prep	
890-1825-15	SW05	Total/NA	Solid	8015NM Prep	
890-1825-16	SW06	Total/NA	Solid	8015NM Prep	
890-1825-17	SW07	Total/NA	Solid	8015NM Prep	
890-1825-18	SW08	Total/NA	Solid	8015NM Prep	
MB 880-16788/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16788/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-16788/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1825-1 MS	FS07	Total/NA	Solid	8015NM Prep	
890-1825-1 MSD	FS07	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Total/NA	Solid	8015 NM	
890-1825-2	FS08	Total/NA	Solid	8015 NM	
890-1825-3	FS09	Total/NA	Solid	8015 NM	
890-1825-4	FS10	Total/NA	Solid	8015 NM	
890-1825-5	FS11	Total/NA	Solid	8015 NM	
890-1825-6	FS12	Total/NA	Solid	8015 NM	
890-1825-7	FS13	Total/NA	Solid	8015 NM	
890-1825-8	FS14	Total/NA	Solid	8015 NM	
890-1825-9	FS15	Total/NA	Solid	8015 NM	
890-1825-10	FS16	Total/NA	Solid	8015 NM	
890-1825-11	FS17	Total/NA	Solid	8015 NM	
890-1825-12	FS18	Total/NA	Solid	8015 NM	
890-1825-13	FS19	Total/NA	Solid	8015 NM	
890-1825-14	FS20	Total/NA	Solid	8015 NM	
890-1825-15	SW05	Total/NA	Solid	8015 NM	
890-1825-16	SW06	Total/NA	Solid	8015 NM	
890-1825-17	SW07	Total/NA	Solid	8015 NM	
890-1825-18	SW08	Total/NA	Solid	8015 NM	

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QC Association Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

HPLC/IC

Leach Batch: 16752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Soluble	Solid	DI Leach	
890-1825-2	FS08	Soluble	Solid	DI Leach	
890-1825-3	FS09	Soluble	Solid	DI Leach	
890-1825-4	FS10	Soluble	Solid	DI Leach	
890-1825-5	FS11	Soluble	Solid	DI Leach	
890-1825-6	FS12	Soluble	Solid	DI Leach	
890-1825-7	FS13	Soluble	Solid	DI Leach	
890-1825-8	FS14	Soluble	Solid	DI Leach	
890-1825-9	FS15	Soluble	Solid	DI Leach	
MB 880-16752/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1824-A-8-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1824-A-8-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 16760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-10	FS16	Soluble	Solid	DI Leach	
890-1825-11	FS17	Soluble	Solid	DI Leach	
890-1825-12	FS18	Soluble	Solid	DI Leach	
890-1825-13	FS19	Soluble	Solid	DI Leach	
890-1825-14	FS20	Soluble	Solid	DI Leach	
890-1825-15	SW05	Soluble	Solid	DI Leach	
890-1825-16	SW06	Soluble	Solid	DI Leach	
890-1825-17	SW07	Soluble	Solid	DI Leach	
890-1825-18	SW08	Soluble	Solid	DI Leach	
MB 880-16760/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16760/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16760/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10168-A-2-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10168-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 16868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-1	FS07	Soluble	Solid	300.0	16752
890-1825-2	FS08	Soluble	Solid	300.0	16752
890-1825-3	FS09	Soluble	Solid	300.0	16752
890-1825-4	FS10	Soluble	Solid	300.0	16752
890-1825-5	FS11	Soluble	Solid	300.0	16752
890-1825-6	FS12	Soluble	Solid	300.0	16752
890-1825-7	FS13	Soluble	Solid	300.0	16752
890-1825-8	FS14	Soluble	Solid	300.0	16752
890-1825-9	FS15	Soluble	Solid	300.0	16752
MB 880-16752/1-A	Method Blank	Soluble	Solid	300.0	16752
LCS 880-16752/2-A	Lab Control Sample	Soluble	Solid	300.0	16752
LCSD 880-16752/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16752
890-1824-A-8-C MS	Matrix Spike	Soluble	Solid	300.0	16752
890-1824-A-8-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	16752

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QC Association Summary

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

Job ID: 890-1825-1
SDG: 31403236.029.07

HPLC/IC

Analysis Batch: 16931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1825-10	FS16	Soluble	Solid	300.0	16760
890-1825-11	FS17	Soluble	Solid	300.0	16760
890-1825-12	FS18	Soluble	Solid	300.0	16760
890-1825-13	FS19	Soluble	Solid	300.0	16760
890-1825-14	FS20	Soluble	Solid	300.0	16760
890-1825-15	SW05	Soluble	Solid	300.0	16760
890-1825-16	SW06	Soluble	Solid	300.0	16760
890-1825-17	SW07	Soluble	Solid	300.0	16760
890-1825-18	SW08	Soluble	Solid	300.0	16760
MB 880-16760/1-A	Method Blank	Soluble	Solid	300.0	16760
LCS 880-16760/2-A	Lab Control Sample	Soluble	Solid	300.0	16760
LCSD 880-16760/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16760
880-10168-A-2-D MS	Matrix Spike	Soluble	Solid	300.0	16760
880-10168-A-2-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	16760

Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS07

Lab Sample ID: 890-1825-1

Date Collected: 01/06/22 12:05

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 04:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 06:38	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 21:52	CH	XEN MID

Client Sample ID: FS08

Lab Sample ID: 890-1825-2

Date Collected: 01/07/22 12:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 04:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 07:40	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 00:13	CH	XEN MID

Client Sample ID: FS09

Lab Sample ID: 890-1825-3

Date Collected: 01/11/22 09:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 04:50	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 08:01	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/14/22 22:32	CH	XEN MID

Client Sample ID: FS10

Lab Sample ID: 890-1825-4

Date Collected: 01/11/22 09:35

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 05:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID

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Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS10

Lab Sample ID: 890-1825-4

Date Collected: 01/11/22 09:35

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 08:22	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 00:38	CH	XEN MID

Client Sample ID: FS11

Lab Sample ID: 890-1825-5

Date Collected: 01/11/22 09:40

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 05:31	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 08:43	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 00:46	CH	XEN MID

Client Sample ID: FS12

Lab Sample ID: 890-1825-6

Date Collected: 01/11/22 10:20

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 05:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 09:04	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 00:54	CH	XEN MID

Client Sample ID: FS13

Lab Sample ID: 890-1825-7

Date Collected: 01/11/22 12:20

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 06:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 09:25	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS13

Date Collected: 01/11/22 12:20

Date Received: 01/12/22 11:53

Lab Sample ID: 890-1825-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 01:03	CH	XEN MID

Client Sample ID: FS14

Date Collected: 01/11/22 12:25

Date Received: 01/12/22 11:53

Lab Sample ID: 890-1825-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 06:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16700	01/14/22 09:45	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 01:11	CH	XEN MID

Client Sample ID: FS15

Date Collected: 01/11/22 12:30

Date Received: 01/12/22 11:53

Lab Sample ID: 890-1825-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 06:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 05:31	AJ	XEN MID
Soluble	Leach	DI Leach			16752	01/13/22 11:38	SC	XEN MID
Soluble	Analysis	300.0		1	16868	01/15/22 01:19	CH	XEN MID

Client Sample ID: FS16

Date Collected: 01/11/22 12:40

Date Received: 01/12/22 11:53

Lab Sample ID: 890-1825-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 07:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 05:54	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		5	16931	01/16/22 15:57	CH	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS17

Lab Sample ID: 890-1825-11

Date Collected: 01/11/22 12:45

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 09:03	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 06:17	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 16:04	CH	XEN MID

Client Sample ID: FS18

Lab Sample ID: 890-1825-12

Date Collected: 01/11/22 12:50

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 09:24	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 06:38	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 16:25	CH	XEN MID

Client Sample ID: FS19

Lab Sample ID: 890-1825-13

Date Collected: 01/11/22 13:10

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 09:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 06:59	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 16:32	CH	XEN MID

Client Sample ID: FS20

Lab Sample ID: 890-1825-14

Date Collected: 01/11/22 13:15

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 10:45	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: FS20

Lab Sample ID: 890-1825-14

Date Collected: 01/11/22 13:15

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 07:19	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 16:40	CH	XEN MID

Client Sample ID: SW05

Lab Sample ID: 890-1825-15

Date Collected: 01/07/22 12:15

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 11:06	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 07:40	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 16:47	CH	XEN MID

Client Sample ID: SW06

Lab Sample ID: 890-1825-16

Date Collected: 01/11/22 13:25

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 11:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 08:01	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		5	16931	01/16/22 16:54	CH	XEN MID

Client Sample ID: SW07

Lab Sample ID: 890-1825-17

Date Collected: 01/11/22 13:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 11:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 08:22	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-1825-1
SDG: 31403236.029.07

Client Sample ID: SW07

Lab Sample ID: 890-1825-17

Date Collected: 01/11/22 13:30

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		5	16931	01/16/22 17:01	CH	XEN MID

Client Sample ID: SW08

Lab Sample ID: 890-1825-18

Date Collected: 01/11/22 10:45

Matrix: Solid

Date Received: 01/12/22 11:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16737	01/14/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	16837	01/15/22 12:07	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16788	01/13/22 13:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16702	01/14/22 08:43	AJ	XEN MID
Soluble	Leach	DI Leach			16760	01/13/22 12:00	SC	XEN MID
Soluble	Analysis	300.0		1	16931	01/16/22 17:08	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.
Project/Site: PLU PB 25-25-30

Job ID: 890-1825-1
SDG: 31403236.029.07

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 PB 25-25-30

Job ID: 890-1825-1
SDG: 31403236.029.07

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 PB 25-25-30

Job ID: 890-1825-1
SDG: 31403236.029.07

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1825-1	FS07	Solid	01/06/22 12:05	01/12/22 11:53	1
890-1825-2	FS08	Solid	01/07/22 12:30	01/12/22 11:53	1
890-1825-3	FS09	Solid	01/11/22 09:30	01/12/22 11:53	2
890-1825-4	FS10	Solid	01/11/22 09:35	01/12/22 11:53	2
890-1825-5	FS11	Solid	01/11/22 09:40	01/12/22 11:53	2
890-1825-6	FS12	Solid	01/11/22 10:20	01/12/22 11:53	2
890-1825-7	FS13	Solid	01/11/22 12:20	01/12/22 11:53	2
890-1825-8	FS14	Solid	01/11/22 12:25	01/12/22 11:53	2
890-1825-9	FS15	Solid	01/11/22 12:30	01/12/22 11:53	2
890-1825-10	FS16	Solid	01/11/22 12:40	01/12/22 11:53	2
890-1825-11	FS17	Solid	01/11/22 12:45	01/12/22 11:53	2
890-1825-12	FS18	Solid	01/11/22 12:50	01/12/22 11:53	2
890-1825-13	FS19	Solid	01/11/22 13:10	01/12/22 11:53	2
890-1825-14	FS20	Solid	01/11/22 13:15	01/12/22 11:53	2
890-1825-15	SW05	Solid	01/07/22 12:15	01/12/22 11:53	0 - 2
890-1825-16	SW06	Solid	01/11/22 13:25	01/12/22 11:53	0 - 2
890-1825-17	SW07	Solid	01/11/22 13:30	01/12/22 11:53	0 - 2
890-1825-18	SW08	Solid	01/11/22 10:45	01/12/22 11:53	0 - 2

Chain of Custody



Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing
Xenco

Work Order No:

www.xenco.com Page 7 of 2

Project Manager: Ben Belli		Bill to: (if different)		ADRIAN BAKER	
Company Name: WSP USA INC		Company Name:		XTO ENERGY	
Address: 508 N STEVENS ST.		Address:		3104 E GREENEST	
City, State ZIP: Carlsbad, NM, 88220		City, State ZIP:		Carlsbad, NM 88220	
Phone: 989-854-0852		Email: Ben.Belli@wsp.com			

Project Name: PLU PB 35-25-30		Turn Around:			
Project Number: 314 032 36.029.07		☐ Routine ☒ Rush			
Project Location: CC 1140221001		Due Date: 3/24/22			
Sampler's Name: Conner Shaw		TAT starts the day received by the lab, if received by 4:30pm			
PO #: Task 07.02		Wet Ice: Yes No			

SAMPLE RECEIPT				ANALYSIS REQUEST				PRESERVATIVE CODES			
Samples Received Intact: ☒ Yes ☐ No Cooler Custody Seals: Yes No ☒ Yes ☐ No Sample Custody Seals: Yes No ☒ Yes ☐ No Total Containers: 1				Thermometer ID: 770007 Correction Factor: -0.2 Temperature Reading: 1.0 Corrected Temperature: 1.0				None: NO DI Water: H ₂ O Cool: Cool MeOH: Me HCL: HC HNO ₃ : HN H ₂ SO ₄ : H ₂ NaOH: Na H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC			
890-1825 Chain of Custody 											
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters				
F507	S	01/06	1205	1'	C	1	BTEX (EPA 821 B)	X			
F508		01/07	1230	1'			TPH (EPA 815 Mod)	X			
F509		01/11	930	2'			(VOCs) (EPA 826 F)	X			
F510		01/11	935	2'							
F511		01/11	940	2'							
F512		01/11	1020	2'							
F513		01/11	1230	2'							
F514		01/11	1235	2'							
F515		01/11	1230	2'							
F516		01/11	1240	2'							
Incident ID: nAPP2130837821											

Total 200.7/6010	200.8/6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U	Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins 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
Conner Shaw	Adrian Baker	1/12/22 12:05	Adrian Baker	Adrian Baker	1.12.22 11:53

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing
Xenco

Work Order No:

www.xenco.com Page 2 of 2

Project Manager: Ben Belli		Bill to: (if different)	
Company Name: WSP USA INC		Company Name: XTC Energy	
Address: 508 W Stevens Street		Address: 514 E. Greene Street	
City, State ZIP: Carlsbad, NM 88270		City, State ZIP: Carlsbad, NM 88220	
Phone: 989-854-0852		Email: ben.belli@wsp.com	

Project Name: PLU PB 25-25-70		Turn Around	
Project Number: 31403036.027.07		☐ Routine ☒ Rush	
Project Location: Co. 1140001001		Due Date: 3/24/21	
Sampler's Name: Conner Shore		TAT starts the day received by the lab, if received by 4:30pm	
P.O. #: Task 07.02		Wet Ice: Yes No	

SAMPLE RECEIPT		Temp Blank: Yes No		Thermometer ID: 121		Correction Factor: Yes No N/A		Temperature Reading: Corrected Temperature:	
Samples Received Intact: Yes No		Cooler Custody Seals: Yes No		Sample Custody Seals: Yes No		Total Containers: Yes No			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code	ANALYSIS REQUEST	Preservative Codes
FS17	S	01/11	1245	2'	C	1	BTX (EPA 821-B)			None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP
FS18		01/11	1250	2'		1	TDH (EPA 815-mod)			DI Water: H ₂ O MeOH: Me HNO ₃ : HN NaOH: Na
FS19		01/11	1310	2'		1				
FS20		01/11	1315	2'		1				
SW05		01/07	1015	0-2'		1				
SW06		01/11	1325	0-2'		1				
SW07		01/11	1330	0-2'		1				
SW08		01/11	1045	0-2'		1				

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti U	Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>Anna Byers</i>	<i>Anna Byers</i>	1/12/22 @ 11:00
3	4	5

Revised Date: 08/25/2020 Rev. 20202

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1825-1
SDG Number: 31403236.029.07Login Number: 1825
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: 890-1825-1
SDG Number: 31403236.029.07**Login Number: 1825****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 01/13/22 11:26 AM**

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
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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 76484

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 76484
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Going forward, please submit with Closure Report photos of intact liner.	3/9/2022