

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	NAPP2134754672
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	NAPP2134754672
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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 Bales</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>12/14/2021</u>

NAPP2134754672

Location:	PLU Delaware B 23 SWD	
Spill Date:	12/6/2021	
Area 1		
Approximate Area =	3088.02	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	550.00	bbls
Area 2		
Approximate Area =	7701.00	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 =	8.86	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil=	0.00	bbls
Total Produced Water =	558.86	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil=	0.00	bbls
Total Produced Water =	552.00	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 66685

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 66685
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	12/14/2021

Incident ID	NAPP2134754672
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<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.

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2134754672
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Adrian Baker Title: Environmental Coordinator
Signature:  Date: 03/02/2022
email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2134754672
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 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 OCD 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 of the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Adrian Baker Title: Environmental Coordinator
Signature: *Adrian Baker* Date: 03/02/2022
Email: adrian.baker@exxonmobil.com Telephone: 432-236-3808

ODC 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: 03/10/2022
Printed Name: Jennifer Nobui Title: Environmental Specialist A



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

March 3, 2022

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

**RE: Closure Request
PLU Delaware B 23 SWD
Incident Number NAPP2134754672
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) Delaware B 23 SWD (Site) in Unit C, Section 23, Township 24 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 the release of produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2134754672.

RELEASE BACKGROUND

On December 6, 2021, a worn fiberglass inlet line spool failed, resulting in the release of 558.86 barrels (bbls) of produced water onto the well pad and pasture area west of the pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; approximately 552 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on December 7, 2021 and submitted a Release Notification Form C-141 (Form C-141) on December 13, 2021. The release was assigned Incident Number NAPP2134754672.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geologic Survey (USGS) well 321203103511801, located approximately 0.4 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 423 feet bgs. The closest New Mexico Office of the State



Engineer (NMOSE) groundwater well is C-02110, located 0.6 miles south of the Site. The groundwater well has a reported depth to groundwater of 400 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1 and the associated well records are included in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is a dry wash, located approximately 406 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Additionally, a reclamation standard of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top four feet of areas that will be reclaimed following remediation.

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 twelve preliminary assessment soil samples (SS01 through SS12) within and around the release extent from a depth of 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 Midland, Texas, 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, SS04, SS05, and SS06 indicated that TPH, TPH-GRO/TPH-DRO, or chloride concentrations exceeded the Site Closure Criteria and/or the reclamation standard for samples collected from the top four feet of pasture areas. Laboratory analytical results for preliminary soil samples SS02, SS03, and SS07 through SS12 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the reclamation standard for samples collected from the top four feet of pasture areas. 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 SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between January 26, 2022 and January 28, 2022, WSP personnel were at the Site to oversee delineation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples.

Potholes PH01 through PH05 were advanced via trackhoe to depths ranging from 2 feet bgs to 4 feet bgs within the release extent, to assess the vertical extent of impacted soil. Delineation soil samples were collected from each pothole from depths ranging from 0.5 feet 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 potholes and delineation soil sample locations are presented on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Midland, Texas. Photographic documentation was conducted during the Site visits. A photographic log is included in Attachment 3.

Laboratory analytical results for the delineation soil samples collected on-pad from potholes PH01 and PH02 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for the delineation soil samples collected in the pasture from potholes PH03, PH04, and PH05 indicated that TPH and chloride concentrations were compliant with the reclamation standards. Based on the laboratory analytical results, the vertical extent of the release was successfully defined.



EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

Between January 26, 2022 and January 31, 2022, WSP personnel returned to the Site to oversee excavation activities based on field screening activities and laboratory analytical results for the preliminary and delineation soil samples.

Excavation activities were completed to remove the visible staining and the impacted soil identified in preliminary samples SS01 and SS04 through SS06. Excavation activities were performed using track-mounted trackhoe and transport vehicle. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to depths ranging from 1-foot bgs (on the well pad) to 4 feet bgs (in the pasture). 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 FS31 were collected from the floor of the excavation from depths ranging from 1 foot to 4 feet bgs. Composite sidewall soil samples SW01 through SW09 were collected from the sidewalls of the deeper pasture excavation, from depths ranging from ground surface to 4 feet bgs. Due to the shallow depth of the well pad excavation, floor samples FS26 through FS31 represented the floor and sidewalls of the excavation in this area. The excavation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico. The excavation extent and excavation soil sample locations are presented on Figure 4.

Laboratory analytical results for excavation samples FS01 through FS31, SW01, and SW04 through SW09 collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the reclamation standards for samples collected from the top four feet of pasture areas. Laboratory analytical results for sidewall samples SW02 and SW03, collected from the pasture excavation, indicated that chloride concentrations initially exceeded the reclamation standard. Additional soil was removed from these areas and subsequent sidewall samples SW08 and SW09 were compliant. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 4.

The final excavation extent measured approximately 6,190 square feet. A total of approximately 782 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.

District II
Page 5**CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the December 6, 2021 release of produced water. Based on the laboratory analytical results for the preliminary and delineation soil samples, impacted soil was excavated. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. In addition, excavation soil samples collected from the top four feet of pasture areas were compliant with the reclamation standard.

Initial response efforts and excavation of impacted soil have mitigated impacts at the Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. 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. Following backfill, the disturbed pasture areas will be reseeded with a Bureau of Land Management (BLM) approved seed-mix. XTO respectfully requests NFA for Incident Number NAPP2134754672.

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

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads "Hadlie Green".

Hadlie Green
Assistant Consultant, Geologist

A handwritten signature in black ink that reads "Aimee Cole".

Aimee Cole
Sr. Consultant, Environmental Scientist

cc: Shelby Pennington, XTO
Adrian Baker, XTO
Bureau of Land Management

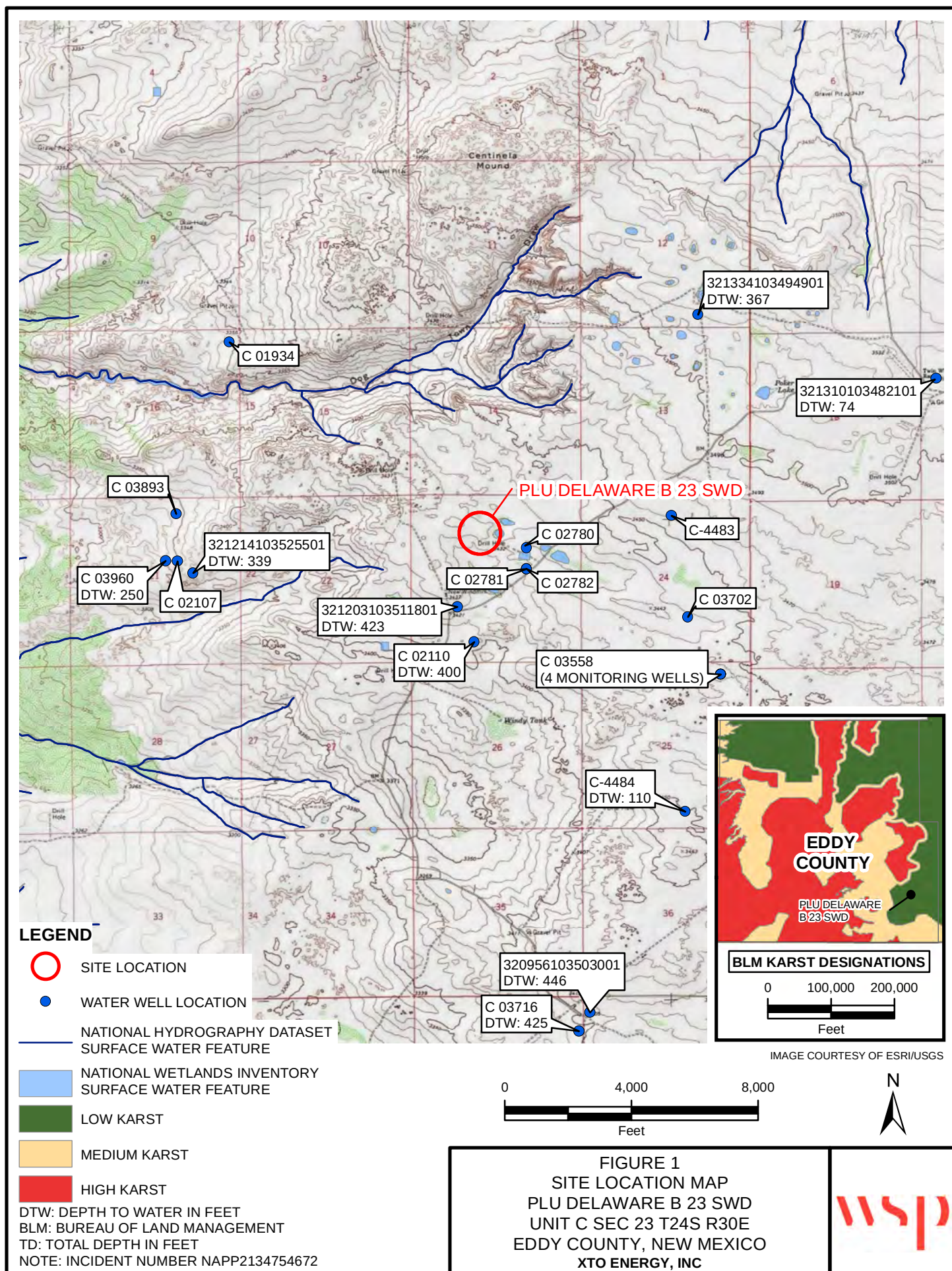


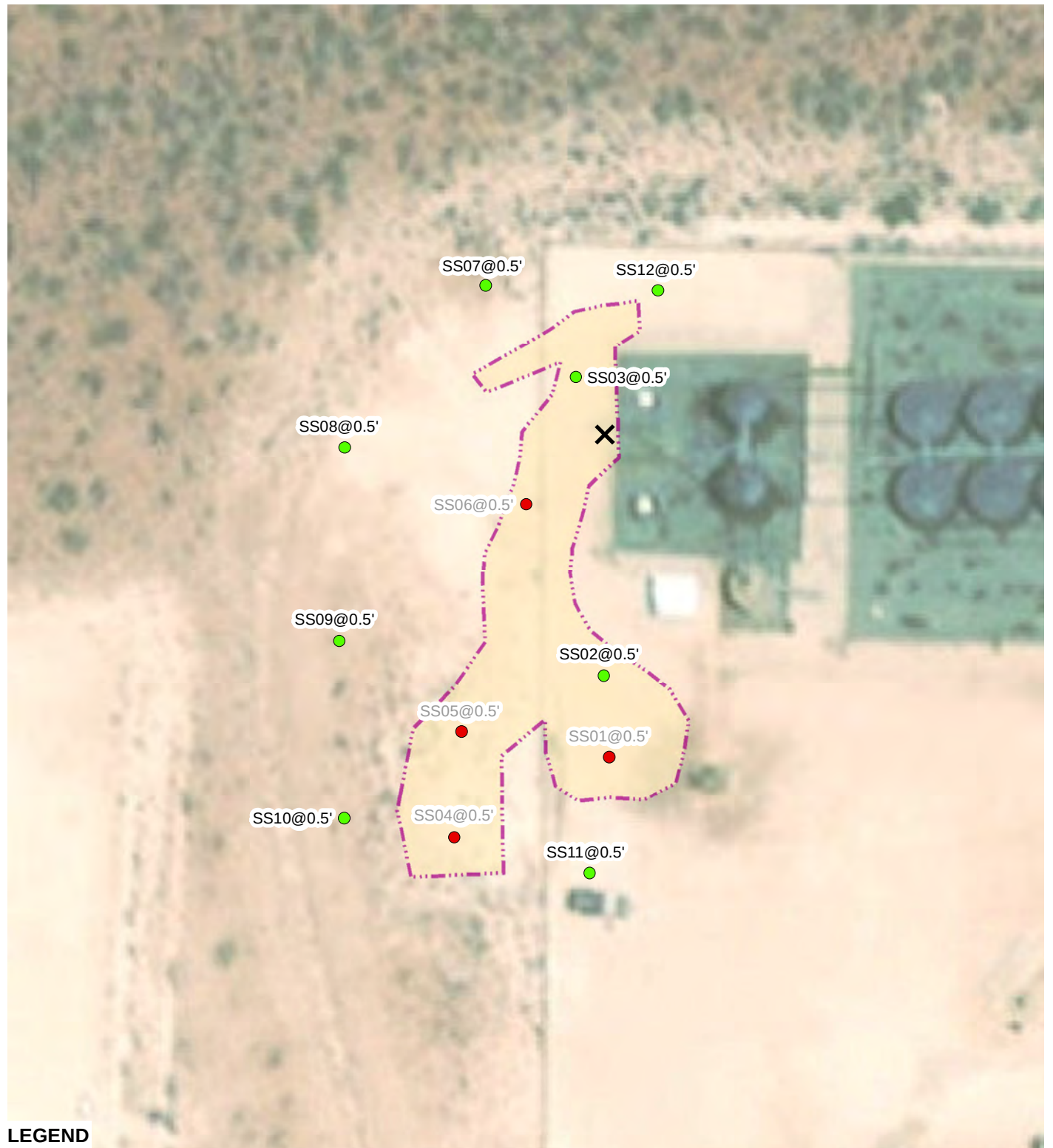
District II
Page 6

Attachments:

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

FIGURES



**LEGEND**

RELEASE LOCATION



PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA



PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



RELEASE EXTENT

NOTE: INCIDENT NUMBER NAPP2134754672
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

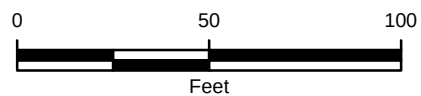


FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
 PLU DELAWARE B 23 SWD
 UNIT C SEC 23 T24S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

RELEASE LOCATION

DELINEATION SOIL SAMPLE IN COMPLIANCE
WITH APPLICABLE CLOSURE CRITERIA

RELEASE EXTENT

NOTE: INCIDENT NUMBER NAPP2134754672
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE
 THAT WAS REMOVED

IMAGE COURTESY OF ESRI

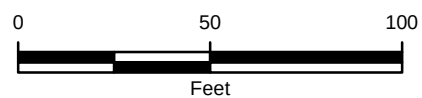
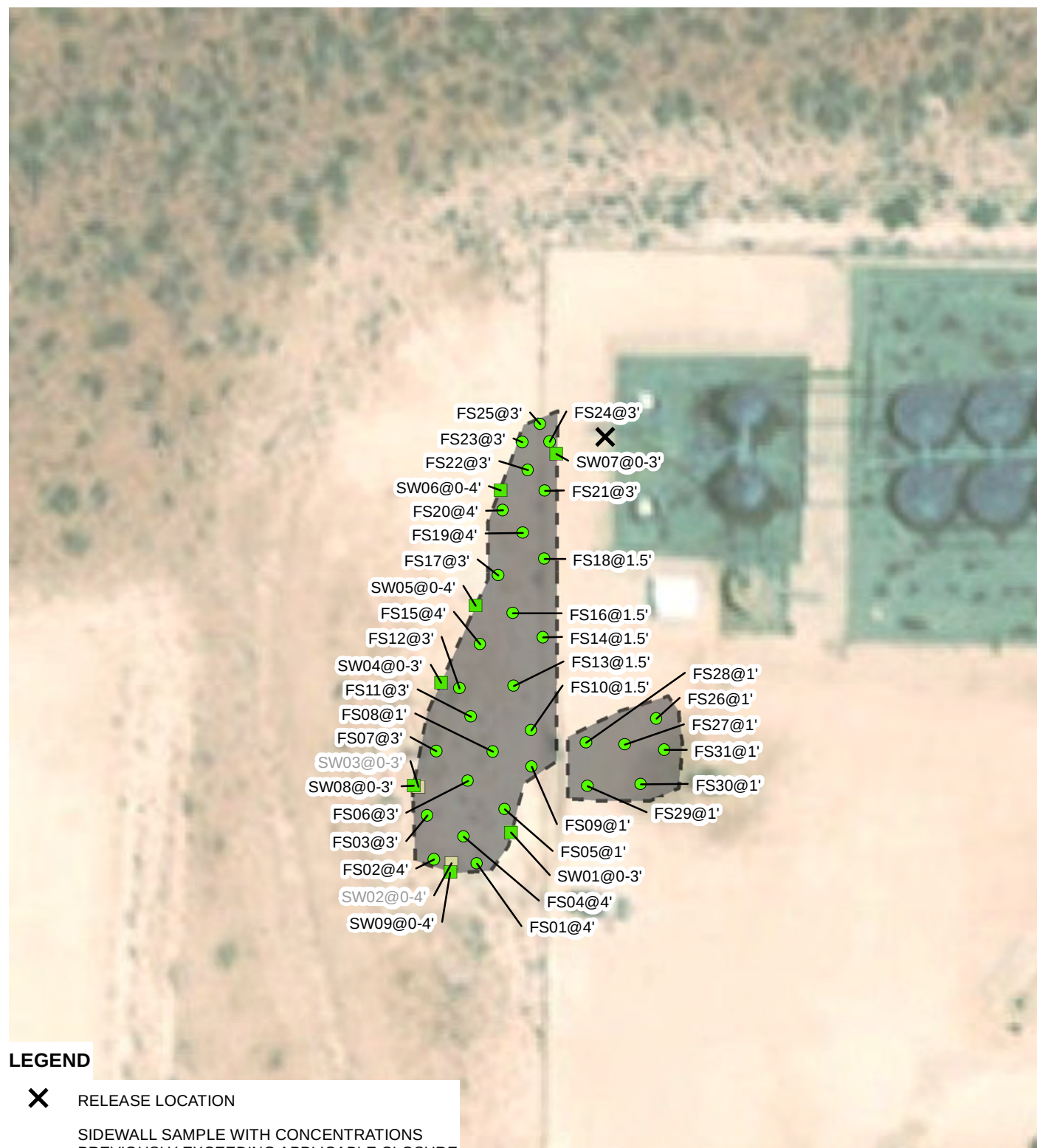


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
 PLU DELAWARE B 23 SWD
 UNIT C SEC 23 T24S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



**LEGEND**

RELEASE LOCATION



SIDEWALL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA AND HAS BEEN EXCAVATED



SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA



EXCAVATION EXTENT

NOTE: INCIDENT NUMBER NAPP2134754672
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

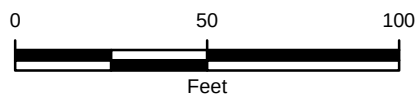


FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
 PLU DELAWARE B 23 SWD
 UNIT C SEC 23 T24S R30E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLE

Table 1

Soil Analytical Results
 PLU Delaware B 23 SWD
 Incident Number nAPP2134754672
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Soil Samples										
SS01	12/20/2021	0.5	0.00711	0.107	81	<50.0	<50.0	81	81	45,200
SS02	12/20/2021	0.5	<0.00199	0.0249	57.2	<50.0	<50.0	57.2	57.2	2,600
SS03	12/20/2021	0.5	<0.00200	0.00632	363	<49.9	<49.9	363	363	4,530
SS04	12/20/2021	0.5	<0.00200	<0.00399	105	<50.0	<50.0	105	105	35,700*
SS05	12/20/2021	0.5	<0.00199	0.099	2,410	<49.9	<49.9	2,410	2,410	21,300*
SS06	12/20/2021	0.5	<0.00200	<0.00399	117	<50.0	<50.0	117	117	16,900*
SS07	12/20/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	54.6*
SS08	12/20/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	22.8*
SS09	12/20/2021	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	<4.95*
SS10	12/20/2021	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<5.03*
SS11	1/31/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	66.7
SS12	1/27/2022	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	43.6
Delineation Soil Samples										
PH01	01/27/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	104
PH01A	01/27/2022	2	<0.00200	<0.00400	85.4	<50.0	<50.0	85.4	85.4	636
PH02	01/28/2022	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	397
PH02A	01/28/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	63.6

Table 1

Soil Analytical Results
 PLU Delaware B 23 SWD
 Incident Number nAPP2134754672
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
PH03	01/27/2022	.0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<49.5*
PH03A	01/27/2022	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	161*
PH03B	01/27/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	158*
PH04	01/26/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	91*
PH04A	01/26/2022	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	71.1*
PH05	01/26/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	15.6*
PH05A	01/26/2022	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	22.1*
Excavation Floor Samples										
FS01	01/31/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	286
FS02	01/31/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	320
FS03	01/28/2022	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	34.7*
FS04	01/31/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	112
FS05	01/28/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	23.5*
FS06	01/28/2022	3	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	60.8*
FS07	01/28/2022	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	131*
FS08	01/28/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	21.7*
FS09	01/28/2022	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	11.4*
FS10	01/31/2022	1.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	64.7*
FS11	01/28/2022	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<4.98*
FS12	01/28/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	17.3*

Table 1

Soil Analytical Results
 PLU Delaware B 23 SWD
 Incident Number nAPP2134754672
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS13	01/31/2022	1.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	315*
FS14	01/31/2022	1.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	77.5*
FS15	01/31/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	136
FS16	01/31/2022	1.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	57.1*
FS17	01/28/2022	3	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	12.6*
FS18	01/31/2022	1.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	70.6*
FS19	01/31/2022	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	178
FS20	01/31/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	172
FS21	01/31/2022	3	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	78.0*
FS22	01/31/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	209*
FS23	01/31/2022	3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	279*
FS24	01/31/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	272*
FS25	01/31/2022	3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	356*
FS26	01/31/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,090
FS27	01/31/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	143
FS28	01/31/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	780
FS29	01/31/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,640
FS30	01/31/2022	1	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	314
FS31	01/31/2022	1	<0.00199	<0.00398	52.3	<49.9	<49.9	52.3	<50.0	6,050

Table 1

Soil Analytical Results
 PLU Delaware B 23 SWD
 Incident Number nAPP2134754672
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Sidewall Samples										
SW01	01/31/2022	0-3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	61.4*
SW02	01/31/2022	0-4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,110*
SW03	01/31/2022	0-3	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	794*
SW04	01/31/2022	0-3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	169*
SW05	01/31/2022	0-4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	534*
SW06	01/31/2022	0-4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	141*
SW07	01/31/2022	0-3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	320*
SW08	02/16/2022	0-3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	341*
SW09	02/28/2022	0-4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	124*

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

Greyed data represents samples that were excavated

* - indicates sample was collected in area to be reclaimed after remediation is complete;

closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

ATTACHMENT 1: REFERENCED WELL RECORDS

Eddy County, New Mexico
 Latitude 32°12'03", Longitude 103°51'18" NAD27
 Land-surface elevation 3,423 feet above NAVD88
 The depth of the well is 474 feet below land surface.
 This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
 This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

[Table of data](#)
[Tab-separated data](#)
[Graph of data](#)
[Reselect period](#)

Date	Time	[?] Water-level date-time accuracy	[?] Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	[?] Status	[?] Method of measurement	[?] Measuring agency	[?] Source of measurement	[?] Water-level approval status
1959-03-26		D	62610		2998.18	NGVD29	1	Z			A
1959-03-26		D	62611		2999.90	NAVD88	1	Z			A
1959-03-26		D	72019	423.10			1	Z			A



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02110	4	3	23	24S	30E	608036	3562950*	

Driller License:**Driller Company:****Driller Name:** UNKNOWN**Drill Start Date:****Drill Finish Date:** 12/31/1967**Plug Date:****Log File Date:****PCW Rcv Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:** 15 GPM**Casing Size:** 7.00**Depth Well:** 600 feet**Depth Water:** 400 feet

*UTM location was derived from PLSS - see Help

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

12/17/21 2:18 PM

POINT OF DIVERSION SUMMARY

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOGS

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH01		Date: 01/27/22	
								Site Name: PLU Del B 23 SWD			
								RP or Incident Number: nAPP2134754672			
								WSP Job Number: 31403236.022.0129			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: HG		Method: Trackhoe	
Lat/Long: 32.2081779, -103.8537487				Field Screening: Chloride, PID				Hole Diameter: N/A		Total Depth: 2'	
Comments:											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
						0.5					
M	296.8	0.3	N	PH01	1	1	SM	SAND, brown, abundant caliche gravel, fine-medium grain, poorly sorted, no odor, no stain, moist			
M	2,368.8	0.0	N	PH01A	2	2	SM	SAND, brown, less caliche gravel, fine-medium grain, poorly sorted, no stain, no odor, moist			
TD @ 2 feet bgs											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: PH02		Date: 01/28/22				
		Site Name: PLU Del B 23 SWD						
		RP or Incident Number: nAPP2134754672						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.207878, -103.853729		Field Screening: Chloride, PID		Hole Diameter: N/A				
				Total Depth: 2'				
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
						0.5		
D	912.8	0.4	N	PH02	1	1	CCHE	CALICHE, tan, abundant sand and caliche gravel, fine-medium poorly sorted, no stain, no odor
D	1,254.4	1.2	N	PH02A	2	2	CCHE	CALICHE, tan, abundant sand and caliche gravel, fine-medium poorly sorted, no stain, no odor.
TD @ 2 feet bgs								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: PH03		Date: 01/27/22	
								Site Name: PLU Del B 23 SWD			
								RP or Incident Number: nAPP2134754672			
								WSP Job Number: 31403236.022.0129			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: HG		Method: Trackhoe	
Lat/Long: 32.2081778, -103.8538453				Field Screening: Chloride, PID				Hole Diameter: N/A		Total Depth: 2'	
Comments:											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0					
D	<179.2	0.0	N	PH03	0.5	0.5	CCHE	CALICHE, light tan, abundant sand, fine-medium grain, poorly graded, some caliche gravel, no stain, no odor.			
D	179.2	0.0	N	PH03A	1	1	CCHE	CALICHE, tan, abundant sand and caliche gravel, fine-medium poorly sorted, no stain, no odor			
D	212.8	0.0	N	PH03B	2	2	CCHE	CALICHE, light brown, abundant sand, some caliche gravel, fine-medium grain, poorly sorted, no stain, no odor.			
TD @ 2 feet bgs											

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: PH04		Date: 01/26/22				
		Site Name: PLU Del B 23 SWD						
		RP or Incident Number: nAPP2134754672						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.2079868, -103.8538116		Field Screening: Chloride, PID		Hole Diameter: N/A				
				Total Depth: 4'				
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
						0.5		
D	817.6	0.0	N	PH04	1	1	SP	SAND, brown-light brown, some caliche gravel, fine-medium grain, poorly graded, no stain, no odor.
D	1,820.0	0.1	N			2	SP	SAND, light brown, some caliche gravel, fine-medium sand, poorly graded, moderate sorting, no stain, no odor.
D	212.8	0.0	N			3	SP-SC	SAND, light tan, some large caliche gravel, trace clay, moderate sorting, no stain, no odor.
D	448	0.0	N	PH04A	4	4	SP-SC	SAND, light tan, some large caliche gravel, trace clay, moderate sorting, no stain, no odor.
TD @ 4 ft bgs								

 WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: PH05		Date: 01/26/22				
		Site Name: PLU Del B 23 SWD						
		RP or Incident Number: nAPP2134754672						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.2077590, -103.8538942		Field Screening: Chloride, PID		Hole Diameter: N/A				
				Total Depth: 3'				
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
						0.5		
D	3,382.4	0.0	Y	PH05	1	1	CCHE	CALICHE, light tan, medium-fine grain sand, large caliche gravel, poorly sorted, poorly graded, no stain, no odor.
D	235.2	0.0	N			2	CCHE	CALICHE, light tan, medium-fine grain sand, large caliche gravel, poorly sorted, poorly graded, no stain, no odor.
D	<179.2	0.0	N	PH05A	3	3	CCHE	CALICHE, brown-light brown, medium-fine grain sand, large caliche gravel, poorly sorted, poorly graded, no stain, no odor.
TD @ 3 ft bgs								

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU Delaware B 23 SWD Eddy County, New Mexico	NAPP2134754672

Photo No.	Date	
1	December 20, 2021	
Photo of on pad release extent to the south of the release point taken during the initial site assessment.		 A wide-angle photograph of an industrial site under a clear blue sky. In the foreground is a flat, sandy area. A chain-link fence runs across the middle ground. Behind the fence are several large industrial storage tanks, some of which are rusted. There are also some smaller structures and pipes visible.

Photo No.	Date	
2	December 20, 2021	
Photo of release in the pasture taken during the initial site assessment.		 A photograph of a dry, rocky pasture. The ground is covered with small, light-colored rocks and sparse, low-lying, yellowish-brown shrubs. In the background, there is a clear blue sky and a distant industrial facility with a tall smokestack emitting a plume of white smoke.



PHOTOGRAPHIC LOG

XTO Energy, Inc.	PLU Delaware B 23 SWD Eddy County, New Mexico	NAPP2134754672
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Photo No.	Date	
3	December 20, 2021	
Photo of release on pad and in pasture taken during the initial site assessment.		 A photograph showing an industrial site with a gravel pad, a chain-link fence, and yellow industrial equipment under a clear blue sky.

Photo No.	Date	
4	January 31, 2022	
Photo of excavation completed on pad.		 A photograph showing an industrial site with a gravel pad, a chain-link fence, and large black storage tanks in the background under a clear blue sky.



PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU Delaware B 23 SWD Eddy County, New Mexico	NAPP2134754672

Photo No.	Date	
5	January 31, 2022	
Photo of excavation completed in the pasture along the west side of the site.		

Photo No.	Date	
6	January 31, 2022	
Photo of scrape completed on pad to remove staining along release extent.		

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-9673-1

Laboratory Sample Delivery Group: 32.20750, -103.85299
Client Project/Site: PLU Delaware B 23

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:
12/31/2021 10:39:58 AM

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

LINKS

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results through
TotalAccess

Have a Question?



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www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Laboratory Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

HPLC/IC

Qualifier	Qualifier Description
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.
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 Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Job ID: 880-9673-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-9673-1****Receipt**

The samples were received on 12/22/2021 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.7°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (880-9673-1) and SS05 (880-9673-5). 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 880-15492 and analytical batch 880-15482 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 laboratory control sample (LCS) associated with preparation batch 880-15618 and analytical batch 880-15626 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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 880-15519 and analytical batch 880-15752 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 Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS01

Lab Sample ID: 880-9673-1

Date Collected: 12/20/21 13:04

Matrix: Solid

Date Received: 12/22/21 16:20

Sample Depth: 0.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00711		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:26	1
Toluene	0.0550		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:26	1
Ethylbenzene	0.0160		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:26	1
m-Xylene & p-Xylene	0.0155		0.00398	mg/Kg		12/23/21 16:34	12/24/21 09:26	1
o-Xylene	0.0130		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:26	1
Xylenes, Total	0.0285		0.00398	mg/Kg		12/23/21 16:34	12/24/21 09:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130	12/23/21 16:34	12/24/21 09:26	1
1,4-Difluorobenzene (Surr)	105		70 - 130	12/23/21 16:34	12/24/21 09:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.107		0.00398	mg/Kg			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	81.0		50.0	mg/Kg			12/30/21 10:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 16:57	1
Diesel Range Organics (Over C10-C28)	81.0	*+	50.0	mg/Kg		12/28/21 08:39	12/28/21 16:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	12/28/21 08:39	12/28/21 16:57	1
o-Terphenyl	119		70 - 130	12/28/21 08:39	12/28/21 16:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45200		252	mg/Kg			12/30/21 14:08	50

Client Sample ID: SS02

Lab Sample ID: 880-9673-2

Date Collected: 12/20/21 13:06

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 09:47	1
Toluene	0.0137		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:47	1
Ethylbenzene	0.00350		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:47	1
m-Xylene & p-Xylene	0.00483		0.00398	mg/Kg		12/23/21 16:34	12/24/21 09:47	1
o-Xylene	0.00287		0.00199	mg/Kg		12/23/21 16:34	12/24/21 09:47	1
Xylenes, Total	0.00770		0.00398	mg/Kg		12/23/21 16:34	12/24/21 09:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	12/23/21 16:34	12/24/21 09:47	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS02

Lab Sample ID: 880-9673-2

Date Collected: 12/20/21 13:06

Matrix: Solid

Date Received: 12/22/21 16:20

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	117		70 - 130	12/23/21 16:34	12/24/21 09:47	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0249		0.00398	mg/Kg			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	57.2		50.0	mg/Kg			12/30/21 10:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:17	1
Diesel Range Organics (Over C10-C28)	57.2	*+	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			12/28/21 08:39	12/28/21 17:17	1
o-Terphenyl	100		70 - 130			12/28/21 08:39	12/28/21 17:17	

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2600		25.2	mg/Kg			12/30/21 14:20	5

Client Sample ID: SS03

Lab Sample ID: 880-9673-3

Date Collected: 12/20/21 13:10

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 10:07	1
Toluene	0.00359		0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		12/23/21 16:34	12/24/21 10:07	1
o-Xylene	0.00273		0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/23/21 16:34	12/24/21 10:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	12/23/21 16:34	12/24/21 10:07	1
1,4-Difluorobenzene (Surr)	106		70 - 130	12/23/21 16:34	12/24/21 10:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00632		0.00401	mg/Kg			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	363		49.9	mg/Kg			12/30/21 10:33	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS03

Lab Sample ID: 880-9673-3

Date Collected: 12/20/21 13:10

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/28/21 08:39	12/28/21 17:38	1
Diesel Range Organics (Over C10-C28)	363	*+	49.9	mg/Kg		12/28/21 08:39	12/28/21 17:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/28/21 08:39	12/28/21 17:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			12/28/21 08:39	12/28/21 17:38	1
o-Terphenyl	104		70 - 130			12/28/21 08:39	12/28/21 17:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4530		50.3	mg/Kg			12/30/21 14:31	10

Client Sample ID: SS04

Lab Sample ID: 880-9673-4

Date Collected: 12/20/21 13:16

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 10:27	1
Toluene	0.00256		0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/23/21 16:34	12/24/21 10:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 10:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/23/21 16:34	12/24/21 10:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			12/23/21 16:34	12/24/21 10:27	1
1,4-Difluorobenzene (Surr)	115		70 - 130			12/23/21 16:34	12/24/21 10:27	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			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	105		50.0	mg/Kg			12/30/21 10:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:59	1
Diesel Range Organics (Over C10-C28)	105	*+	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 17:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130			12/28/21 08:39	12/28/21 17:59	1
o-Terphenyl	106		70 - 130			12/28/21 08:39	12/28/21 17:59	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS04

Lab Sample ID: 880-9673-4

Date Collected: 12/20/21 13:16

Matrix: Solid

Date Received: 12/22/21 16:20

Sample Depth: 0.5'

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35700		250	mg/Kg			12/30/21 14:43	50

Client Sample ID: SS05

Lab Sample ID: 880-9673-5

Date Collected: 12/20/21 13:18

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 11:50	1
Toluene	0.0120		0.00199	mg/Kg		12/23/21 16:34	12/24/21 11:50	1
Ethylbenzene	0.0308		0.00199	mg/Kg		12/23/21 16:34	12/24/21 11:50	1
m-Xylene & p-Xylene	0.0460		0.00398	mg/Kg		12/23/21 16:34	12/24/21 11:50	1
o-Xylene	0.0102		0.00199	mg/Kg		12/23/21 16:34	12/24/21 11:50	1
Xylenes, Total	0.0562		0.00398	mg/Kg		12/23/21 16:34	12/24/21 11:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	272	S1+	70 - 130			12/23/21 16:34	12/24/21 11:50	1
1,4-Difluorobenzene (Surr)	350	S1+	70 - 130			12/23/21 16:34	12/24/21 11:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0990		0.00398	mg/Kg			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2410		49.9	mg/Kg			12/30/21 10:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		12/28/21 08:39	12/28/21 18:19	1
Diesel Range Organics (Over C10-C28)	2410	*+	49.9	mg/Kg		12/28/21 08:39	12/28/21 18:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/28/21 08:39	12/28/21 18:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			12/28/21 08:39	12/28/21 18:19	1
o-Terphenyl	126		70 - 130			12/28/21 08:39	12/28/21 18:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21300		249	mg/Kg			12/30/21 17:33	50

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS06

Lab Sample ID: 880-9673-6

Date Collected: 12/20/21 13:21

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 12:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 12:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 12:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		12/23/21 16:34	12/24/21 12:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 12:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		12/23/21 16:34	12/24/21 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	12/23/21 16:34	12/24/21 12:10	1
1,4-Difluorobenzene (Surr)	91		70 - 130	12/23/21 16:34	12/24/21 12:10	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			12/28/21 08:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	117		50.0	mg/Kg			12/30/21 10:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		12/28/21 08:30	12/28/21 23:30	1
Diesel Range Organics (Over C10-C28)	117		50.0	mg/Kg		12/28/21 08:30	12/28/21 23:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:30	12/28/21 23:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	12/28/21 08:30	12/28/21 23:30	1
o-Terphenyl	101		70 - 130	12/28/21 08:30	12/28/21 23:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16900		99.2	mg/Kg			12/30/21 18:08	20

Eurofins Xenco, Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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)
880-9655-A-11-F MS	Matrix Spike	147 S1+	111
880-9655-A-11-G MSD	Matrix Spike Duplicate	149 S1+	89
880-9673-1	SS01	142 S1+	105
880-9673-2	SS02	120	117
880-9673-3	SS03	114	106
880-9673-4	SS04	116	115
880-9673-5	SS05	272 S1+	350 S1+
880-9673-6	SS06	125	91
LCS 880-15492/1-A	Lab Control Sample	102	105
LCSD 880-15492/2-A	Lab Control Sample Dup	99	96
MB 880-15491/5-A	Method Blank	105	96
MB 880-15492/5-A	Method Blank	117	107
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)
880-9663-A-21-C MS	Matrix Spike	100	85
880-9663-A-21-D MSD	Matrix Spike Duplicate	100	84
880-9673-1	SS01	119	119
880-9673-2	SS02	102	100
880-9673-3	SS03	107	104
880-9673-4	SS04	111	106
880-9673-5	SS05	110	126
880-9673-6	SS06	100	101
890-1748-A-1-E MS	Matrix Spike	99	99
890-1748-A-1-F MSD	Matrix Spike Duplicate	109	104
LCS 880-15607/2-A	Lab Control Sample	491 S1+	477 S1+
LCSD 880-15607/3-A	Lab Control Sample Dup	500 S1+	487 S1+
MB 880-15607/1-A	Method Blank	100	106
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 880-15618/2-A	Lab Control Sample	119	108
LCSD 880-15618/3-A	Lab Control Sample Dup	106	102
MB 880-15618/1-A	Method Blank	96	99
Surrogate Legend			

Eurofins Xenco, Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15491/5-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15491

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/23/21 16:31	12/23/21 20:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	12/23/21 16:31	12/23/21 20:11	1
1,4-Difluorobenzene (Surr)	96		70 - 130	12/23/21 16:31	12/23/21 20:11	1

Lab Sample ID: MB 880-15492/5-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15492

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/23/21 16:34	12/24/21 07:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	12/23/21 16:34	12/24/21 07:02	1
1,4-Difluorobenzene (Surr)	107		70 - 130	12/23/21 16:34	12/24/21 07:02	1

Lab Sample ID: LCS 880-15492/1-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07953		mg/Kg		80	70 - 130
Toluene	0.100	0.07585		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.07416		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1536		mg/Kg		77	70 - 130
o-Xylene	0.100	0.07699		mg/Kg		77	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-15492/2-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08037		mg/Kg		80	70 - 130	1	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: LCSD 880-15492/2-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.08102		mg/Kg		81	70 - 130	7	35
Ethylbenzene	0.100	0.08025		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1672		mg/Kg		84	70 - 130	8	35
o-Xylene	0.100	0.08266		mg/Kg		83	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-9655-A-11-F MS

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.04812	F1	mg/Kg		48	70 - 130
Toluene	0.0274	F1	0.0998	0.04869	F1	mg/Kg		21	70 - 130
Ethylbenzene	0.00462	F1	0.0998	0.05995	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1077	F1	mg/Kg		52	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.05583	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-9655-A-11-G MSD

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.03705	F1	mg/Kg		37	70 - 130	26	35
Toluene	0.0274	F1	0.101	0.04481	F1	mg/Kg		17	70 - 130	8	35
Ethylbenzene	0.00462	F1	0.101	0.04783	F1	mg/Kg		43	70 - 130	22	35
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1091	F1	mg/Kg		52	70 - 130	1	35
o-Xylene	<0.00200	U F1	0.101	0.05489	F1	mg/Kg		54	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-15607/1-A

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15607

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		12/28/21 08:30	12/28/21 14:01	1

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: MB 880-15607/1-A

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15607

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		12/28/21 08:30	12/28/21 14:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:30	12/28/21 14:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			12/28/21 08:30	12/28/21 14:01	1
o-Terphenyl	106		70 - 130			12/28/21 08:30	12/28/21 14:01	1

Lab Sample ID: LCS 880-15607/2-A

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1142		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1144		mg/Kg		114	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	491	S1+	70 - 130				
o-Terphenyl	477	S1+	70 - 130				

Lab Sample ID: LCSD 880-15607/3-A

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1182		mg/Kg		118	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1168		mg/Kg		117	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	500	S1+	70 - 130						
o-Terphenyl	487	S1+	70 - 130						

Lab Sample ID: 880-9663-A-21-C MS

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15607

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	872.4		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	822.4		mg/Kg		83	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	85		70 - 130						

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: 880-9663-A-21-D MSD

Matrix: Solid

Analysis Batch: 15643

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15607

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	998	905.6		mg/Kg		89	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	819.4		mg/Kg		82	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	100		70 - 130								
o-Terphenyl	84		70 - 130								

Lab Sample ID: MB 880-15618/1-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15618

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		12/28/21 08:39	12/28/21 10:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 10:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:39	12/28/21 10:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			12/28/21 08:39	12/28/21 10:43	1
o-Terphenyl	99		70 - 130			12/28/21 08:39	12/28/21 10:43	1

Lab Sample ID: LCS 880-15618/2-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1239		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1331	*+	mg/Kg		133	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	108		70 - 130						

Lab Sample ID: LCSD 880-15618/3-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15618

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1149		mg/Kg		115	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1164		mg/Kg		116	70 - 130	13	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: LCSD 880-15618/3-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15618

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-1748-A-1-E MS

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15618

	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	1990	1746		mg/Kg		86	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U **	1990	1693		mg/Kg		83	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	99		70 - 130							
o-Terphenyl	99		70 - 130							

Lab Sample ID: 890-1748-A-1-F MSD

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15618

	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	2000	1906		mg/Kg		94	70 - 130	9	20	
Diesel Range Organics (Over C10-C28)	<49.9	U **	2000	1776		mg/Kg		87	70 - 130	5	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	109		70 - 130									
o-Terphenyl	104		70 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15519/1-A

Matrix: Solid

Analysis Batch: 15752

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			12/30/21 09:00	1		

Lab Sample ID: LCS 880-15519/2-A

Matrix: Solid

Analysis Batch: 15752

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	234.7		mg/Kg		94	90 - 110		

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-15519/3-A

Matrix: Solid

Analysis Batch: 15752

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	231.8		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-9664-A-35-B MS

Matrix: Solid

Analysis Batch: 15752

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4050	F1	1240	5431	F1	mg/Kg		112	90 - 110		

Lab Sample ID: 880-9664-A-35-C MSD

Matrix: Solid

Analysis Batch: 15752

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	4050	F1	1240	5164		mg/Kg		90	90 - 110	5	20

Lab Sample ID: 880-9671-A-6-B MS

Matrix: Solid

Analysis Batch: 15752

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11.3		250	268.9		mg/Kg		103	90 - 110		

Lab Sample ID: 880-9671-A-6-C MSD

Matrix: Solid

Analysis Batch: 15752

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	11.3		250	271.3		mg/Kg		104	90 - 110	1	20

Lab Sample ID: MB 880-15520/1-A

Matrix: Solid

Analysis Batch: 15816

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			12/30/21 16:57	1

Lab Sample ID: LCS 880-15520/2-A

Matrix: Solid

Analysis Batch: 15816

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	246.1		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-15520/3-A

Matrix: Solid

Analysis Batch: 15816

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	250.5		mg/Kg		100	90 - 110	2	20

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-9673-5 MS

Matrix: Solid

Analysis Batch: 15816

Client Sample ID: SS05

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	21300		12400	33900		mg/Kg		101	90 - 110

Lab Sample ID: 880-9673-5 MSD

Matrix: Solid

Analysis Batch: 15816

Client Sample ID: SS05

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	21300		12400	33390		mg/Kg		97	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

GC VOA

Analysis Batch: 15482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	8021B	15492
880-9673-2	SS02	Total/NA	Solid	8021B	15492
880-9673-3	SS03	Total/NA	Solid	8021B	15492
880-9673-4	SS04	Total/NA	Solid	8021B	15492
880-9673-5	SS05	Total/NA	Solid	8021B	15492
880-9673-6	SS06	Total/NA	Solid	8021B	15492
MB 880-15491/5-A	Method Blank	Total/NA	Solid	8021B	15491
MB 880-15492/5-A	Method Blank	Total/NA	Solid	8021B	15492
LCS 880-15492/1-A	Lab Control Sample	Total/NA	Solid	8021B	15492
LCSD 880-15492/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15492
880-9655-A-11-F MS	Matrix Spike	Total/NA	Solid	8021B	15492
880-9655-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15492

Prep Batch: 15491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15491/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 15492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	5035	
880-9673-2	SS02	Total/NA	Solid	5035	
880-9673-3	SS03	Total/NA	Solid	5035	
880-9673-4	SS04	Total/NA	Solid	5035	
880-9673-5	SS05	Total/NA	Solid	5035	
880-9673-6	SS06	Total/NA	Solid	5035	
MB 880-15492/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15492/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15492/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9655-A-11-F MS	Matrix Spike	Total/NA	Solid	5035	
880-9655-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 15610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	Total BTEX	
880-9673-2	SS02	Total/NA	Solid	Total BTEX	
880-9673-3	SS03	Total/NA	Solid	Total BTEX	
880-9673-4	SS04	Total/NA	Solid	Total BTEX	
880-9673-5	SS05	Total/NA	Solid	Total BTEX	
880-9673-6	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-15607/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15607/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15607/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9663-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9663-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

GC Semi VOA

Prep Batch: 15618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	8015NM Prep	
880-9673-2	SS02	Total/NA	Solid	8015NM Prep	
880-9673-3	SS03	Total/NA	Solid	8015NM Prep	
880-9673-4	SS04	Total/NA	Solid	8015NM Prep	
880-9673-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-15618/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15618/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1748-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1748-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	8015B NM	15618
880-9673-2	SS02	Total/NA	Solid	8015B NM	15618
880-9673-3	SS03	Total/NA	Solid	8015B NM	15618
880-9673-4	SS04	Total/NA	Solid	8015B NM	15618
880-9673-5	SS05	Total/NA	Solid	8015B NM	15618
MB 880-15618/1-A	Method Blank	Total/NA	Solid	8015B NM	15618
LCS 880-15618/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15618
LCSD 880-15618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15618
890-1748-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	15618
890-1748-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15618

Analysis Batch: 15643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-6	SS06	Total/NA	Solid	8015B NM	15607
MB 880-15607/1-A	Method Blank	Total/NA	Solid	8015B NM	15607
LCS 880-15607/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15607
LCSD 880-15607/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15607
880-9663-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	15607
880-9663-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15607

Analysis Batch: 15798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Total/NA	Solid	8015 NM	
880-9673-2	SS02	Total/NA	Solid	8015 NM	
880-9673-3	SS03	Total/NA	Solid	8015 NM	
880-9673-4	SS04	Total/NA	Solid	8015 NM	
880-9673-5	SS05	Total/NA	Solid	8015 NM	
880-9673-6	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Soluble	Solid	DI Leach	
880-9673-2	SS02	Soluble	Solid	DI Leach	
880-9673-3	SS03	Soluble	Solid	DI Leach	
880-9673-4	SS04	Soluble	Solid	DI Leach	
MB 880-15519/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

HPLC/IC (Continued)

Leach Batch: 15519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-15519/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15519/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9664-A-35-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9664-A-35-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-9671-A-6-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9671-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 15520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-5	SS05	Soluble	Solid	DI Leach	
880-9673-6	SS06	Soluble	Solid	DI Leach	
MB 880-15520/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15520/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15520/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9673-5 MS	SS05	Soluble	Solid	DI Leach	
880-9673-5 MSD	SS05	Soluble	Solid	DI Leach	

Analysis Batch: 15752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-1	SS01	Soluble	Solid	300.0	15519
880-9673-2	SS02	Soluble	Solid	300.0	15519
880-9673-3	SS03	Soluble	Solid	300.0	15519
880-9673-4	SS04	Soluble	Solid	300.0	15519
MB 880-15519/1-A	Method Blank	Soluble	Solid	300.0	15519
LCS 880-15519/2-A	Lab Control Sample	Soluble	Solid	300.0	15519
LCSD 880-15519/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15519
880-9664-A-35-B MS	Matrix Spike	Soluble	Solid	300.0	15519
880-9664-A-35-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15519
880-9671-A-6-B MS	Matrix Spike	Soluble	Solid	300.0	15519
880-9671-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15519

Analysis Batch: 15816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9673-5	SS05	Soluble	Solid	300.0	15520
880-9673-6	SS06	Soluble	Solid	300.0	15520
MB 880-15520/1-A	Method Blank	Soluble	Solid	300.0	15520
LCS 880-15520/2-A	Lab Control Sample	Soluble	Solid	300.0	15520
LCSD 880-15520/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15520
880-9673-5 MS	SS05	Soluble	Solid	300.0	15520
880-9673-5 MSD	SS05	Soluble	Solid	300.0	15520

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS01

Lab Sample ID: 880-9673-1

Date Collected: 12/20/21 13:04

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 09:26	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15618	12/28/21 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 16:57	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	15519	12/24/21 19:51	SC	XEN MID
Soluble	Analysis	300.0		50			15752	12/30/21 14:08	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 880-9673-2

Date Collected: 12/20/21 13:06

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 09:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15618	12/28/21 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 17:17	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	15519	12/24/21 19:51	SC	XEN MID
Soluble	Analysis	300.0		5			15752	12/30/21 14:20	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 880-9673-3

Date Collected: 12/20/21 13:10

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 10:07	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	15618	12/28/21 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 17:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	15519	12/24/21 19:51	SC	XEN MID
Soluble	Analysis	300.0		10			15752	12/30/21 14:31	CH	XEN MID

Client Sample ID: SS04

Lab Sample ID: 880-9673-4

Date Collected: 12/20/21 13:16

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 10:27	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Client Sample ID: SS04

Lab Sample ID: 880-9673-4

Date Collected: 12/20/21 13:16

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15618	12/28/21 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 17:59	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	15519	12/24/21 19:51	SC	XEN MID
Soluble	Analysis	300.0		50			15752	12/30/21 14:43	CH	XEN MID

Client Sample ID: SS05

Lab Sample ID: 880-9673-5

Date Collected: 12/20/21 13:18

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 11:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15618	12/28/21 08:39	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 18:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		50			15816	12/30/21 17:33	CH	XEN MID

Client Sample ID: SS06

Lab Sample ID: 880-9673-6

Date Collected: 12/20/21 13:21

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 12:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15610	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15798	12/30/21 10:33	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15607	12/28/21 08:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15643	12/28/21 23:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		20			15816	12/30/21 18:08	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

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

Eurofins Xenco, Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9673-1
SDG: 32.20750, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9673-1	SS01	Solid	12/20/21 13:04	12/22/21 16:20	0.5'
880-9673-2	SS02	Solid	12/20/21 13:06	12/22/21 16:20	0.5'
880-9673-3	SS03	Solid	12/20/21 13:10	12/22/21 16:20	0.5'
880-9673-4	SS04	Solid	12/20/21 13:16	12/22/21 16:20	0.5'
880-9673-5	SS05	Solid	12/20/21 13:18	12/22/21 16:20	0.5'
880-9673-6	SS06	Solid	12/20/21 13:21	12/22/21 16:20	0.5'



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 986-3199 Phoenix AZ (480) 355-0900
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800



880-9673 Chain of Custody

Project Manager	Kalei Jennings	Bill to (if different)	
Company Name	WSP USA	Company Name	
Address	3500 North A Street Bldg 1, Unit 222	Address	
City State ZIP	Midland, TX 79705	City, State ZIP	
Phone	817-1683-2503	Email	Kalei.Jennings@wsp.com

Project Name	PLU Delaware B 23	Turn Around	☒ Routine ☐ Rush
Project Number	34403236-022.024	Due Date	5/04/21
Project Location	32.20750, -103.05299		
Sampler's Name	Hadii Green		
PO #			

SAMPLE RECEIPT	Temp Blank	Yes ☐ No ☒	Wet Ice	Yes ☒ No ☐
	Temperature (°C)	9.6/9.7	Thermometer ID	IPB
	Received Intact	Yes ☒ No ☐	Correction Factor	1.0
	Cooler Custody Seals	Yes ☐ No ☒		
	Sample Custody Seals	Yes ☐ No ☒	Total Containers	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
SS01	SL	12-20-21	1304	0.5'	BTEX (EPA 0-8021)		HN03 HN
SS02	SL		1306		TPH (EPA 8015)		H2S04 H2
SS03	SL		1310		CHLORIDES (EPA 300.6)		HCL HL
SS04	SL		1316				None NO
SS05	SL		1318				NaOH Na
SS06	SL		1321				MeOH Me
							Zn Acetate+ NaOH Zn
							TAT starts the day received by the lab if received by 4:30pm
							Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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
1631 / 245.1 / 7470 / 7471 Hg

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Hadii Green	Hadii Green	12/22/21 10:20			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-9673-1

SDG Number: 32.20750, -103.85299

Login Number: 9673

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland

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	received two days after it was sampled
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, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-9674-1

Laboratory Sample Delivery Group: 32.20750, -103.85299
Client Project/Site: PLU Delaware B 23

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:
12/31/2021 10:40:09 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 Delaware B 23

Laboratory Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Job ID: 880-9674-1**Laboratory: Eurofins Xenco, Midland****Narrative****Job Narrative
880-9674-1****Receipt**

The samples were received on 12/22/2021 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.7°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS07 (880-9674-1) and SS08 (880-9674-2). 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 880-15492 and analytical batch 880-15482 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15606 and analytical batch 880-15626 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.

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 Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS07

Lab Sample ID: 880-9674-1

Date Collected: 12/20/21 13:23

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 12:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/23/21 16:34	12/24/21 12:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/23/21 16:34	12/24/21 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	153	S1+	70 - 130	12/23/21 16:34	12/24/21 12:31	1
1,4-Difluorobenzene (Surr)	131	S1+	70 - 130	12/23/21 16:34	12/24/21 12:31	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			12/28/21 08:37	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			12/29/21 08:37	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 F1 F2	49.9	mg/Kg		12/28/21 08:25	12/28/21 21:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	49.9	mg/Kg		12/28/21 08:25	12/28/21 21:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/28/21 08:25	12/28/21 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	12/28/21 08:25	12/28/21 21:09	1
o-Terphenyl	90		70 - 130	12/28/21 08:25	12/28/21 21:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.6		4.97	mg/Kg			12/30/21 18:20	1

Client Sample ID: SS08

Lab Sample ID: 880-9674-2

Date Collected: 12/20/21 13:26

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 12:51	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:51	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/23/21 16:34	12/24/21 12:51	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/23/21 16:34	12/24/21 12:51	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/23/21 16:34	12/24/21 12:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130	12/23/21 16:34	12/24/21 12:51	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS08

Lab Sample ID: 880-9674-2

Date Collected: 12/20/21 13:26

Matrix: Solid

Date Received: 12/22/21 16:20

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	12/23/21 16:34	12/24/21 12:51	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			12/28/21 08:37	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			12/29/21 08:37	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		12/28/21 08:25	12/28/21 22:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			12/28/21 08:25	12/28/21 22:14	1
o-Terphenyl	95		70 - 130			12/28/21 08:25	12/28/21 22:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.8		4.99	mg/Kg			12/30/21 18:32	1

Client Sample ID: SS09

Lab Sample ID: 880-9674-3

Date Collected: 12/20/21 13:30

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 13:12	1
Toluene	<0.00202	U	0.00202	mg/Kg		12/23/21 16:34	12/24/21 13:12	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		12/23/21 16:34	12/24/21 13:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		12/23/21 16:34	12/24/21 13:12	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		12/23/21 16:34	12/24/21 13:12	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		12/23/21 16:34	12/24/21 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	12/23/21 16:34	12/24/21 13:12	1
1,4-Difluorobenzene (Surr)	102		70 - 130	12/23/21 16:34	12/24/21 13:12	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			12/28/21 08:37	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			12/29/21 08:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS09

Lab Sample ID: 880-9674-3

Date Collected: 12/20/21 13:30

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/28/21 08:25	12/28/21 22:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			12/28/21 08:25	12/28/21 22:36	1
o-Terphenyl	86		70 - 130			12/28/21 08:25	12/28/21 22:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95	mg/Kg			12/30/21 18:44	1

Client Sample ID: SS10

Lab Sample ID: 880-9674-4

Date Collected: 12/20/21 13:34

Matrix: Solid

Date Received: 12/22/21 16:20

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		12/23/21 16:34	12/24/21 13:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 13:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 13:32	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		12/23/21 16:34	12/24/21 13:32	1
o-Xylene	0.00210		0.00200	mg/Kg		12/23/21 16:34	12/24/21 13:32	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/23/21 16:34	12/24/21 13:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			12/23/21 16:34	12/24/21 13:32	1
1,4-Difluorobenzene (Surr)	81		70 - 130			12/23/21 16:34	12/24/21 13:32	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			12/28/21 08:37	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			12/29/21 08:37	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		12/28/21 08:25	12/28/21 22:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 22:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			12/28/21 08:25	12/28/21 22:58	1
o-Terphenyl	93		70 - 130			12/28/21 08:25	12/28/21 22:58	1

Eurofins Xenco, Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS10
Date Collected: 12/20/21 13:34
Date Received: 12/22/21 16:20
Sample Depth: 0.5'

Lab Sample ID: 880-9674-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03	mg/Kg			12/30/21 19:20	1

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

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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)
880-9655-A-11-F MS	Matrix Spike	147 S1+	111
880-9655-A-11-G MSD	Matrix Spike Duplicate	149 S1+	89
880-9674-1	SS07	153 S1+	131 S1+
880-9674-2	SS08	139 S1+	88
880-9674-3	SS09	129	102
880-9674-4	SS10	109	81
LCS 880-15492/1-A	Lab Control Sample	102	105
LCSD 880-15492/2-A	Lab Control Sample Dup	99	96
MB 880-15491/5-A	Method Blank	105	96
MB 880-15492/5-A	Method Blank	117	107
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)
880-9674-1	SS07	97	90
880-9674-1 MS	SS07	105	106
880-9674-1 MSD	SS07	83	85
880-9674-2	SS08	99	95
880-9674-3	SS09	88	86
880-9674-4	SS10	95	93
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 880-15606/2-A	Lab Control Sample	91	90
LCSD 880-15606/3-A	Lab Control Sample Dup	100	98
MB 880-15606/1-A	Method Blank	100	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15491/5-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15491

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:31	12/23/21 20:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/23/21 16:31	12/23/21 20:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	12/23/21 16:31	12/23/21 20:11	1
1,4-Difluorobenzene (Surr)	96		70 - 130	12/23/21 16:31	12/23/21 20:11	1

Lab Sample ID: MB 880-15492/5-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15492

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/23/21 16:34	12/24/21 07:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/23/21 16:34	12/24/21 07:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	12/23/21 16:34	12/24/21 07:02	1
1,4-Difluorobenzene (Surr)	107		70 - 130	12/23/21 16:34	12/24/21 07:02	1

Lab Sample ID: LCS 880-15492/1-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07953		mg/Kg		80	70 - 130
Toluene	0.100	0.07585		mg/Kg		76	70 - 130
Ethylbenzene	0.100	0.07416		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1536		mg/Kg		77	70 - 130
o-Xylene	0.100	0.07699		mg/Kg		77	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-15492/2-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08037		mg/Kg		80	70 - 130	1	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: LCSD 880-15492/2-A

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.08102		mg/Kg		81	70 - 130	7	35
Ethylbenzene	0.100	0.08025		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1672		mg/Kg		84	70 - 130	8	35
o-Xylene	0.100	0.08266		mg/Kg		83	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-9655-A-11-F MS

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.04812	F1	mg/Kg		48	70 - 130
Toluene	0.0274	F1	0.0998	0.04869	F1	mg/Kg		21	70 - 130
Ethylbenzene	0.00462	F1	0.0998	0.05995	F1	mg/Kg		55	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1077	F1	mg/Kg		52	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.05583	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-9655-A-11-G MSD

Matrix: Solid

Analysis Batch: 15482

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 15492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.03705	F1	mg/Kg		37	70 - 130	26	35
Toluene	0.0274	F1	0.101	0.04481	F1	mg/Kg		17	70 - 130	8	35
Ethylbenzene	0.00462	F1	0.101	0.04783	F1	mg/Kg		43	70 - 130	22	35
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1091	F1	mg/Kg		52	70 - 130	1	35
o-Xylene	<0.00200	U F1	0.101	0.05489	F1	mg/Kg		54	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

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

Lab Sample ID: MB 880-15606/1-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15606

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		12/28/21 08:25	12/28/21 20:04	1

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: MB 880-15606/1-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 15606

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		12/28/21 08:25	12/28/21 20:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/28/21 08:25	12/28/21 20:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			12/28/21 08:25	12/28/21 20:04	1
o-Terphenyl	102		70 - 130			12/28/21 08:25	12/28/21 20:04	1

Lab Sample ID: LCS 880-15606/2-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 15606

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1005		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	91		70 - 130				
o-Terphenyl	90		70 - 130				

Lab Sample ID: LCSD 880-15606/3-A

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 15606

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1067		mg/Kg		107	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1070		mg/Kg		107	70 - 130	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	98		70 - 130						

Lab Sample ID: 880-9674-1 MS

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: SS07

Prep Type: Total/NA

Prep Batch: 15606

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 F1 F2	996	1902	F1	mg/Kg		189	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	996	1834	F1	mg/Kg		184	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	106		70 - 130						

Eurofins Xenco, Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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

Lab Sample ID: 880-9674-1 MSD

Matrix: Solid

Analysis Batch: 15626

Client Sample ID: SS07

Prep Type: Total/NA

Prep Batch: 15606

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 F1 F2	998	1498	F1 F2	mg/Kg		148	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1 F2	998	1471	F1 F2	mg/Kg		147	70 - 130	22	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	85		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15520/1-A

Matrix: Solid

Analysis Batch: 15816

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			12/30/21 16:57	1

Lab Sample ID: LCS 880-15520/2-A

Matrix: Solid

Analysis Batch: 15816

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	246.1		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-15520/3-A

Matrix: Solid

Analysis Batch: 15816

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	250.5		mg/Kg		100	90 - 110	2	20

Lab Sample ID: 880-9675-A-5-B MS

Matrix: Solid

Analysis Batch: 15816

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	72.2		251	331.2		mg/Kg		103	90 - 110

Lab Sample ID: 880-9675-A-5-C MSD

Matrix: Solid

Analysis Batch: 15816

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	72.2		251	336.9		mg/Kg		106	90 - 110	2	20

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

GC VOA

Analysis Batch: 15482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	8021B	15492
880-9674-2	SS08	Total/NA	Solid	8021B	15492
880-9674-3	SS09	Total/NA	Solid	8021B	15492
880-9674-4	SS10	Total/NA	Solid	8021B	15492
MB 880-15491/5-A	Method Blank	Total/NA	Solid	8021B	15491
MB 880-15492/5-A	Method Blank	Total/NA	Solid	8021B	15492
LCS 880-15492/1-A	Lab Control Sample	Total/NA	Solid	8021B	15492
LCSD 880-15492/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15492
880-9655-A-11-F MS	Matrix Spike	Total/NA	Solid	8021B	15492
880-9655-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15492

Prep Batch: 15491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-15491/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 15492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	5035	
880-9674-2	SS08	Total/NA	Solid	5035	
880-9674-3	SS09	Total/NA	Solid	5035	
880-9674-4	SS10	Total/NA	Solid	5035	
MB 880-15492/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15492/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15492/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9655-A-11-F MS	Matrix Spike	Total/NA	Solid	5035	
880-9655-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 15611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	Total BTEX	
880-9674-2	SS08	Total/NA	Solid	Total BTEX	
880-9674-3	SS09	Total/NA	Solid	Total BTEX	
880-9674-4	SS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	8015NM Prep	
880-9674-2	SS08	Total/NA	Solid	8015NM Prep	
880-9674-3	SS09	Total/NA	Solid	8015NM Prep	
880-9674-4	SS10	Total/NA	Solid	8015NM Prep	
MB 880-15606/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15606/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15606/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9674-1 MS	SS07	Total/NA	Solid	8015NM Prep	
880-9674-1 MSD	SS07	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	8015B NM	15606

Eurofins Xenco, Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

GC Semi VOA (Continued)

Analysis Batch: 15626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-2	SS08	Total/NA	Solid	8015B NM	15606
880-9674-3	SS09	Total/NA	Solid	8015B NM	15606
880-9674-4	SS10	Total/NA	Solid	8015B NM	15606
MB 880-15606/1-A	Method Blank	Total/NA	Solid	8015B NM	15606
LCS 880-15606/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15606
LCSD 880-15606/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15606
880-9674-1 MS	SS07	Total/NA	Solid	8015B NM	15606
880-9674-1 MSD	SS07	Total/NA	Solid	8015B NM	15606

Analysis Batch: 15700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Total/NA	Solid	8015 NM	
880-9674-2	SS08	Total/NA	Solid	8015 NM	
880-9674-3	SS09	Total/NA	Solid	8015 NM	
880-9674-4	SS10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 15520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Soluble	Solid	DI Leach	
880-9674-2	SS08	Soluble	Solid	DI Leach	
880-9674-3	SS09	Soluble	Solid	DI Leach	
880-9674-4	SS10	Soluble	Solid	DI Leach	
MB 880-15520/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15520/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15520/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-9675-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-9675-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 15816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-9674-1	SS07	Soluble	Solid	300.0	15520
880-9674-2	SS08	Soluble	Solid	300.0	15520
880-9674-3	SS09	Soluble	Solid	300.0	15520
880-9674-4	SS10	Soluble	Solid	300.0	15520
MB 880-15520/1-A	Method Blank	Soluble	Solid	300.0	15520
LCS 880-15520/2-A	Lab Control Sample	Soluble	Solid	300.0	15520
LCSD 880-15520/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15520
880-9675-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	15520
880-9675-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	15520

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS07

Lab Sample ID: 880-9674-1

Date Collected: 12/20/21 13:23

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 12:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15611	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15700	12/29/21 08:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	15606	12/28/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 21:09	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		1			15816	12/30/21 18:20	CH	XEN MID

Client Sample ID: SS08

Lab Sample ID: 880-9674-2

Date Collected: 12/20/21 13:26

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 12:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15611	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15700	12/29/21 08:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15606	12/28/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 22:14	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		1			15816	12/30/21 18:32	CH	XEN MID

Client Sample ID: SS09

Lab Sample ID: 880-9674-3

Date Collected: 12/20/21 13:30

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 13:12	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15611	12/28/21 08:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			15700	12/29/21 08:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	15606	12/28/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 22:36	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		1			15816	12/30/21 18:44	CH	XEN MID

Client Sample ID: SS10

Lab Sample ID: 880-9674-4

Date Collected: 12/20/21 13:34

Matrix: Solid

Date Received: 12/22/21 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	15492	12/23/21 16:34	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	15482	12/24/21 13:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			15611	12/28/21 08:37	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Client Sample ID: SS10
Date Collected: 12/20/21 13:34
Date Received: 12/22/21 16:20

Lab Sample ID: 880-9674-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			15700	12/29/21 08:37	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	15606	12/28/21 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			15626	12/28/21 22:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	15520	12/24/21 19:53	SC	XEN MID
Soluble	Analysis	300.0		1			15816	12/30/21 19:20	CH	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 Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

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

Eurofins Xenco, Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU Delaware B 23

Job ID: 880-9674-1
SDG: 32.20750, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-9674-1	SS07	Solid	12/20/21 13:23	12/22/21 16:20	0.5'
880-9674-2	SS08	Solid	12/20/21 13:26	12/22/21 16:20	0.5'
880-9674-3	SS09	Solid	12/20/21 13:30	12/22/21 16:20	0.5'
880-9674-4	SS10	Solid	12/20/21 13:34	12/22/21 16:20	0.5'



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 505-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad NM (505) 988-3199 Phoenix, AZ (480) 355-0900
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6707
Atlanta GA (770) 449-8800



888-9674 Chain of Custody

Project Manager	Kalei Jennings			Bill to (if different)	
Company Name	WSP USA			Company Name	
Address	3300 Northin A Street Bldg 1, Unit 222			Address	
City State ZIP	Midland, TX 79705			City State ZIP	
Phone	817-603-2503	Email	Kalei.Jennings@wsp.com		

Work Order Comments			
Program: UST/PST	☐ PRF	☐ Brownfield	☐ RR ☐ Superfund
State of Project			
Reporting Level	☐ Level	☐ PST/USE	TRF ☐ Level ☒ 2
Deliverables EDD	☒	Adapt ☐	Other

ANALYSIS REQUEST						Preservative Codes	
Project Name	PLU Delaware B-23	Turn Around				HNO ₃	HN
Project Number	340373A 0220219	Routine	☒			H ₂ SO ₄	HZ
Project Location	32.20750, -103.85299	Rush	☐			HCL	HL
Sampler's Name	Hadia Green	Due Date	SDAY			None	NO
PO #		TAT				NaOH	NA
SAMPLE RECEIPT		Temp Blank	Yes ☐ No ☒	Wet Ice	Yes ☐ No ☒	MeOH	ME
Temperature (°C)	9 46/9.7	Thermometer ID				Zn Acetate+	NaOH Zn
Received Inact.	No						
Cooler Custody Seals	Yes ☒ No ☐	Correction Factor					
Sample Custody Seals	Yes ☒ No ☐	Total Containers					

EPA 90.0021)
EPA 9015)
DES (EPA 300.6)

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

[illegible]

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 Si/O2 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		1631 / 245.1 / 7470 / 7471 Hg	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.							
Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time		
1 <i>Shadi Chohan</i>	<i>Shadi Chohan</i>	12/21/12 10:00	2				
3			4				
5			6				

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-9674-1

SDG Number: 32.20750, -103.85299

Login Number: 9674

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Xenco, Midland

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	received two days after it was sampled
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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10653-1

Laboratory Sample Delivery Group: 32.2075, -103.85299
Client Project/Site: PLU Del B 23 SWD

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:
2/2/2022 3:57:49 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 Del B 23 SWD

Laboratory Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
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 Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Job ID: 880-10653-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-10653-1****Receipt**

The samples were received on 1/27/2022 8:53 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 0.2°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-10654-A-41-A MS). 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: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-18150 and analytical batch 880-18223 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PHO4 (880-10653-1), PHO4A (880-10653-2), PHO5 (880-10653-3), PHO5A (880-10653-4), (880-10650-A-21-F), (880-10650-A-21-G MS) and (880-10650-A-21-H 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 Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO4

Lab Sample ID: 880-10653-1

Date Collected: 01/26/22 12:10

Matrix: Solid

Date Received: 01/27/22 08:53

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		01/27/22 10:32	01/27/22 23:35	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/27/22 23:35	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/27/22 23:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/27/22 23:35	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/27/22 23:35	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/27/22 23:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	01/27/22 10:32	01/27/22 23:35	1
1,4-Difluorobenzene (Surr)	86		70 - 130	01/27/22 10:32	01/27/22 23:35	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			01/28/22 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/02/22 16:07	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		01/31/22 12:03	02/01/22 23:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/01/22 23:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/01/22 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	53	S1-	70 - 130	01/31/22 12:03	02/01/22 23:54	1
o-Terphenyl	71		70 - 130	01/31/22 12:03	02/01/22 23:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.0		5.00	mg/Kg			02/01/22 17:00	1

Client Sample ID: PHO4A

Lab Sample ID: 880-10653-2

Date Collected: 01/26/22 12:17

Matrix: Solid

Date Received: 01/27/22 08:53

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		01/27/22 10:32	01/28/22 07:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 07:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 07:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/28/22 07:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 07:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/28/22 07:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	01/27/22 10:32	01/28/22 07:44	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO4A

Lab Sample ID: 880-10653-2

Date Collected: 01/26/22 12:17

Matrix: Solid

Date Received: 01/27/22 08:53

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	01/27/22 10:32	01/28/22 07:44	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			01/28/22 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/02/22 16:07	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		01/31/22 12:03	02/02/22 00:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/02/22 00:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/02/22 00:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	53	S1-	70 - 130			01/31/22 12:03	02/02/22 00:16	1
o-Terphenyl	64	S1-	70 - 130			01/31/22 12:03	02/02/22 00:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.1		4.95	mg/Kg			02/02/22 10:50	1

Client Sample ID: PHO5

Lab Sample ID: 880-10653-3

Date Collected: 01/26/22 12:45

Matrix: Solid

Date Received: 01/27/22 08:53

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/27/22 10:32	01/28/22 08:05	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/27/22 10:32	01/28/22 08:05	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/27/22 10:32	01/28/22 08:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/27/22 10:32	01/28/22 08:05	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/27/22 10:32	01/28/22 08:05	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/27/22 10:32	01/28/22 08:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	01/27/22 10:32	01/28/22 08:05	1
1,4-Difluorobenzene (Surr)	86		70 - 130	01/27/22 10:32	01/28/22 08:05	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			01/28/22 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/02/22 16:07	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO5

Lab Sample ID: 880-10653-3

Date Collected: 01/26/22 12:45

Matrix: Solid

Date Received: 01/27/22 08:53

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/02/22 01:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/02/22 01:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/02/22 01:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	63	S1-	70 - 130			01/31/22 12:03	02/02/22 01:00	1
o-Terphenyl	79		70 - 130			01/31/22 12:03	02/02/22 01:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.6		4.99	mg/Kg			02/01/22 17:48	1

Client Sample ID: PHO5A

Lab Sample ID: 880-10653-4

Date Collected: 01/26/22 12:54

Matrix: Solid

Date Received: 01/27/22 08:53

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		01/27/22 10:32	01/28/22 08:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 08:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 08:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/28/22 08:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/27/22 10:32	01/28/22 08:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/27/22 10:32	01/28/22 08:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			01/27/22 10:32	01/28/22 08:26	1
1,4-Difluorobenzene (Surr)	95		70 - 130			01/27/22 10:32	01/28/22 08:26	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			01/28/22 11:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/02/22 16:07	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		01/31/22 12:03	02/02/22 01:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/31/22 12:03	02/02/22 01:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/31/22 12:03	02/02/22 01:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	51	S1-	70 - 130			01/31/22 12:03	02/02/22 01:22	1
o-Terphenyl	64	S1-	70 - 130			01/31/22 12:03	02/02/22 01:22	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO5A
Date Collected: 01/26/22 12:54
Date Received: 01/27/22 08:53
Sample Depth: 3

Lab Sample ID: 880-10653-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	22.1		5.04	mg/Kg			02/01/22 18:00	1	

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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)
880-10653-1	PHO4	105	86
880-10653-2	PHO4A	109	99
880-10653-3	PHO5	98	86
880-10653-4	PHO5A	93	95
880-10654-A-41-A MS	Matrix Spike	43 S1-	88
880-10654-A-41-B MSD	Matrix Spike Duplicate	95	87
LCS 880-17887/1-A	Lab Control Sample	95	85
LCSD 880-17887/2-A	Lab Control Sample Dup	96	88
MB 880-17887/5-A	Method Blank	115	85
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)
880-10650-A-21-G MS	Matrix Spike	57 S1-	62 S1-
880-10650-A-21-H MSD	Matrix Spike Duplicate	63 S1-	69 S1-
880-10653-1	PHO4	53 S1-	71
880-10653-2	PHO4A	53 S1-	64 S1-
880-10653-3	PHO5	63 S1-	79
880-10653-4	PHO5A	51 S1-	64 S1-
LCS 880-18150/2-A	Lab Control Sample	73	83
LCSD 880-18150/3-A	Lab Control Sample Dup	74	82
MB 880-18150/1-A	Method Blank	75	96
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17887/5-A

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 17887

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/27/22 10:32	01/27/22 16:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/27/22 10:32	01/27/22 16:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/27/22 10:32	01/27/22 16:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/27/22 10:32	01/27/22 16:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/27/22 10:32	01/27/22 16:40	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/27/22 10:32	01/27/22 16:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/27/22 10:32	01/27/22 16:40	1
1,4-Difluorobenzene (Surr)	85		70 - 130	01/27/22 10:32	01/27/22 16:40	1

Lab Sample ID: LCS 880-17887/1-A

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 17887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08366		mg/Kg		84	70 - 130
Toluene	0.100	0.08898		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09390		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1871		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09142		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: LCSD 880-17887/2-A

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 17887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08355		mg/Kg		84	70 - 130	0	35
Toluene	0.100	0.08718		mg/Kg		87	70 - 130	2	35
Ethylbenzene	0.100	0.08934		mg/Kg		89	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1786		mg/Kg		89	70 - 130	5	35
o-Xylene	0.100	0.08879		mg/Kg		89	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-10654-A-41-A MS

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 17887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.100	0.08687		mg/Kg		87	70 - 130
Toluene	<0.00199	U	0.100	0.08887		mg/Kg		89	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10654-A-41-A MS

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 17887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.100	0.08907		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1783		mg/Kg		89	70 - 130
o-Xylene	<0.00199	U	0.100	0.08793		mg/Kg		88	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	43	S1-	70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-10654-A-41-B MSD

Matrix: Solid

Analysis Batch: 17563

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 17887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.07358		mg/Kg		74	70 - 130	17	35
Toluene	<0.00199	U	0.0990	0.07687		mg/Kg		78	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0990	0.07842		mg/Kg		79	70 - 130	13	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1583		mg/Kg		80	70 - 130	12	35
o-Xylene	<0.00199	U	0.0990	0.07972		mg/Kg		81	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

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

Lab Sample ID: MB 880-18150/1-A

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18150

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		01/31/22 12:03	02/01/22 19:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/01/22 19:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/31/22 12:03	02/01/22 19:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	01/31/22 12:03	02/01/22 19:10	1
o-Terphenyl	96		70 - 130	01/31/22 12:03	02/01/22 19:10	1

Lab Sample ID: LCS 880-18150/2-A

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	774.4		mg/Kg		77	70 - 130
Diesel Range Organics (Over C10-C28)	1000	919.4		mg/Kg		92	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-18150/2-A

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18150

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	73		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: LCSD 880-18150/3-A

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18150

			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	802.4		mg/Kg		80	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	942.2		mg/Kg		94	70 - 130	2	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	74		70 - 130								
o-Terphenyl	82		70 - 130								

Lab Sample ID: 880-10650-A-21-G MS

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18150

	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 F2	999	796.0		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	875.1		mg/Kg		86	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	57	S1-	70 - 130								
o-Terphenyl	62	S1-	70 - 130								

Lab Sample ID: 880-10650-A-21-H MSD

Matrix: Solid

Analysis Batch: 18223

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18150

	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 F2	999	1038	F2	mg/Kg		99	70 - 130	26	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	975.4		mg/Kg		96	70 - 130	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	63	S1-	70 - 130								
o-Terphenyl	69	S1-	70 - 130								

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18040/1-A
Matrix: Solid
Analysis Batch: 18272

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			02/01/22 16:25	1

Lab Sample ID: LCS 880-18040/2-A
Matrix: Solid
Analysis Batch: 18272

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	253.4		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-18040/3-A
Matrix: Solid
Analysis Batch: 18272

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	256.7		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-10653-1 MS
Matrix: Solid
Analysis Batch: 18272

Client Sample ID: PHO4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	91.0		250	357.0		mg/Kg		106	90 - 110

Lab Sample ID: 880-10653-1 MSD
Matrix: Solid
Analysis Batch: 18272

Client Sample ID: PHO4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	91.0		250	342.6		mg/Kg		101	90 - 110	4	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

GC VOA

Analysis Batch: 17563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	8021B	17887
880-10653-2	PHO4A	Total/NA	Solid	8021B	17887
880-10653-3	PHO5	Total/NA	Solid	8021B	17887
880-10653-4	PHO5A	Total/NA	Solid	8021B	17887
MB 880-17887/5-A	Method Blank	Total/NA	Solid	8021B	17887
LCS 880-17887/1-A	Lab Control Sample	Total/NA	Solid	8021B	17887
LCSD 880-17887/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	17887
880-10654-A-41-A MS	Matrix Spike	Total/NA	Solid	8021B	17887
880-10654-A-41-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	17887

Prep Batch: 17887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	5035	
880-10653-2	PHO4A	Total/NA	Solid	5035	
880-10653-3	PHO5	Total/NA	Solid	5035	
880-10653-4	PHO5A	Total/NA	Solid	5035	
MB 880-17887/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-17887/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-17887/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10654-A-41-A MS	Matrix Spike	Total/NA	Solid	5035	
880-10654-A-41-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	Total BTEX	
880-10653-2	PHO4A	Total/NA	Solid	Total BTEX	
880-10653-3	PHO5	Total/NA	Solid	Total BTEX	
880-10653-4	PHO5A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	8015NM Prep	
880-10653-2	PHO4A	Total/NA	Solid	8015NM Prep	
880-10653-3	PHO5	Total/NA	Solid	8015NM Prep	
880-10653-4	PHO5A	Total/NA	Solid	8015NM Prep	
MB 880-18150/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18150/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18150/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10650-A-21-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10650-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	8015B NM	18150
880-10653-2	PHO4A	Total/NA	Solid	8015B NM	18150
880-10653-3	PHO5	Total/NA	Solid	8015B NM	18150
880-10653-4	PHO5A	Total/NA	Solid	8015B NM	18150
MB 880-18150/1-A	Method Blank	Total/NA	Solid	8015B NM	18150
LCS 880-18150/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18150

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

GC Semi VOA (Continued)

Analysis Batch: 18223 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-18150/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18150
880-10650-A-21-G MS	Matrix Spike	Total/NA	Solid	8015B NM	18150
880-10650-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18150

Analysis Batch: 18413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Total/NA	Solid	8015 NM	
880-10653-2	PHO4A	Total/NA	Solid	8015 NM	
880-10653-3	PHO5	Total/NA	Solid	8015 NM	
880-10653-4	PHO5A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Soluble	Solid	DI Leach	
880-10653-2	PHO4A	Soluble	Solid	DI Leach	
880-10653-3	PHO5	Soluble	Solid	DI Leach	
880-10653-4	PHO5A	Soluble	Solid	DI Leach	
MB 880-18040/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18040/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18040/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10653-1 MS	PHO4	Soluble	Solid	DI Leach	
880-10653-1 MSD	PHO4	Soluble	Solid	DI Leach	

Analysis Batch: 18272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10653-1	PHO4	Soluble	Solid	300.0	18040
880-10653-2	PHO4A	Soluble	Solid	300.0	18040
880-10653-3	PHO5	Soluble	Solid	300.0	18040
880-10653-4	PHO5A	Soluble	Solid	300.0	18040
MB 880-18040/1-A	Method Blank	Soluble	Solid	300.0	18040
LCS 880-18040/2-A	Lab Control Sample	Soluble	Solid	300.0	18040
LCSD 880-18040/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18040
880-10653-1 MS	PHO4	Soluble	Solid	300.0	18040
880-10653-1 MSD	PHO4	Soluble	Solid	300.0	18040

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO4

Lab Sample ID: 880-10653-1

Date Collected: 01/26/22 12:10

Matrix: Solid

Date Received: 01/27/22 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	17887	01/27/22 10:32	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17563	01/27/22 23:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18035	01/28/22 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18150	01/31/22 12:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18223	02/01/22 23:54	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18040	01/28/22 11:11	CH	XEN MID
Soluble	Analysis	300.0		1			18272	02/01/22 17:00	SC	XEN MID

Client Sample ID: PHO4A

Lab Sample ID: 880-10653-2

Date Collected: 01/26/22 12:17

Matrix: Solid

Date Received: 01/27/22 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	17887	01/27/22 10:32	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17563	01/28/22 07:44	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18035	01/28/22 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18150	01/31/22 12:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18223	02/02/22 00:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18040	01/28/22 11:11	CH	XEN MID
Soluble	Analysis	300.0		1			18272	02/02/22 10:50	SC	XEN MID

Client Sample ID: PHO5

Lab Sample ID: 880-10653-3

Date Collected: 01/26/22 12:45

Matrix: Solid

Date Received: 01/27/22 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	17887	01/27/22 10:32	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17563	01/28/22 08:05	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18035	01/28/22 11:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18150	01/31/22 12:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18223	02/02/22 01:00	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18040	01/28/22 11:11	CH	XEN MID
Soluble	Analysis	300.0		1			18272	02/01/22 17:48	SC	XEN MID

Client Sample ID: PHO5A

Lab Sample ID: 880-10653-4

Date Collected: 01/26/22 12:54

Matrix: Solid

Date Received: 01/27/22 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	17887	01/27/22 10:32	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17563	01/28/22 08:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18035	01/28/22 11:02	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Client Sample ID: PHO5A Lab Sample ID: 880-10653-4
Date Collected: 01/26/22 12:54 Matrix: Solid
Date Received: 01/27/22 08:53

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18150	01/31/22 12:03	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18223	02/02/22 01:22	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18040	01/28/22 11:11	CH	XEN MID
Soluble	Analysis	300.0		1			18272	02/01/22 18:00	SC	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 Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10653-1
SDG: 32.2075, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10653-1	PHO4	Solid	01/26/22 12:10	01/27/22 08:53	1
880-10653-2	PHO4A	Solid	01/26/22 12:17	01/27/22 08:53	4
880-10653-3	PHO5	Solid	01/26/22 12:45	01/27/22 08:53	1
880-10653-4	PHO5A	Solid	01/26/22 12:54	01/27/22 08:53	3

1

2

3

4

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6

7

8

9

10

11

12

13

14



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 802-0300 San Antonio TX (210) 506-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 335-0800
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6707
Atlanta GA (770) 449-8600

Work Order No: 10653

Project Manager	Kalei Jennings	Bill to (if different)	Kalei Jennings
Company Name	WSP USA Inc.	Company Name	WSP USA Inc
Address	3300 North A Street, Bldg 1 Unit 222	Address	
City, State ZIP	Midland, TX 79705	City State ZIP	
Phone	817-683-2503	Email	Kalei.Jennings@wsp.com

Work Order Comments			
Program: UST/PST	☐ PRP	☐ Brownfields	☐ RRC ☐ Superfund
State of Project			
Reporting Level	☐ Level I	☐ PST/UST	☐ TRR ☐ Level II
Deliverables	EDD ☒	Adapt ☐	Other

Project Name	PUV DEL B 23 SWD	Turn Around	
Project Number	3468736, 022 0129	Routine	☒
Project Location	32.2075, -103.85299	Rush	☐
Sampler's Name	Hadlin Green	Due Date	5 DAY
PO #			
SAMPLE RECEIPT	Temp Blank	Yes ☒ No	Wet Ice
	Temperature (°C)	11.2	Thermometer ID
	Received Intact	Yes ☒ No	
	Cooler Custody Seals	Yes ☒ No ☒ (N/A)	Correction Factor
	Sample Custody Seals	Yes ☒ No ☒ (N/A)	Total Containers
Number of Containers/Preservative Code			
(8015)			
(8021)			
rides (300)			
ANALYSIS REQUEST			
Preservative Codes	HNO3	HN	
	H2SO4	H2	
	HCL	HL	
	None	NO	
	NaOH	Na	
	MeOH	Me	
	Zn Acetate + NaOH	Zn	
TAT starts the day received by the lab if received by 4:30pm			

[illegible]

880-10653 Chain of Custody

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11		Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	
<i>Circle Method(s) and Metal(s) to be analyzed</i>				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 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	Relinquished by (Signature)	Received by (Signature)
1 <i>Patel</i>	<i>Shivani</i>	1-27-22					
3		8:53					
5							

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10653-1

SDG Number: 32.2075, -103.85299

Login Number: 10653

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10697-1

Laboratory Sample Delivery Group: 32.2075, -103.85299

Client Project/Site: PLU Del B 23 SWD

Revision: 1

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:

2/22/2022 10:38:58 AM

Jessica Kramer, Project Manager
(432)704-5440

jessica.kramer@eurofinset.com

LINKS

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results through

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www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Laboratory Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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.
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 Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Job ID: 880-10697-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-10697-1**REVISION

The report being provided is a revision of the original report sent on 2/3/2022. The report (revision 1) is being revised due to Per client email, requesting re run on chloride for sample PH01A @ 2'.

Report revision history

Receipt

The samples were received on 1/28/2022 11:29 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 3.0°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-10698-A-1-C MS) and (880-10698-A-1-D 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

Method 300_ORGFM_28D: Method required MS/MSD and/or duplicate QC were prepared and analyzed at required batch frequency for preparation batch 880-18208 and analytical batch 880-18287 using samples from other sites, and are not reported with this project.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18507 and 880-18507 and analytical batch 880-18508 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18837 and analytical batch 880-18944 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-19180 and analytical batch 880-19413 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 Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH01

Lab Sample ID: 880-10697-1

Date Collected: 01/27/22 11:44

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/28/22 13:19	01/29/22 14:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/28/22 13:19	01/29/22 14:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/28/22 13:19	01/29/22 14:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		01/28/22 13:19	01/29/22 14:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/28/22 13:19	01/29/22 14:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/28/22 13:19	01/29/22 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	165	S1+	70 - 130	01/28/22 13:19	01/29/22 14:05	1
1,4-Difluorobenzene (Surr)	107		70 - 130	01/28/22 13:19	01/29/22 14:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/02/22 16:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 19:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 19:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	01/31/22 15:06	02/02/22 19:27	1
o-Terphenyl	94		70 - 130	01/31/22 15:06	02/02/22 19:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		4.99		mg/Kg			02/03/22 01:49	1

Client Sample ID: PH01A

Lab Sample ID: 880-10697-2

Date Collected: 01/27/22 11:51

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 14:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 14:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 14:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 14:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 14:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	01/28/22 13:19	01/29/22 14:33	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH01A

Lab Sample ID: 880-10697-2

Date Collected: 01/27/22 11:51

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	01/28/22 13:19	01/29/22 14:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	85.4		50.0		mg/Kg			02/02/22 16:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 19:49	1
Diesel Range Organics (Over C10-C28)	85.4		50.0		mg/Kg		01/31/22 15:06	02/02/22 19:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 19:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130				01/31/22 15:06	02/02/22 19:49	1
o-Terphenyl	82		70 - 130				01/31/22 15:06	02/02/22 19:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	636		5.00		mg/Kg			02/03/22 01:55	1

Client Sample ID: PH03

Lab Sample ID: 880-10697-3

Date Collected: 01/27/22 15:00

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 0.5"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 17:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 17:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 17:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/28/22 13:19	01/29/22 17:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 17:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/28/22 13:19	01/29/22 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130	01/28/22 13:19	01/29/22 17:22	1
1,4-Difluorobenzene (Surr)	92		70 - 130	01/28/22 13:19	01/29/22 17:22	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/02/22 16:07	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH03

Lab Sample ID: 880-10697-3

Date Collected: 01/27/22 15:00

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 0.5"

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 20:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 20:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 20:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				01/31/22 15:06	02/02/22 20:11	1
o-Terphenyl	93		70 - 130				01/31/22 15:06	02/02/22 20:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<49.5	U	49.5		mg/Kg			02/03/22 02:01	10

Client Sample ID: PH03A

Lab Sample ID: 880-10697-4

Date Collected: 01/27/22 15:07

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/28/22 13:19	01/29/22 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	157	S1+	70 - 130				01/28/22 13:19	01/29/22 17:50	1
1,4-Difluorobenzene (Surr)	107		70 - 130				01/28/22 13:19	01/29/22 17:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/02/22 16:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				01/31/22 15:06	02/02/22 20:33	1
o-Terphenyl	86		70 - 130				01/31/22 15:06	02/02/22 20:33	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH03A

Lab Sample ID: 880-10697-4

Date Collected: 01/27/22 15:07

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		5.04		mg/Kg			02/03/22 16:18	1

Client Sample ID: PH03B

Lab Sample ID: 880-10697-5

Date Collected: 01/27/22 15:14

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/28/22 13:19	01/29/22 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130				01/28/22 13:19	01/29/22 18:19	1
1,4-Difluorobenzene (Surr)	110		70 - 130				01/28/22 13:19	01/29/22 18:19	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/02/22 16:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 20:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				01/31/22 15:06	02/02/22 20:54	1
o-Terphenyl	100		70 - 130				01/31/22 15:06	02/02/22 20:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	158		25.1		mg/Kg			02/03/22 02:26	5

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Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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)
880-10665-A-1-A MS	Matrix Spike	113	102
880-10665-A-1-B MSD	Matrix Spike Duplicate	139 S1+	110
880-10697-1	PH01	165 S1+	107
880-10697-2	PH01A	121	85
880-10697-3	PH03	151 S1+	92
880-10697-4	PH03A	157 S1+	107
880-10697-5	PH03B	154 S1+	110
LCS 880-18045/1-A	Lab Control Sample	132 S1+	111
LCSD 880-18045/2-A	Lab Control Sample Dup	139 S1+	113
MB 880-17925/5-A	Method Blank	88	96
MB 880-18045/5-A	Method Blank	92	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)
880-10697-1	PH01	82	94
880-10697-2	PH01A	75	82
880-10697-3	PH03	82	93
880-10697-4	PH03A	79	86
880-10697-5	PH03B	87	100
880-10698-A-1-C MS	Matrix Spike	66 S1-	64 S1-
880-10698-A-1-D MSD	Matrix Spike Duplicate	66 S1-	66 S1-
LCS 880-18190/2-A	Lab Control Sample	94	96
LCSD 880-18190/3-A	Lab Control Sample Dup	92	92
MB 880-18190/1-A	Method Blank	74	82

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17925/5-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 17925

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 20:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	01/28/22 07:30	01/28/22 20:16	1
1,4-Difluorobenzene (Surr)	96		70 - 130	01/28/22 07:30	01/28/22 20:16	1

Lab Sample ID: MB 880-18045/5-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	01/28/22 13:19	01/29/22 10:47	1
1,4-Difluorobenzene (Surr)	100		70 - 130	01/28/22 13:19	01/29/22 10:47	1

Lab Sample ID: LCS 880-18045/1-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1180		mg/Kg		118	70 - 130
Toluene	0.100	0.09779		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09356		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.2052		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-18045/2-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1214		mg/Kg		121	70 - 130	3	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCSD 880-18045/2-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.09969		mg/Kg		100	70 - 130	2	35
Ethylbenzene	0.100	0.09654		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2110		mg/Kg		106	70 - 130	3	35
o-Xylene	0.100	0.1131		mg/Kg		113	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-10665-A-1-A MS

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1 F2	0.100	0.03423	F1	mg/Kg		34	70 - 130
Toluene	<0.00199	U F1 F2	0.100	0.02935	F1	mg/Kg		29	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.100	0.03014	F1	mg/Kg		30	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.201	0.06491	F1	mg/Kg		32	70 - 130
o-Xylene	<0.00199	U F1 F2	0.100	0.03365	F1	mg/Kg		34	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-10665-A-1-B MSD

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0990	0.09259	F2	mg/Kg		94	70 - 130	92	35
Toluene	<0.00199	U F1 F2	0.0990	0.07678	F2	mg/Kg		78	70 - 130	89	35
Ethylbenzene	<0.00199	U F1 F2	0.0990	0.07044	F2	mg/Kg		71	70 - 130	80	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.198	0.1532	F2	mg/Kg		77	70 - 130	81	35
o-Xylene	<0.00199	U F1 F2	0.0990	0.08203	F2	mg/Kg		83	70 - 130	84	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

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

Lab Sample ID: MB 880-18190/1-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: MB 880-18190/1-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130				01/31/22 15:06	02/02/22 11:37	1
o-Terphenyl	82		70 - 130				01/31/22 15:06	02/02/22 11:37	1

Lab Sample ID: LCS 880-18190/2-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	870.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1097		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	94		70 - 130				
o-Terphenyl	96		70 - 130				

Lab Sample ID: LCSD 880-18190/3-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18190

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.4		mg/Kg		84	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1061		mg/Kg		106	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	92		70 - 130						

Lab Sample ID: 880-10698-A-1-C MS

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18190

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	999	776.3		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	887.8		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	66	S1-	70 - 130						
o-Terphenyl	64	S1-	70 - 130						

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10698-A-1-D MSD

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18190

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	750.2		mg/Kg		75	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.5		mg/Kg		91	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	66	S1-	70 - 130								
o-Terphenyl	66	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18208/1-A

Matrix: Solid

Analysis Batch: 18287

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/03/22 00:17	1

Lab Sample ID: LCS 880-18208/2-A

Matrix: Solid

Analysis Batch: 18287

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	266.4		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-18208/3-A

Matrix: Solid

Analysis Batch: 18287

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	270.3		mg/Kg		108	90 - 110	1	20

Lab Sample ID: MB 880-18507/1-A

Matrix: Solid

Analysis Batch: 18508

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/03/22 15:32	1

Lab Sample ID: LCS 880-18507/2-A

Matrix: Solid

Analysis Batch: 18508

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	250	269.7		mg/Kg		108	90 - 110		

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-18507/3-A

Matrix: Solid

Analysis Batch: 18508

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	269.5		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-10697-3 MS

Matrix: Solid

Analysis Batch: 18508

Client Sample ID: PH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	75.5	F1	248	363.3	F1	mg/Kg		116	90 - 110		

Lab Sample ID: 880-10697-3 MSD

Matrix: Solid

Analysis Batch: 18508

Client Sample ID: PH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	75.5	F1	248	358.1	F1	mg/Kg		114	90 - 110	1	20

Lab Sample ID: MB 880-18837/1-A

Matrix: Solid

Analysis Batch: 18944

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/10/22 10:47	1

Lab Sample ID: LCS 880-18837/2-A

Matrix: Solid

Analysis Batch: 18944

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	247.2		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-18837/3-A

Matrix: Solid

Analysis Batch: 18944

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	225.3		mg/Kg		90	90 - 110	9	20

Lab Sample ID: 880-10995-A-3-C MS

Matrix: Solid

Analysis Batch: 18944

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.21	F1	249	236.0		mg/Kg		93	90 - 110		

Lab Sample ID: 880-10995-A-3-D MSD

Matrix: Solid

Analysis Batch: 18944

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	5.21	F1	249	207.8	F1	mg/Kg		81	90 - 110	13	20

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19180/1-A

Matrix: Solid

Analysis Batch: 19413

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/15/22 02:59	1

Lab Sample ID: LCS 880-19180/2-A

Matrix: Solid

Analysis Batch: 19413

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.5		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-19180/3-A

Matrix: Solid

Analysis Batch: 19413

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	263.6		mg/Kg		105	90 - 110	3	20

Lab Sample ID: 880-11196-A-31-D MS

Matrix: Solid

Analysis Batch: 19413

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	29.7	F1	249	313.0	F1	mg/Kg		114	90 - 110

Lab Sample ID: 880-11196-A-31-E MSD

Matrix: Solid

Analysis Batch: 19413

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	29.7	F1	249	287.1		mg/Kg		103	90 - 110	9	20

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

GC VOA

Analysis Batch: 17866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	8021B	18045
880-10697-2	PH01A	Total/NA	Solid	8021B	18045
880-10697-3	PH03	Total/NA	Solid	8021B	18045
880-10697-4	PH03A	Total/NA	Solid	8021B	18045
880-10697-5	PH03B	Total/NA	Solid	8021B	18045
MB 880-17925/5-A	Method Blank	Total/NA	Solid	8021B	17925
MB 880-18045/5-A	Method Blank	Total/NA	Solid	8021B	18045
LCS 880-18045/1-A	Lab Control Sample	Total/NA	Solid	8021B	18045
LCSD 880-18045/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18045
880-10665-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	18045
880-10665-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18045

Prep Batch: 17925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-17925/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 18045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	5035	
880-10697-2	PH01A	Total/NA	Solid	5035	
880-10697-3	PH03	Total/NA	Solid	5035	
880-10697-4	PH03A	Total/NA	Solid	5035	
880-10697-5	PH03B	Total/NA	Solid	5035	
MB 880-18045/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18045/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18045/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10665-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-10665-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	Total BTEX	
880-10697-2	PH01A	Total/NA	Solid	Total BTEX	
880-10697-3	PH03	Total/NA	Solid	Total BTEX	
880-10697-4	PH03A	Total/NA	Solid	Total BTEX	
880-10697-5	PH03B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	8015NM Prep	
880-10697-2	PH01A	Total/NA	Solid	8015NM Prep	
880-10697-3	PH03	Total/NA	Solid	8015NM Prep	
880-10697-4	PH03A	Total/NA	Solid	8015NM Prep	
880-10697-5	PH03B	Total/NA	Solid	8015NM Prep	
MB 880-18190/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18190/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18190/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10698-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10698-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

GC Semi VOA

Analysis Batch: 18339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	8015B NM	18190
880-10697-2	PH01A	Total/NA	Solid	8015B NM	18190
880-10697-3	PH03	Total/NA	Solid	8015B NM	18190
880-10697-4	PH03A	Total/NA	Solid	8015B NM	18190
880-10697-5	PH03B	Total/NA	Solid	8015B NM	18190
MB 880-18190/1-A	Method Blank	Total/NA	Solid	8015B NM	18190
LCS 880-18190/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18190
LCSD 880-18190/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18190
880-10698-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	18190
880-10698-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18190

Analysis Batch: 18413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Total/NA	Solid	8015 NM	
880-10697-2	PH01A	Total/NA	Solid	8015 NM	
880-10697-3	PH03	Total/NA	Solid	8015 NM	
880-10697-4	PH03A	Total/NA	Solid	8015 NM	
880-10697-5	PH03B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Soluble	Solid	DI Leach	
880-10697-2	PH01A	Soluble	Solid	DI Leach	
880-10697-3	PH03	Soluble	Solid	DI Leach	
880-10697-5	PH03B	Soluble	Solid	DI Leach	
MB 880-18208/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18208/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18208/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 18287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-1	PH01	Soluble	Solid	300.0	18208
880-10697-2	PH01A	Soluble	Solid	300.0	18208
880-10697-3	PH03	Soluble	Solid	300.0	18208
880-10697-5	PH03B	Soluble	Solid	300.0	18208
MB 880-18208/1-A	Method Blank	Soluble	Solid	300.0	18208
LCS 880-18208/2-A	Lab Control Sample	Soluble	Solid	300.0	18208
LCSD 880-18208/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18208

Leach Batch: 18507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-4	PH03A	Soluble	Solid	DI Leach	
MB 880-18507/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18507/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18507/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10697-3 MS	PH03	Soluble	Solid	DI Leach	
880-10697-3 MSD	PH03	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

HPLC/IC

Analysis Batch: 18508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10697-4	PH03A	Soluble	Solid	300.0	18507
MB 880-18507/1-A	Method Blank	Soluble	Solid	300.0	18507
LCS 880-18507/2-A	Lab Control Sample	Soluble	Solid	300.0	18507
LCSD 880-18507/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18507
880-10697-3 MS	PH03	Soluble	Solid	300.0	18507
880-10697-3 MSD	PH03	Soluble	Solid	300.0	18507

Leach Batch: 18837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18837/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18837/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18837/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10995-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10995-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18837/1-A	Method Blank	Soluble	Solid	300.0	18837
LCS 880-18837/2-A	Lab Control Sample	Soluble	Solid	300.0	18837
LCSD 880-18837/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18837
880-10995-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	18837
880-10995-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18837

Leach Batch: 19180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19180/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19180/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19180/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11196-A-31-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11196-A-31-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19180/1-A	Method Blank	Soluble	Solid	300.0	19180
LCS 880-19180/2-A	Lab Control Sample	Soluble	Solid	300.0	19180
LCSD 880-19180/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19180
880-11196-A-31-D MS	Matrix Spike	Soluble	Solid	300.0	19180
880-11196-A-31-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19180

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH01

Lab Sample ID: 880-10697-1

Date Collected: 01/27/22 11:44

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 14:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 19:27	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18208	01/31/22 18:34	SC	XEN MID
Soluble	Analysis	300.0		1			18287	02/03/22 01:49	SC	XEN MID

Client Sample ID: PH01A

Lab Sample ID: 880-10697-2

Date Collected: 01/27/22 11:51

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 14:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 19:49	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18208	01/31/22 18:34	SC	XEN MID
Soluble	Analysis	300.0		1			18287	02/03/22 01:55	SC	XEN MID

Client Sample ID: PH03

Lab Sample ID: 880-10697-3

Date Collected: 01/27/22 15:00

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 17:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:07	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 20:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18208	01/31/22 18:34	SC	XEN MID
Soluble	Analysis	300.0		10			18287	02/03/22 02:01	SC	XEN MID

Client Sample ID: PH03A

Lab Sample ID: 880-10697-4

Date Collected: 01/27/22 15:07

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 17:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Client Sample ID: PH03A

Lab Sample ID: 880-10697-4

Date Collected: 01/27/22 15:07

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:41	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 20:33	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	18507	02/03/22 13:47	CH	XEN MID
Soluble	Analysis	300.0		1			18508	02/03/22 16:18	CH	XEN MID

Client Sample ID: PH03B

Lab Sample ID: 880-10697-5

Date Collected: 01/27/22 15:14

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 18:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:41	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 20:54	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18208	01/31/22 18:34	SC	XEN MID
Soluble	Analysis	300.0		5			18287	02/03/22 02:26	SC	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 Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

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

Eurofins Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10697-1
SDG: 32.2075, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10697-1	PH01	Solid	01/27/22 11:44	01/28/22 11:29	1
880-10697-2	PH01A	Solid	01/27/22 11:51	01/28/22 11:29	2
880-10697-3	PH03	Solid	01/27/22 15:00	01/28/22 11:29	0.5"
880-10697-4	PH03A	Solid	01/27/22 15:07	01/28/22 11:29	1
880-10697-5	PH03B	Solid	01/27/22 15:14	01/28/22 11:29	2



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
 Midland TX (432) 704-5440 EL Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900
 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 589-6701
 Atlanta GA (770) 449-8900



880-10697 Chain of Custody

www.xenco.com Page ____ of ____

Project Manager	Kalei Jennings	Bill to (if different)	Kalei Jennings
Company Name	WSP USA Inc	Company Name	WSP USA Inc
Address	3300 N. A St, Bldg 1, Suite 228	Address	3300 N. A St, Bldg 1, Suite 228
City State ZIP	Midland TX 79705	City State ZIP	Midland TX 79705
Phone	817-683-2503	Email	Kalei.Jennings@wsp.com

ANALYSIS REQUEST

Preservative Codes

Project Name	PLU Del B 23 SWD	Turn Around	
Project Number	31403236.022.0129	Routine	☒
Project Location	38.2075, -103.85299	Rush	☐
Sampler's Name	Hadlie Green	Due Date	
PO #	CC 16167671001		

SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C)	29/30			Thermometer ID	IPB	
Received Intact:	Yes	No		Correction Factor	10	
Cooler Custody Seals	Yes	No				
Sample Custody Seals	Yes	No		Total Containers		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code
-----------------------	--------	--------------	--------------	-------	--

PH01	SL	1/27/22	11:44	1	1	BTX (8021)	TPH (8015)	Chbride (300)
PH01A			11:51	2	1	X	X	X
PH03			15:00	0.5	1	X	X	X
PH03A			15:07	1	1	X	X	X
PH03B			15:14	2	1	X	X	X

PH01	SL	1/27/22	11:44	1	1	BTX (8021)	TPH (8015)	Chbride (300)
PH01A			11:51	2	1	X	X	X
PH03			15:00	0.5	1	X	X	X
PH03A			15:07	1	1	X	X	X
PH03B			15:14	2	1	X	X	X

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	1631 / 245.1 / 7470 / 7471 Hg

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10697-1
SDG Number: 32.2075, -103.85299**Login Number: 10697****List Number: 1****Creator: Rodriguez, Leticia****List Source: Eurofins Midland**

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10698-1

Laboratory Sample Delivery Group: 32.2075, -103.85299

Client Project/Site: PLU Del B 23 SWD

Revision: 1

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:

2/11/2022 9:28:58 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 Del B 23 SWD

Laboratory Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Job ID: 880-10698-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-10698-1

REVISION

The report being provided is a revision of the original report sent on 2/3/2022. The report (revision 1) is being revised due to Per client email, correcting sample ID from SS08 to SS12.

Report revision history

Receipt

The sample was received on 1/28/2022 11:29 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-10698-A-1-C MS) and (880-10698-A-1-D 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

Method 300_ORGFM_28D: Method required MS/MSD and/or duplicate QC were prepared and analyzed at required batch frequency for preparation batch 880-18208 and analytical batch 880-18287 using samples from other sites, and are not reported with this project.

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 Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Client Sample ID: SS12

Lab Sample ID: 880-10698-1

Date Collected: 01/27/22 13:17

Matrix: Solid

Date Received: 01/28/22 11:29

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/28/22 13:19	01/29/22 18:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/28/22 13:19	01/29/22 18:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/28/22 13:19	01/29/22 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	149	S1+	70 - 130	01/28/22 13:19	01/29/22 18:47	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/28/22 13:19	01/29/22 18:47	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/03/22 13:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/02/22 16:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 12:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 12:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/31/22 15:06	02/02/22 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	01/31/22 15:06	02/02/22 12:44	1
o-Terphenyl	78		70 - 130	01/31/22 15:06	02/02/22 12:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.6		4.98		mg/Kg			02/03/22 02:44	1

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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)
880-10698-1	SS12	149 S1+	99
LCS 880-18045/1-A	Lab Control Sample	132 S1+	111
LCSD 880-18045/2-A	Lab Control Sample Dup	139 S1+	113
MB 880-17925/5-A	Method Blank	88	96
MB 880-18045/5-A	Method Blank	92	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)
880-10698-1	SS12	73	78
880-10698-1 MS	SS12	66 S1-	64 S1-
880-10698-1 MSD	SS12	66 S1-	66 S1-
LCS 880-18190/2-A	Lab Control Sample	94	96
LCSD 880-18190/3-A	Lab Control Sample Dup	92	92
MB 880-18190/1-A	Method Blank	74	82
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-17925/5-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 17925

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 07:30	01/28/22 20:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 07:30	01/28/22 20:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	01/28/22 07:30	01/28/22 20:16	1
1,4-Difluorobenzene (Surr)	96		70 - 130	01/28/22 07:30	01/28/22 20:16	1

Lab Sample ID: MB 880-18045/5-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/28/22 13:19	01/29/22 10:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/28/22 13:19	01/29/22 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	01/28/22 13:19	01/29/22 10:47	1
1,4-Difluorobenzene (Surr)	100		70 - 130	01/28/22 13:19	01/29/22 10:47	1

Lab Sample ID: LCS 880-18045/1-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1180		mg/Kg		118	70 - 130
Toluene	0.100	0.09779		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09356		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.2052		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-18045/2-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.1214		mg/Kg		121	70 - 130	3	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCSD 880-18045/2-A

Matrix: Solid

Analysis Batch: 17866

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18045

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.09969		mg/Kg		100	70 - 130	2	35
Ethylbenzene	0.100	0.09654		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2110		mg/Kg		106	70 - 130	3	35
o-Xylene	0.100	0.1131		mg/Kg		113	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

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

Lab Sample ID: MB 880-18190/1-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/31/22 15:06	02/02/22 11:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	01/31/22 15:06	02/02/22 11:37	1
o-Terphenyl	82		70 - 130	01/31/22 15:06	02/02/22 11:37	1

Lab Sample ID: LCS 880-18190/2-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	870.1		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1097		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	96		70 - 130

Lab Sample ID: LCSD 880-18190/3-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18190

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	842.4		mg/Kg		84	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1061		mg/Kg		106	70 - 130	3	20

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCSD 880-18190/3-A

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18190

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-10698-1 MS

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: SS12

Prep Type: Total/NA

Prep Batch: 18190

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	999	776.3		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	887.8		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	66	S1-	70 - 130						
o-Terphenyl	64	S1-	70 - 130						

Lab Sample ID: 880-10698-1 MSD

Matrix: Solid

Analysis Batch: 18339

Client Sample ID: SS12

Prep Type: Total/NA

Prep Batch: 18190

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	750.2		mg/Kg		75	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.5		mg/Kg		91	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	66	S1-	70 - 130								
o-Terphenyl	66	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18208/1-A

Matrix: Solid

Analysis Batch: 18287

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/03/22 00:17	1

Lab Sample ID: LCS 880-18208/2-A

Matrix: Solid

Analysis Batch: 18287

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	266.4		mg/Kg		107	90 - 110

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-18208/3-A

Matrix: Solid

Analysis Batch: 18287

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	270.3		mg/Kg		108	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

GC VOA

Analysis Batch: 17866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	8021B	18045
MB 880-17925/5-A	Method Blank	Total/NA	Solid	8021B	17925
MB 880-18045/5-A	Method Blank	Total/NA	Solid	8021B	18045
LCS 880-18045/1-A	Lab Control Sample	Total/NA	Solid	8021B	18045
LCSD 880-18045/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18045

Prep Batch: 17925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-17925/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 18045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	5035	
MB 880-18045/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18045/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18045/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 18428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	8015NM Prep	
MB 880-18190/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18190/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18190/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10698-1 MS	SS12	Total/NA	Solid	8015NM Prep	
880-10698-1 MSD	SS12	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	8015B NM	18190
MB 880-18190/1-A	Method Blank	Total/NA	Solid	8015B NM	18190
LCS 880-18190/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18190
LCSD 880-18190/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18190
880-10698-1 MS	SS12	Total/NA	Solid	8015B NM	18190
880-10698-1 MSD	SS12	Total/NA	Solid	8015B NM	18190

Analysis Batch: 18413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Soluble	Solid	DI Leach	
MB 880-18208/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18208/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

HPLC/IC (Continued)

Leach Batch: 18208 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-18208/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 18287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10698-1	SS12	Soluble	Solid	300.0	18208
MB 880-18208/1-A	Method Blank	Soluble	Solid	300.0	18208
LCS 880-18208/2-A	Lab Control Sample	Soluble	Solid	300.0	18208
LCSD 880-18208/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18208

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Client Sample ID: SS12

Lab Sample ID: 880-10698-1

Date Collected: 01/27/22 13:17

Matrix: Solid

Date Received: 01/28/22 11:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	18045	01/28/22 13:19	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	17866	01/29/22 18:47	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18428	02/03/22 13:55	KL	XEN MID
Total/NA	Analysis	8015 NM		1			18413	02/02/22 16:41	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18190	01/31/22 15:06	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18339	02/02/22 12:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18208	01/31/22 18:34	SC	XEN MID
Soluble	Analysis	300.0		1			18287	02/03/22 02:44	SC	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 Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

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

Eurofins Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10698-1
SDG: 32.2075, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10698-1	SS12	Solid	01/27/22 13:17	01/28/22 11:29	0.5

- 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 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0800
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6707

Atlanta GA (770) 449-8800

Work C



880-10698 Chain of Custody

Project Manager	Kalei Jennings		Bill to (if different)	Kalei Jennings	NK
Company Name	WSP USA Inc.		Company Name	WSP USA Inc.	1/28/22
Address	3300 N A St Bldg 1, Suite 222		XTO Energy		
City State ZIP	Midland, TX 79705		City State ZIP		
Phone	817-683-2503	Email	Kalei.Jennings@wsp.com		

Work Order Comments					
Program	USTPST ☐	PRP ☐	Brownfields ☐	RRQ ☐	Superfund ☐
State of Project					
Reporting Level	☒ Level 1P	☐ PST/USP	☐ TRRP	Level 1P	
Deliverables	EDD ☒	Adapt ☐	Other		

Project Name	PLU DEL B 23 SWD	Turn Around	☒
Project Number	31403236.022.9129	Routine	☒
Project Location	32-20TS, -103.85299	Rush	☐
Sampler's Name	Hadue, Green	Due Date	
PO #	CC 1667571001		
SAMPLE RECEIPT			
Temperature (°C)	29/30	Temp Blank	Yes ☐ No ☒
Received In tact	Yes ☒ No ☐	Thermometer ID	IPB
Cooler Custody Seals	Yes ☐ No ☒	Correction Factor	10
Sample Custody Seals	Yes ☐ No ☒	Total Containers	
Number of Containers/Preservative Code			
EX (8021)			
H (8015)			
LORIDE (300)			
ANALYSIS REQUEST			
Preservative Codes			
HNO3	HN		
H2SO4	H2		
HCL	HL		
None	NO		
NaOH	Na		
MeOH	Me		
Zn Acetate+	NaOH Zn		

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

[illegible]

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
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

purchase. Significant terms and conditions of this contract and reimbursement of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 circumstances beyond the control of Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, 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 		1-28-22 11:29 ¹²			
3					
5					

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10698-1
SDG Number: 32.2075, -103.85299**Login Number: 10698****List Number: 1****Creator: Rodriguez, Leticia****List Source: Eurofins Midland**

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").	True	



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10734-1

Laboratory Sample Delivery Group: 32.075,-103.85299

Client Project/Site: PLU Del B 23 SWD

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:
2/7/2022 8:17:58 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 Del B 23 SWD

Laboratory Job ID: 880-10734-1
SDG: 32.075,-103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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 Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Job ID: 880-10734-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-10734-1****Receipt**

The samples were received on 1/31/2022 9:59 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 4.3°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-10734-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: PH02 A (880-10734-2), (880-10734-A-1-F MS) and (880-10734-A-1-G 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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18216 and analytical batch 880-18524 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 Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Client Sample ID: PH02

Lab Sample ID: 880-10734-1

Date Collected: 01/28/22 12:20

Matrix: Solid

Date Received: 01/31/22 09:59

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/01/22 07:30	02/01/22 11:38	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/01/22 07:30	02/01/22 11:38	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/01/22 07:30	02/01/22 11:38	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/01/22 07:30	02/01/22 11:38	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/01/22 07:30	02/01/22 11:38	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/01/22 07:30	02/01/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	02/01/22 07:30	02/01/22 11:38	1
1,4-Difluorobenzene (Surr)	77		70 - 130	02/01/22 07:30	02/01/22 11:38	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/04/22 14:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/03/22 11:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 20:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 20:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	02/01/22 13:25	02/01/22 20:13	1
o-Terphenyl	84		70 - 130	02/01/22 13:25	02/01/22 20:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	397		50.0		mg/Kg			02/04/22 01:01	10

Client Sample ID: PH02 A

Lab Sample ID: 880-10734-2

Date Collected: 01/28/22 12:24

Matrix: Solid

Date Received: 01/31/22 09:59

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/01/22 07:30	02/01/22 11:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/01/22 07:30	02/01/22 11:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/01/22 07:30	02/01/22 11:58	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/01/22 07:30	02/01/22 11:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/01/22 07:30	02/01/22 11:58	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/01/22 07:30	02/01/22 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	02/01/22 07:30	02/01/22 11:58	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Client Sample ID: PH02 A

Lab Sample ID: 880-10734-2

Date Collected: 01/28/22 12:24

Matrix: Solid

Date Received: 01/31/22 09:59

Sample Depth: 2'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81		70 - 130	02/01/22 07:30	02/01/22 11:58	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/04/22 14:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 21:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 21:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 21:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130				02/01/22 13:25	02/01/22 21:19	1
o-Terphenyl	74		70 - 130				02/01/22 13:25	02/01/22 21:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.6		4.95		mg/Kg			02/04/22 10:38	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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)
880-10734-1	PH02	95	77
880-10734-1 MS	PH02	115	106
880-10734-1 MSD	PH02	152 S1+	113
880-10734-2	PH02 A	105	81
LCS 880-18173/1-A	Lab Control Sample	103	95
LCSD 880-18173/2-A	Lab Control Sample Dup	97	105
MB 880-18173/5-A	Method Blank	100	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)
880-10734-1	PH02	73	84
880-10734-1 MS	PH02	63 S1-	64 S1-
880-10734-1 MSD	PH02	64 S1-	65 S1-
880-10734-2	PH02 A	67 S1-	74
LCS 880-18288/2-A	Lab Control Sample	88	93
LCSD 880-18288/3-A	Lab Control Sample Dup	86	90
MB 880-18288/1-A	Method Blank	81	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18173/5-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18173

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/01/22 07:30	02/01/22 11:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/01/22 07:30	02/01/22 11:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/01/22 07:30	02/01/22 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	02/01/22 07:30	02/01/22 11:16	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/01/22 07:30	02/01/22 11:16	1

Lab Sample ID: LCS 880-18173/1-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18173

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08127		mg/Kg		81	70 - 130
Toluene	0.100	0.07937		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.07385		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1487		mg/Kg		74	70 - 130
o-Xylene	0.100	0.07610		mg/Kg		76	70 - 130

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

Lab Sample ID: LCSD 880-18173/2-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18173

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08507		mg/Kg		85	70 - 130	5	35
Toluene	0.100	0.07653		mg/Kg		77	70 - 130	4	35
Ethylbenzene	0.100	0.07328		mg/Kg		73	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1480		mg/Kg		74	70 - 130	0	35
o-Xylene	0.100	0.07261		mg/Kg		73	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-10734-1 MS

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 18173

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U	0.100	0.07517		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.100	0.07063		mg/Kg		70	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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

Lab Sample ID: 880-10734-1 MS

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 18173

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00202	U	0.100	0.07058		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1505		mg/Kg		75	70 - 130
o-Xylene	<0.00202	U	0.100	0.07254		mg/Kg		73	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-10734-1 MSD

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 18173

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0998	0.08802		mg/Kg		88	70 - 130	16	35
Toluene	<0.00202	U	0.0998	0.09875		mg/Kg		98	70 - 130	33	35
Ethylbenzene	<0.00202	U	0.0998	0.09415		mg/Kg		94	70 - 130	29	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1890		mg/Kg		95	70 - 130	23	35
o-Xylene	<0.00202	U	0.0998	0.1036		mg/Kg		104	70 - 130	35	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	152	S1+	70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

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

Lab Sample ID: MB 880-18288/1-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	02/01/22 13:25	02/01/22 19:10	1
o-Terphenyl	94		70 - 130	02/01/22 13:25	02/01/22 19:10	1

Lab Sample ID: LCS 880-18288/2-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	837.8		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1109		mg/Kg		111	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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

Lab Sample ID: LCS 880-18288/2-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18288

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-18288/3-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18288

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	859.7		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1079		mg/Kg		108	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-10734-1 MS

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 18288

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	999	812.0		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	934.4		mg/Kg		92	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	63	S1-	70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 880-10734-1 MSD

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: PH02

Prep Type: Total/NA

Prep Batch: 18288

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	777.8		mg/Kg		75	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	956.3		mg/Kg		94	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	65	S1-	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18216/1-A

Matrix: Solid

Analysis Batch: 18524

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/03/22 21:57	1

Lab Sample ID: LCS 880-18216/2-A

Matrix: Solid

Analysis Batch: 18524

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.1		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-18216/3-A

Matrix: Solid

Analysis Batch: 18524

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	258.9		mg/Kg		104	90 - 110	3	20

Lab Sample ID: 880-10733-A-32-C MS

Matrix: Solid

Analysis Batch: 18524

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	1110		252	1253	4	mg/Kg		55	90 - 110

Lab Sample ID: 880-10733-A-32-D MSD

Matrix: Solid

Analysis Batch: 18524

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	1110		252	1325	4	mg/Kg		84	90 - 110	6	20

Lab Sample ID: MB 880-18217/1-A

Matrix: Solid

Analysis Batch: 18554

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/04/22 10:15	1

Lab Sample ID: LCS 880-18217/2-A

Matrix: Solid

Analysis Batch: 18554

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	274.5		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-18217/3-A

Matrix: Solid

Analysis Batch: 18554

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	274.7		mg/Kg		110	90 - 110	0	20

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10734-2 MS

Client Sample ID: PH02 A

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 18554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	63.6		248	329.9		mg/Kg		108	90 - 110

Lab Sample ID: 880-10734-2 MSD

Client Sample ID: PH02 A

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 18554

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	63.6		248	322.3		mg/Kg		105	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

GC VOA

Prep Batch: 18173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	5035	
880-10734-2	PH02 A	Total/NA	Solid	5035	
MB 880-18173/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18173/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18173/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10734-1 MS	PH02	Total/NA	Solid	5035	
880-10734-1 MSD	PH02	Total/NA	Solid	5035	

Analysis Batch: 18229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	8021B	18173
880-10734-2	PH02 A	Total/NA	Solid	8021B	18173
MB 880-18173/5-A	Method Blank	Total/NA	Solid	8021B	18173
LCS 880-18173/1-A	Lab Control Sample	Total/NA	Solid	8021B	18173
LCSD 880-18173/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18173
880-10734-1 MS	PH02	Total/NA	Solid	8021B	18173
880-10734-1 MSD	PH02	Total/NA	Solid	8021B	18173

Analysis Batch: 18599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	Total BTEX	
880-10734-2	PH02 A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	8015B NM	18288
880-10734-2	PH02 A	Total/NA	Solid	8015B NM	18288
MB 880-18288/1-A	Method Blank	Total/NA	Solid	8015B NM	18288
LCS 880-18288/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18288
LCSD 880-18288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18288
880-10734-1 MS	PH02	Total/NA	Solid	8015B NM	18288
880-10734-1 MSD	PH02	Total/NA	Solid	8015B NM	18288

Prep Batch: 18288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	8015NM Prep	
880-10734-2	PH02 A	Total/NA	Solid	8015NM Prep	
MB 880-18288/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18288/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10734-1 MS	PH02	Total/NA	Solid	8015NM Prep	
880-10734-1 MSD	PH02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Total/NA	Solid	8015 NM	
880-10734-2	PH02 A	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

HPLC/IC

Leach Batch: 18216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Soluble	Solid	DI Leach	
MB 880-18216/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18216/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18216/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10733-A-32-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10733-A-32-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 18217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-2	PH02 A	Soluble	Solid	DI Leach	
MB 880-18217/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18217/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18217/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10734-2 MS	PH02 A	Soluble	Solid	DI Leach	
880-10734-2 MSD	PH02 A	Soluble	Solid	DI Leach	

Analysis Batch: 18524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-1	PH02	Soluble	Solid	300.0	18216
MB 880-18216/1-A	Method Blank	Soluble	Solid	300.0	18216
LCS 880-18216/2-A	Lab Control Sample	Soluble	Solid	300.0	18216
LCSD 880-18216/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18216
880-10733-A-32-C MS	Matrix Spike	Soluble	Solid	300.0	18216
880-10733-A-32-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18216

Analysis Batch: 18554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10734-2	PH02 A	Soluble	Solid	300.0	18217
MB 880-18217/1-A	Method Blank	Soluble	Solid	300.0	18217
LCS 880-18217/2-A	Lab Control Sample	Soluble	Solid	300.0	18217
LCSD 880-18217/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18217
880-10734-2 MS	PH02 A	Soluble	Solid	300.0	18217
880-10734-2 MSD	PH02 A	Soluble	Solid	300.0	18217

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Client Sample ID: PH02

Lab Sample ID: 880-10734-1

Date Collected: 01/28/22 12:20

Matrix: Solid

Date Received: 01/31/22 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18173	02/01/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18229	02/01/22 11:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18599	02/04/22 14:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18288	02/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 20:13	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18216	01/31/22 18:57	SC	XEN MID
Soluble	Analysis	300.0		10			18524	02/04/22 01:01	CH	XEN MID

Client Sample ID: PH02 A

Lab Sample ID: 880-10734-2

Date Collected: 01/28/22 12:24

Matrix: Solid

Date Received: 01/31/22 09:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18173	02/01/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18229	02/01/22 11:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18599	02/04/22 14:16	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18288	02/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 21:19	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 10:38	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 Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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 Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

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 Del B 23 SWD

Job ID: 880-10734-1
SDG: 32.075,-103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10734-1	PH02	Solid	01/28/22 12:20	01/31/22 09:59	1'
880-10734-2	PH02 A	Solid	01/28/22 12:24	01/31/22 09:59	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, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

W



880-10734 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 N. A St. Bldg 1, Suite 224	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503	Email:	Kalei.Jennings@wsp.com

Work Order Comments	
Program: UST/PS	PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting Level:	Level I ☒ Level II ☐ PST/US ☐ TRR ☐ Level IV ☐
Deliverables: EDD	ADAPT ☐ Other: ☐

Project Name:	PLU Del B 23 SUD	Turn Around	
Project Number:	31403236.022.0129	Routine:	☒
Project Location:	32.2075 -103.85299	Rush:	☐
Sampler's Name:	Hadie Green	Due Date:	5 day
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Temperature (°C):	47.3	Thermometer ID		
Received Intact:	Yes ☒ No ☐	Correction Factor:	1.00	
Cooler Custody Seals:	Yes ☐ No ☒	Total Containers:	D.1	
Sample Custody Seals:	Yes ☐ No ☒			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST														Preservative Codes	Sample Comments
PH02	SL	1-26-24	12:20	1'	BTEX (8021)															HN03: HN	
PH02A	SL	1-26-24	12:24	2'	TPH (8015)															H2SO4: H2	
					CHLORIDES (300)															HCL: HL	
																				None: NO	
																				NaOH: Na	
																				MeOH: Me	
																				Zn Acetate+ NaOH: Zn	
																				TAT starts the day received by the lab, if received by 4:30pm	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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	1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Hadie Green	Adrian Baker	1/31/24			
		957			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10734-1
SDG Number: 32.075,-103.85299

Login Number: 10734

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10735-1

Laboratory Sample Delivery Group: 32.3075,-103.85299

Client Project/Site: PLU Del B 23 SWD

Revision: 1

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:

2/11/2022 9:32:27 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 Del B 23 SWD

Laboratory Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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 Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Job ID: 880-10735-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-10735-1

REVISION

The report being provided is a revision of the original report sent on 2/7/2022. The report (revision 1) is being revised due to Per client email, correcting sample depth for FS06 from 33' to 3'.

Report revision history

Receipt

The samples were received on 1/31/2022 10:01 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 4.3°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS08 (880-10735-5), (CCV 880-18101/20) and (CCV 880-18101/33). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: (880-10734-A-1-F MS) and (880-10734-A-1-G 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 Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS03

Lab Sample ID: 880-10735-1

Date Collected: 01/28/22 10:00

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 16:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 16:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 16:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/31/22 10:15	01/31/22 16:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 16:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/31/22 10:15	01/31/22 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	01/31/22 10:15	01/31/22 16:28	1
1,4-Difluorobenzene (Surr)	92		70 - 130	01/31/22 10:15	01/31/22 16:28	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/04/22 14:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 22:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 22:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	02/02/22 08:25	02/02/22 22:28	1
o-Terphenyl	87		70 - 130	02/02/22 08:25	02/02/22 22:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		5.05		mg/Kg			02/04/22 11:01	1

Client Sample ID: FS05

Lab Sample ID: 880-10735-2

Date Collected: 01/28/22 10:07

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/31/22 10:15	01/31/22 16:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/31/22 10:15	01/31/22 16:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/31/22 10:15	01/31/22 16:49	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/31/22 10:15	01/31/22 16:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/31/22 10:15	01/31/22 16:49	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/31/22 10:15	01/31/22 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	01/31/22 10:15	01/31/22 16:49	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS05

Lab Sample ID: 880-10735-2

Date Collected: 01/28/22 10:07

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130	01/31/22 10:15	01/31/22 16:49	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 23:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 23:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 23:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				02/02/22 08:25	02/02/22 23:31	1
o-Terphenyl	85		70 - 130				02/02/22 08:25	02/02/22 23:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.5		4.98		mg/Kg			02/04/22 11:08	1

Client Sample ID: FS06

Lab Sample ID: 880-10735-3

Date Collected: 01/28/22 10:09

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:09	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/31/22 10:15	01/31/22 17:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:09	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/31/22 10:15	01/31/22 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	01/31/22 10:15	01/31/22 17:09	1
1,4-Difluorobenzene (Surr)	91		70 - 130	01/31/22 10:15	01/31/22 17:09	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/03/22 11:27	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS06

Lab Sample ID: 880-10735-3

Date Collected: 01/28/22 10:09

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 23:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 23:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/02/22 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				02/02/22 08:25	02/02/22 23:52	1
o-Terphenyl	86		70 - 130				02/02/22 08:25	02/02/22 23:52	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.8		4.97		mg/Kg			02/04/22 11:16	1

Client Sample ID: FS07

Lab Sample ID: 880-10735-4

Date Collected: 01/28/22 10:11

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/31/22 10:15	01/31/22 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				01/31/22 10:15	01/31/22 17:29	1
1,4-Difluorobenzene (Surr)	95		70 - 130				01/31/22 10:15	01/31/22 17:29	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				02/02/22 08:25	02/03/22 00:12	1
o-Terphenyl	86		70 - 130				02/02/22 08:25	02/03/22 00:12	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS07

Lab Sample ID: 880-10735-4

Date Collected: 01/28/22 10:11

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		4.95		mg/Kg			02/04/22 11:24	1

Client Sample ID: FS08

Lab Sample ID: 880-10735-5

Date Collected: 01/28/22 10:18

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
o-Xylene	0.00297		0.00199		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/31/22 10:15	01/31/22 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130				01/31/22 10:15	01/31/22 17:50	1
1,4-Difluorobenzene (Surr)	113		70 - 130				01/31/22 10:15	01/31/22 17:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 00:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				02/02/22 08:25	02/03/22 00:33	1
o-Terphenyl	86		70 - 130				02/02/22 08:25	02/03/22 00:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7		4.95		mg/Kg			02/04/22 11:46	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS09

Lab Sample ID: 880-10735-6

Date Collected: 01/28/22 10:19

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/31/22 10:15	01/31/22 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/31/22 10:15	01/31/22 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	01/31/22 10:15	01/31/22 18:10	1
1,4-Difluorobenzene (Surr)	120		70 - 130	01/31/22 10:15	01/31/22 18:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/03/22 00:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/03/22 00:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/02/22 08:25	02/03/22 00:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	02/02/22 08:25	02/03/22 00:53	1
o-Terphenyl	90		70 - 130	02/02/22 08:25	02/03/22 00:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.4		5.05		mg/Kg			02/04/22 12:42	1

Client Sample ID: FS11

Lab Sample ID: 880-10735-7

Date Collected: 01/28/22 12:51

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/31/22 10:15	01/31/22 18:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 18:31	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/31/22 10:15	01/31/22 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	01/31/22 10:15	01/31/22 18:31	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS11

Lab Sample ID: 880-10735-7

Date Collected: 01/28/22 12:51

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	01/31/22 10:15	01/31/22 18:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 01:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 01:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/03/22 01:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				02/02/22 08:25	02/03/22 01:14	1
o-Terphenyl	86		70 - 130				02/02/22 08:25	02/03/22 01:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			02/04/22 12:49	1

Client Sample ID: FS12

Lab Sample ID: 880-10735-8

Date Collected: 01/28/22 12:54

Matrix: Solid

Date Received: 01/31/22 10:01

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/31/22 10:15	01/31/22 18:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/31/22 10:15	01/31/22 18:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/31/22 10:15	01/31/22 18:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/31/22 10:15	01/31/22 18:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/31/22 10:15	01/31/22 18:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/31/22 10:15	01/31/22 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/31/22 10:15	01/31/22 18:51	1
1,4-Difluorobenzene (Surr)	72		70 - 130	01/31/22 10:15	01/31/22 18:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/03/22 11:27	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS12

Date Collected: 01/28/22 12:54

Date Received: 01/31/22 10:01

Sample Depth: 3

Lab Sample ID: 880-10735-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 21:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 21:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/01/22 13:25	02/01/22 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130				02/01/22 13:25	02/01/22 21:40	1
o-Terphenyl	82		70 - 130				02/01/22 13:25	02/01/22 21:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		4.95		mg/Kg			02/04/22 12:57	1

Client Sample ID: FS17

Date Collected: 01/28/22 13:03

Date Received: 01/31/22 10:01

Sample Depth: 3

Lab Sample ID: 880-10735-9

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/31/22 10:15	01/31/22 19:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				01/31/22 10:15	01/31/22 19:11	1
1,4-Difluorobenzene (Surr)	83		70 - 130				01/31/22 10:15	01/31/22 19:11	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			02/01/22 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/03/22 11:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 22:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 22:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130				02/01/22 13:25	02/01/22 22:02	1
o-Terphenyl	83		70 - 130				02/01/22 13:25	02/01/22 22:02	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS17
Date Collected: 01/28/22 13:03
Date Received: 01/31/22 10:01
Sample Depth: 3

Lab Sample ID: 880-10735-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.6		4.97		mg/Kg			02/04/22 13:04	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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)
880-10694-A-51-B MS	Matrix Spike	129	112
880-10694-A-51-C MSD	Matrix Spike Duplicate	121	98
880-10735-1	FS03	81	92
880-10735-2	FS05	114	112
880-10735-3	FS06	122	91
880-10735-4	FS07	127	95
880-10735-5	FS08	145 S1+	113
880-10735-6	FS09	90	120
880-10735-7	FS11	129	106
880-10735-8	FS12	126	72
880-10735-9	FS17	118	83
LCS 880-18099/1-A	Lab Control Sample	119	101
LCSD 880-18099/2-A	Lab Control Sample Dup	120	98
MB 880-18099/5-A	Method Blank	128	106
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)
880-10734-A-1-F MS	Matrix Spike	63 S1-	64 S1-
880-10734-A-1-G MSD	Matrix Spike Duplicate	64 S1-	65 S1-
880-10735-1	FS03	89	87
880-10735-1 MS	FS03	82	79
880-10735-1 MSD	FS03	78	81
880-10735-2	FS05	86	85
880-10735-3	FS06	89	86
880-10735-4	FS07	86	86
880-10735-5	FS08	90	86
880-10735-6	FS09	94	90
880-10735-7	FS11	87	86
880-10735-8	FS12	72	82
880-10735-9	FS17	72	83
LCS 880-18288/2-A	Lab Control Sample	88	93
LCSD 880-18288/3-A	Lab Control Sample Dup	86	90
MB 880-18288/1-A	Method Blank	81	94
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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 880-18336/2-A	Lab Control Sample	78	82
LCSD 880-18336/3-A	Lab Control Sample Dup	78	82
MB 880-18336/1-A	Method Blank	85	86
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18099/5-A

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/31/22 07:27	01/31/22 10:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/31/22 07:27	01/31/22 10:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/31/22 07:27	01/31/22 10:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/31/22 07:27	01/31/22 10:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/31/22 07:27	01/31/22 10:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/31/22 07:27	01/31/22 10:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	01/31/22 07:27	01/31/22 10:45	1
1,4-Difluorobenzene (Surr)	106		70 - 130	01/31/22 07:27	01/31/22 10:45	1

Lab Sample ID: LCS 880-18099/1-A

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1021		mg/Kg		102	70 - 130
Toluene	0.100	0.1028		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1043		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2093		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-18099/2-A

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.09158		mg/Kg		92	70 - 130	11	35
Toluene	0.100	0.09843		mg/Kg		98	70 - 130	4	35
Ethylbenzene	0.100	0.1031		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1937		mg/Kg		97	70 - 130	8	35
o-Xylene	0.100	0.09376		mg/Kg		94	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-10694-A-51-B MS

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.0992	0.1027		mg/Kg		104	70 - 130
Toluene	<0.00199	U	0.0992	0.1031		mg/Kg		104	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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

Lab Sample ID: 880-10694-A-51-B MS

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.0992	0.1033		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1980		mg/Kg		100	70 - 130
o-Xylene	<0.00199	U	0.0992	0.1037		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	129		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-10694-A-51-C MSD

Matrix: Solid

Analysis Batch: 18101

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00199	U	0.0992	0.09491		mg/Kg		96	70 - 130	8	35
Toluene	<0.00199	U	0.0992	0.09611		mg/Kg		97	70 - 130	7	35
Ethylbenzene	<0.00199	U	0.0992	0.1006		mg/Kg		101	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1893		mg/Kg		95	70 - 130	4	35
o-Xylene	<0.00199	U	0.0992	0.09620		mg/Kg		97	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-18288/1-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/01/22 13:25	02/01/22 19:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	02/01/22 13:25	02/01/22 19:10	1
o-Terphenyl	94		70 - 130	02/01/22 13:25	02/01/22 19:10	1

Lab Sample ID: LCS 880-18288/2-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	837.8		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1109		mg/Kg		111	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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

Lab Sample ID: LCS 880-18288/2-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18288

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-18288/3-A

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18288

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	859.7		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1079		mg/Kg		108	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 880-10734-A-1-F MS

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18288

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	999	812.0		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	934.4		mg/Kg		92	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	63	S1-	70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 880-10734-A-1-G MSD

Matrix: Solid

Analysis Batch: 18225

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18288

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	777.8		mg/Kg		75	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	956.3		mg/Kg		94	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	65	S1-	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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

Lab Sample ID: MB 880-18336/1-A

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18336

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 21:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 21:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/02/22 08:25	02/02/22 21:25	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				02/02/22 08:25	02/02/22 21:25	1
o-Terphenyl	86		70 - 130				02/02/22 08:25	02/02/22 21:25	1

Lab Sample ID: LCS 880-18336/2-A

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	837.3		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	78		70 - 130				
o-Terphenyl	82		70 - 130				

Lab Sample ID: LCSD 880-18336/3-A

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18336

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	787.0		mg/Kg		79	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	78		70 - 130						
o-Terphenyl	82		70 - 130						

Lab Sample ID: 880-10735-1 MS

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: FS03

Prep Type: Total/NA

Prep Batch: 18336

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	999	822.9		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	986.8		mg/Kg		99	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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

Lab Sample ID: 880-10735-1 MS

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: FS03

Prep Type: Total/NA

Prep Batch: 18336

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 880-10735-1 MSD

Matrix: Solid

Analysis Batch: 18343

Client Sample ID: FS03

Prep Type: Total/NA

Prep Batch: 18336

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	819.5		mg/Kg		82	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1004		mg/Kg		101	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	81		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18217/1-A

Matrix: Solid

Analysis Batch: 18554

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/04/22 10:15	1

Lab Sample ID: LCS 880-18217/2-A

Matrix: Solid

Analysis Batch: 18554

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	274.5		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-18217/3-A

Matrix: Solid

Analysis Batch: 18554

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	274.7		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-10734-A-2-C MS

Matrix: Solid

Analysis Batch: 18554

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	63.6		248	329.9		mg/Kg		108	90 - 110

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-10734-A-2-D MSD						Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid						Prep Type: Soluble						
Analysis Batch: 18554												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	63.6		248	322.3		mg/Kg		105	90 - 110	2	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

GC VOA

Prep Batch: 18099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	5035	
880-10735-2	FS05	Total/NA	Solid	5035	
880-10735-3	FS06	Total/NA	Solid	5035	
880-10735-4	FS07	Total/NA	Solid	5035	
880-10735-5	FS08	Total/NA	Solid	5035	
880-10735-6	FS09	Total/NA	Solid	5035	
880-10735-7	FS11	Total/NA	Solid	5035	
880-10735-8	FS12	Total/NA	Solid	5035	
880-10735-9	FS17	Total/NA	Solid	5035	
MB 880-18099/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18099/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18099/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10694-A-51-B MS	Matrix Spike	Total/NA	Solid	5035	
880-10694-A-51-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	8021B	18099
880-10735-2	FS05	Total/NA	Solid	8021B	18099
880-10735-3	FS06	Total/NA	Solid	8021B	18099
880-10735-4	FS07	Total/NA	Solid	8021B	18099
880-10735-5	FS08	Total/NA	Solid	8021B	18099
880-10735-6	FS09	Total/NA	Solid	8021B	18099
880-10735-7	FS11	Total/NA	Solid	8021B	18099
880-10735-8	FS12	Total/NA	Solid	8021B	18099
880-10735-9	FS17	Total/NA	Solid	8021B	18099
MB 880-18099/5-A	Method Blank	Total/NA	Solid	8021B	18099
LCS 880-18099/1-A	Lab Control Sample	Total/NA	Solid	8021B	18099
LCSD 880-18099/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18099
880-10694-A-51-B MS	Matrix Spike	Total/NA	Solid	8021B	18099
880-10694-A-51-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18099

Analysis Batch: 18282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	Total BTEX	
880-10735-2	FS05	Total/NA	Solid	Total BTEX	
880-10735-3	FS06	Total/NA	Solid	Total BTEX	
880-10735-4	FS07	Total/NA	Solid	Total BTEX	
880-10735-5	FS08	Total/NA	Solid	Total BTEX	
880-10735-6	FS09	Total/NA	Solid	Total BTEX	
880-10735-7	FS11	Total/NA	Solid	Total BTEX	
880-10735-8	FS12	Total/NA	Solid	Total BTEX	
880-10735-9	FS17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 18225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-8	FS12	Total/NA	Solid	8015B NM	18288
880-10735-9	FS17	Total/NA	Solid	8015B NM	18288
MB 880-18288/1-A	Method Blank	Total/NA	Solid	8015B NM	18288

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

GC Semi VOA (Continued)

Analysis Batch: 18225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-18288/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18288
LCSD 880-18288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18288
880-10734-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	18288
880-10734-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18288

Prep Batch: 18288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-8	FS12	Total/NA	Solid	8015NM Prep	
880-10735-9	FS17	Total/NA	Solid	8015NM Prep	
MB 880-18288/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18288/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18288/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10734-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10734-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 18336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	8015NM Prep	
880-10735-2	FS05	Total/NA	Solid	8015NM Prep	
880-10735-3	FS06	Total/NA	Solid	8015NM Prep	
880-10735-4	FS07	Total/NA	Solid	8015NM Prep	
880-10735-5	FS08	Total/NA	Solid	8015NM Prep	
880-10735-6	FS09	Total/NA	Solid	8015NM Prep	
880-10735-7	FS11	Total/NA	Solid	8015NM Prep	
MB 880-18336/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18336/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10735-1 MS	FS03	Total/NA	Solid	8015NM Prep	
880-10735-1 MSD	FS03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	8015B NM	18336
880-10735-2	FS05	Total/NA	Solid	8015B NM	18336
880-10735-3	FS06	Total/NA	Solid	8015B NM	18336
880-10735-4	FS07	Total/NA	Solid	8015B NM	18336
880-10735-5	FS08	Total/NA	Solid	8015B NM	18336
880-10735-6	FS09	Total/NA	Solid	8015B NM	18336
880-10735-7	FS11	Total/NA	Solid	8015B NM	18336
MB 880-18336/1-A	Method Blank	Total/NA	Solid	8015B NM	18336
LCS 880-18336/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18336
LCSD 880-18336/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18336
880-10735-1 MS	FS03	Total/NA	Solid	8015B NM	18336
880-10735-1 MSD	FS03	Total/NA	Solid	8015B NM	18336

Analysis Batch: 18476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-2	FS05	Total/NA	Solid	8015 NM	
880-10735-3	FS06	Total/NA	Solid	8015 NM	
880-10735-4	FS07	Total/NA	Solid	8015 NM	
880-10735-5	FS08	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

GC Semi VOA (Continued)

Analysis Batch: 18476 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-6	FS09	Total/NA	Solid	8015 NM	
880-10735-7	FS11	Total/NA	Solid	8015 NM	
880-10735-8	FS12	Total/NA	Solid	8015 NM	
880-10735-9	FS17	Total/NA	Solid	8015 NM	

Analysis Batch: 18606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 18217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Soluble	Solid	DI Leach	
880-10735-2	FS05	Soluble	Solid	DI Leach	
880-10735-3	FS06	Soluble	Solid	DI Leach	
880-10735-4	FS07	Soluble	Solid	DI Leach	
880-10735-5	FS08	Soluble	Solid	DI Leach	
880-10735-6	FS09	Soluble	Solid	DI Leach	
880-10735-7	FS11	Soluble	Solid	DI Leach	
880-10735-8	FS12	Soluble	Solid	DI Leach	
880-10735-9	FS17	Soluble	Solid	DI Leach	
MB 880-18217/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18217/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18217/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10734-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10734-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10735-1	FS03	Soluble	Solid	300.0	18217
880-10735-2	FS05	Soluble	Solid	300.0	18217
880-10735-3	FS06	Soluble	Solid	300.0	18217
880-10735-4	FS07	Soluble	Solid	300.0	18217
880-10735-5	FS08	Soluble	Solid	300.0	18217
880-10735-6	FS09	Soluble	Solid	300.0	18217
880-10735-7	FS11	Soluble	Solid	300.0	18217
880-10735-8	FS12	Soluble	Solid	300.0	18217
880-10735-9	FS17	Soluble	Solid	300.0	18217
MB 880-18217/1-A	Method Blank	Soluble	Solid	300.0	18217
LCS 880-18217/2-A	Lab Control Sample	Soluble	Solid	300.0	18217
LCSD 880-18217/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18217
880-10734-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	18217
880-10734-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18217

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS03

Lab Sample ID: 880-10735-1

Date Collected: 01/28/22 10:00

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 16:28	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18606	02/04/22 14:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/02/22 22:28	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 11:01	CH	XEN MID

Client Sample ID: FS05

Lab Sample ID: 880-10735-2

Date Collected: 01/28/22 10:07

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 16:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/02/22 23:31	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 11:08	CH	XEN MID

Client Sample ID: FS06

Lab Sample ID: 880-10735-3

Date Collected: 01/28/22 10:09

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 17:09	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/02/22 23:52	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 11:16	CH	XEN MID

Client Sample ID: FS07

Lab Sample ID: 880-10735-4

Date Collected: 01/28/22 10:11

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 17:29	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS07

Lab Sample ID: 880-10735-4

Date Collected: 01/28/22 10:11

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/03/22 00:12	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 11:24	CH	XEN MID

Client Sample ID: FS08

Lab Sample ID: 880-10735-5

Date Collected: 01/28/22 10:18

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 17:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/03/22 00:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 11:46	CH	XEN MID

Client Sample ID: FS09

Lab Sample ID: 880-10735-6

Date Collected: 01/28/22 10:19

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 18:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/03/22 00:53	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 12:42	CH	XEN MID

Client Sample ID: FS11

Lab Sample ID: 880-10735-7

Date Collected: 01/28/22 12:51

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 18:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18336	02/02/22 08:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18343	02/03/22 01:14	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Client Sample ID: FS11

Lab Sample ID: 880-10735-7

Date Collected: 01/28/22 12:51

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 12:49	CH	XEN MID

Client Sample ID: FS12

Lab Sample ID: 880-10735-8

Date Collected: 01/28/22 12:54

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 18:51	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18288	02/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 21:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 12:57	CH	XEN MID

Client Sample ID: FS17

Lab Sample ID: 880-10735-9

Date Collected: 01/28/22 13:03

Matrix: Solid

Date Received: 01/31/22 10:01

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18099	01/31/22 10:15	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18101	01/31/22 19:11	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18282	02/01/22 12:17	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18476	02/03/22 11:27	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18288	02/01/22 13:25	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18225	02/01/22 22:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18217	01/31/22 19:00	SC	XEN MID
Soluble	Analysis	300.0		1			18554	02/04/22 13:04	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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 Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

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

Eurofins Midland

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10735-1
SDG: 32.3075,-103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10735-1	FS03	Solid	01/28/22 10:00	01/31/22 10:01	3
880-10735-2	FS05	Solid	01/28/22 10:07	01/31/22 10:01	1
880-10735-3	FS06	Solid	01/28/22 10:09	01/31/22 10:01	3
880-10735-4	FS07	Solid	01/28/22 10:11	01/31/22 10:01	3
880-10735-5	FS08	Solid	01/28/22 10:18	01/31/22 10:01	1
880-10735-6	FS09	Solid	01/28/22 10:19	01/31/22 10:01	1
880-10735-7	FS11	Solid	01/28/22 12:51	01/31/22 10:01	3
880-10735-8	FS12	Solid	01/28/22 12:54	01/31/22 10:01	3
880-10735-9	FS17	Solid	01/28/22 13:03	01/31/22 10:01	3



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800



880-10735 Chain of Custody

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	WSP USA	Company Name:	WSP USA
Address:	3300 North A St, Bldg 1, Unit 222	Address:	XTO Energy
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Level 5 ☐	Deliverables: ☒ EDD ☐ ADAPT ☐ Other:

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Project Name:	PLU D01 B 23 SWD	Turn Around	
Project Number:	31403236.022.0129	Routine:	☒
Project Location:	32.2075, -103.85299	Rush:	☐
Sample Name:	Hadlie Green	Due Date:	5 DAY
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒
Temperature (°C):	4.3/4.3	Wet Ice:	Yes ☐ No ☒
Received In tact:	Yes ☒ No ☐	Thermometer ID:	128
Cooler Custody Seals:	Yes ☒ No ☐	Correction Factor:	0.1
Sample Custody Seals:	Yes ☒ No ☐	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST																Preservative Codes	Sample Comments
FS03	SL	1-28-22	10:00	3	X	BTEX (EPA 0-8021)																	
FS05			10:01	1	X	TPH (EPA 8015)																	
FS06			10:09	3	X	CHLORIDES (EPA 300.6)																	
FS07			10:11	3																			
FS08			10:14	1																			
FS09			10:19	1																			
ES11			12:51	3																			
ES12			12:54	3																			
ES17			13:03	3																			

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 1631 / 245.1 / 7470 / 7471 - Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 X [Signature]	[Signature]	13122			
3		957			
5					

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10735-1

SDG Number: 32.3075,-103.85299

Login Number: 10735**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Midland**

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10780-1

Laboratory Sample Delivery Group: 32.2075, -103.85799
Client Project/Site: PLU Del B 23 SWD

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:
2/9/2022 2:52:29 PM

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 Del B 23 SWD

Laboratory Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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.
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 Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Job ID: 880-10780-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-10780-1****Receipt**

The sample was received on 2/1/2022 9:23 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

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 Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Client Sample ID: SS11

Lab Sample ID: 880-10780-1

Date Collected: 01/31/22 14:57

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 10:49	02/02/22 00:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/02/22 00:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/02/22 00:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 10:49	02/02/22 00:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/02/22 00:14	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 10:49	02/02/22 00:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	02/01/22 10:49	02/02/22 00:14	1
1,4-Difluorobenzene (Surr)	111		70 - 130	02/01/22 10:49	02/02/22 00:14	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 16:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 17:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		02/02/22 14:28	02/05/22 17:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	02/02/22 14:28	02/05/22 17:33	1
o-Terphenyl	112		70 - 130	02/02/22 14:28	02/05/22 17:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.7		5.00	mg/Kg			02/07/22 20:07	1

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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)
880-10780-1	SS11	116	111
880-10783-A-1-A MS	Matrix Spike	123	80
880-10783-A-1-B MSD	Matrix Spike Duplicate	120	105
LCS 880-18257/1-A	Lab Control Sample	98	93
LCSD 880-18257/2-A	Lab Control Sample Dup	108	100
MB 880-18173/5-A	Method Blank	100	100
MB 880-18257/5-A	Method Blank	105	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)
880-10780-1	SS11	110	112
880-10891-A-21-D MS	Matrix Spike	72	75
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86
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 880-18405/2-A	Lab Control Sample	104	109
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103
MB 880-18405/1-A	Method Blank	96	97
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18173/5-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18173

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 07:30	02/01/22 11:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 07:30	02/01/22 11:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 07:30	02/01/22 11:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 07:30	02/01/22 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	02/01/22 07:30	02/01/22 11:16	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/01/22 07:30	02/01/22 11:16	1

Lab Sample ID: MB 880-18257/5-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18257

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/01/22 22:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/01/22 22:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/01/22 22:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 10:49	02/01/22 22:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 10:49	02/01/22 22:10	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 10:49	02/01/22 22:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	02/01/22 10:49	02/01/22 22:10	1
1,4-Difluorobenzene (Surr)	92		70 - 130	02/01/22 10:49	02/01/22 22:10	1

Lab Sample ID: LCS 880-18257/1-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08051		mg/Kg		81	70 - 130
Toluene	0.100	0.07929		mg/Kg		79	70 - 130
Ethylbenzene	0.100	0.07934		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	0.200	0.1630		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08031		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-18257/2-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07638		mg/Kg		76	70 - 130	5	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: LCSD 880-18257/2-A

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.07517		mg/Kg		75	70 - 130	5	35
Ethylbenzene	0.100	0.07382		mg/Kg		74	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1590		mg/Kg		80	70 - 130	2	35
o-Xylene	0.100	0.08121		mg/Kg		81	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-10783-A-1-A MS

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18257

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00198	U F1 F2	0.0998	0.03462	F1	mg/Kg		35	70 - 130
Toluene	<0.00198	U F1 F2	0.0998	0.03843	F1	mg/Kg		39	70 - 130
Ethylbenzene	<0.00198	U F1 F2	0.0998	0.04297	F1	mg/Kg		43	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.200	0.08946	F1	mg/Kg		45	70 - 130
o-Xylene	<0.00198	U F1 F2	0.0998	0.05000	F1	mg/Kg		50	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: 880-10783-A-1-B MSD

Matrix: Solid

Analysis Batch: 18229

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18257

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00198	U F1 F2	0.0996	0.05950	F1 F2	mg/Kg		60	70 - 130	53	35
Toluene	<0.00198	U F1 F2	0.0996	0.06456	F1 F2	mg/Kg		65	70 - 130	51	35
Ethylbenzene	<0.00198	U F1 F2	0.0996	0.06675	F1 F2	mg/Kg		67	70 - 130	43	35
m-Xylene & p-Xylene	<0.00397	U F1 F2	0.199	0.1415	F2	mg/Kg		71	70 - 130	45	35
o-Xylene	<0.00198	U F1 F2	0.0996	0.07243	F2	mg/Kg		73	70 - 130	37	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18405

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18405

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			02/02/22 14:28	02/05/22 11:54	1
o-Terphenyl	97		70 - 130			02/02/22 14:28	02/05/22 11:54	1

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1218		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1331	*+	mg/Kg		133	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-18405/3-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18405

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1098		mg/Kg		110	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	1165		mg/Kg		117	70 - 130	13	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	97		70 - 130						
o-Terphenyl	103		70 - 130						

Lab Sample ID: 880-10891-A-21-D MS

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	996.6		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1 F2	1000	1008		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	72		70 - 130						
o-Terphenyl	75		70 - 130						

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: 880-10891-A-21-E MSD

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18405

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	<50.0	U	998	1148		mg/Kg		112	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1 F2	998	1328	F1 F2	mg/Kg		133	70 - 130	27	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	86		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18367/1-A

Matrix: Solid

Analysis Batch: 18608

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			02/07/22 18:14	1

Lab Sample ID: LCS 880-18367/2-A

Matrix: Solid

Analysis Batch: 18608

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-18367/3-A

Matrix: Solid

Analysis Batch: 18608

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	252.3		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-10781-A-2-E MS

Matrix: Solid

Analysis Batch: 18608

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	320	F1	250	598.9	F1	mg/Kg		112	90 - 110

Lab Sample ID: 880-10781-A-2-F MSD

Matrix: Solid

Analysis Batch: 18608

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	320	F1	250	593.3		mg/Kg		109	90 - 110	1	20

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

GC VOA

Prep Batch: 18173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18173/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 18229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	8021B	18257
MB 880-18173/5-A	Method Blank	Total/NA	Solid	8021B	18173
MB 880-18257/5-A	Method Blank	Total/NA	Solid	8021B	18257
LCS 880-18257/1-A	Lab Control Sample	Total/NA	Solid	8021B	18257
LCSD 880-18257/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18257
880-10783-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	18257
880-10783-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18257

Prep Batch: 18257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	5035	
MB 880-18257/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18257/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18257/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10783-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-10783-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 18770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	8015B NM	18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

Analysis Batch: 18777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

HPLC/IC

Leach Batch: 18367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Soluble	Solid	DI Leach	
MB 880-18367/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18367/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18367/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10781-A-2-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10781-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 18608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10780-1	SS11	Soluble	Solid	300.0	18367
MB 880-18367/1-A	Method Blank	Soluble	Solid	300.0	18367
LCS 880-18367/2-A	Lab Control Sample	Soluble	Solid	300.0	18367
LCSD 880-18367/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18367
880-10781-A-2-E MS	Matrix Spike	Soluble	Solid	300.0	18367
880-10781-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18367

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Client Sample ID: SS11
Date Collected: 01/31/22 14:57
Date Received: 02/01/22 09:23

Lab Sample ID: 880-10780-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18257	02/01/22 10:49	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18229	02/02/22 00:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18620	02/05/22 17:33	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 20:07	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 Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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 Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

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 Del B 23 SWD

Job ID: 880-10780-1
SDG: 32.2075, -103.85799

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10780-1	SS11	Solid	01/31/22 14:57	02/01/22 09:23	0.5

- 1
- 2
- 3
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- 14

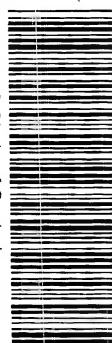


Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300, San Antonio, TX (210) 506-3334
Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 382-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6707
Atlanta, GA (770) 449-8800

Atlanta, GA (770) 449-8800

W



880-10780 Chain of Custody

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10780-1
SDG Number: 32.2075, -103.85799

Login Number: 10780

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10781-1

Laboratory Sample Delivery Group: 32.2075, -103.85299
Client Project/Site: PLU Del B 23 SWD

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:
2/9/2022 2:53:47 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 Del B 23 SWD

Laboratory Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
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.
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)

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Job ID: 880-10781-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10781-1

Receipt

The samples were received on 2/1/2022 9:23 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 5.7°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS28 (880-10781-19), FS29 (880-10781-20), FS30 (880-10781-21), SW02 (880-10781-24), SW04 (880-10781-26), SW06 (880-10781-28) and (MB 880-18259/5-A). 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 880-18259 and analytical batch 880-18231 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18304 and analytical batch 880-18332 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS25 (880-10781-16) and (880-10781-A-13-F MS). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18290 and analytical batch 880-18230 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 laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-18405 and analytical batch 880-18620 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28) These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18405 and analytical batch 880-18620 were outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS02 (880-10781-2), FS13 (880-10781-5), FS16 (880-10781-8), (880-10781-A-1-C MS) and (880-10781-A-1-D MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS31 (880-10781-22), (LCSD 880-18779/3-A), (880-10781-A-22-E MS) and (880-10781-A-22-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

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18271 and analytical batch 880-18561 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-18367 and analytical batch 880-18608 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Job ID: 880-10781-1 (Continued)

Laboratory: Eurofins Midland (Continued)

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.

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS01

Lab Sample ID: 880-10781-1

Date Collected: 01/31/22 11:06

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 02:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 02:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 02:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 02:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 02:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 02:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	02/01/22 14:11	02/02/22 02:21	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/01/22 14:11	02/02/22 02:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 12:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 12:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130	02/01/22 13:29	02/04/22 12:10	1
o-Terphenyl	77		70 - 130	02/01/22 13:29	02/04/22 12:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	286		4.99	mg/Kg			02/07/22 20:15	1

Client Sample ID: FS02

Lab Sample ID: 880-10781-2

Date Collected: 01/31/22 11:08

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 02:42	1
Toluene	<0.00201	U	0.00201	mg/Kg		02/01/22 14:11	02/02/22 02:42	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		02/01/22 14:11	02/02/22 02:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		02/01/22 14:11	02/02/22 02:42	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		02/01/22 14:11	02/02/22 02:42	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		02/01/22 14:11	02/02/22 02:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	02/01/22 14:11	02/02/22 02:42	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS02

Lab Sample ID: 880-10781-2

Date Collected: 01/31/22 11:08

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	02/01/22 14:11	02/02/22 02:42	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			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 13:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 13:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 13:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130			02/01/22 13:29	02/04/22 13:17	1
o-Terphenyl	68	S1-	70 - 130			02/01/22 13:29	02/04/22 13:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320	F1	5.00	mg/Kg			02/07/22 20:22	1

Client Sample ID: FS04

Lab Sample ID: 880-10781-3

Date Collected: 01/31/22 11:09

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 04:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 04:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 04:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 04:32	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 04:32	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	02/01/22 14:11	02/02/22 04:32	1
1,4-Difluorobenzene (Surr)	106		70 - 130	02/01/22 14:11	02/02/22 04:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS04

Lab Sample ID: 880-10781-3

Date Collected: 01/31/22 11:09

Matrix: Solid

Date Received: 02/01/22 09:23

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	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 13:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 13:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/01/22 13:29	02/04/22 13:40	1
o-Terphenyl	79		70 - 130			02/01/22 13:29	02/04/22 13:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		4.99	mg/Kg			02/07/22 20:45	1

Client Sample ID: FS10

Lab Sample ID: 880-10781-4

Date Collected: 01/31/22 11:11

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 14:11	02/02/22 04:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			02/01/22 14:11	02/02/22 04:53	1
1,4-Difluorobenzene (Surr)	96		70 - 130			02/01/22 14:11	02/02/22 04:53	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			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			02/01/22 13:29	02/04/22 14:02	1
o-Terphenyl	80		70 - 130			02/01/22 13:29	02/04/22 14:02	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS10

Lab Sample ID: 880-10781-4

Date Collected: 01/31/22 11:11

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.7		4.95	mg/Kg			02/07/22 20:52	1

Client Sample ID: FS13

Lab Sample ID: 880-10781-5

Date Collected: 01/31/22 11:13

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/02/22 05:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130			02/01/22 14:11	02/02/22 05:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130			02/01/22 14:11	02/02/22 05:13	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 14:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130			02/01/22 13:29	02/04/22 14:24	1
o-Terphenyl	73		70 - 130			02/01/22 13:29	02/04/22 14:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	315		5.01	mg/Kg			02/07/22 21:15	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS14

Lab Sample ID: 880-10781-6

Date Collected: 01/31/22 11:05

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 05:33	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 05:33	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 05:33	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/01/22 14:11	02/02/22 05:33	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 05:33	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/01/22 14:11	02/02/22 05:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	02/01/22 14:11	02/02/22 05:33	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/01/22 14:11	02/02/22 05:33	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			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 14:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 14:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130	02/01/22 13:29	02/04/22 14:44	1
o-Terphenyl	84		70 - 130	02/01/22 13:29	02/04/22 14:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.5		4.97	mg/Kg			02/07/22 21:22	1

Client Sample ID: FS15

Lab Sample ID: 880-10781-7

Date Collected: 01/31/22 11:18

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 05:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 14:11	02/02/22 05:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 05:54	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 14:11	02/02/22 05:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	02/01/22 14:11	02/02/22 05:54	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS15

Lab Sample ID: 880-10781-7

Date Collected: 01/31/22 11:18

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	02/01/22 14:11	02/02/22 05:54	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			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 15:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 15:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 15:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	70		70 - 130			02/01/22 13:29	02/04/22 15:07	1
o-Terphenyl	75		70 - 130			02/01/22 13:29	02/04/22 15:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		4.98	mg/Kg			02/04/22 19:37	1

Client Sample ID: FS16

Lab Sample ID: 880-10781-8

Date Collected: 01/31/22 11:21

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 06:14	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 06:14	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 06:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 06:14	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 14:11	02/02/22 06:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 14:11	02/02/22 06:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	02/01/22 14:11	02/02/22 06:14	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/01/22 14:11	02/02/22 06:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS16

Lab Sample ID: 880-10781-8

Date Collected: 01/31/22 11:21

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130			02/01/22 13:29	02/04/22 15:30	1
o-Terphenyl	71		70 - 130			02/01/22 13:29	02/04/22 15:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.1		4.97	mg/Kg			02/04/22 19:56	1

Client Sample ID: FS18

Lab Sample ID: 880-10781-9

Date Collected: 01/31/22 11:23

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		02/01/22 14:11	02/02/22 06:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			02/01/22 14:11	02/02/22 06:35	1
1,4-Difluorobenzene (Surr)	98		70 - 130			02/01/22 14:11	02/02/22 06:35	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			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 15:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130			02/01/22 13:29	02/04/22 15:53	1
o-Terphenyl	76		70 - 130			02/01/22 13:29	02/04/22 15:53	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS18

Lab Sample ID: 880-10781-9

Date Collected: 01/31/22 11:23

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1.5

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.6		4.95	mg/Kg			02/04/22 20:02	1

Client Sample ID: FS19

Lab Sample ID: 880-10781-10

Date Collected: 01/31/22 13:00

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 06:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 06:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 06:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/02/22 06:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 06:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/02/22 06:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			02/01/22 14:11	02/02/22 06:55	1
1,4-Difluorobenzene (Surr)	105		70 - 130			02/01/22 14:11	02/02/22 06:55	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			02/02/22 14:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130			02/01/22 13:29	02/04/22 16:15	1
o-Terphenyl	81		70 - 130			02/01/22 13:29	02/04/22 16:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	178		25.0	mg/Kg			02/04/22 20:08	5

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS20

Lab Sample ID: 880-10781-11

Date Collected: 01/31/22 13:03

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 14:11	02/02/22 07:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 07:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 07:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		02/01/22 14:11	02/02/22 07:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/02/22 07:15	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		02/01/22 14:11	02/02/22 07:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	02/01/22 14:11	02/02/22 07:15	1
1,4-Difluorobenzene (Surr)	114		70 - 130	02/01/22 14:11	02/02/22 07:15	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	02/01/22 13:29	02/04/22 16:59	1
o-Terphenyl	97		70 - 130	02/01/22 13:29	02/04/22 16:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	172		4.96	mg/Kg			02/04/22 20:14	1

Client Sample ID: FS21

Lab Sample ID: 880-10781-12

Date Collected: 01/31/22 14:00

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 07:36	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 07:36	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 07:36	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/01/22 14:11	02/02/22 07:36	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/01/22 14:11	02/02/22 07:36	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/01/22 14:11	02/02/22 07:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	02/01/22 14:11	02/02/22 07:36	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS21

Lab Sample ID: 880-10781-12

Date Collected: 01/31/22 14:00

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	02/01/22 14:11	02/02/22 07:36	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/01/22 13:29	02/04/22 17:22	1
o-Terphenyl	81		70 - 130			02/01/22 13:29	02/04/22 17:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.0		5.05	mg/Kg			02/04/22 20:20	1

Client Sample ID: FS22

Lab Sample ID: 880-10781-13

Date Collected: 01/31/22 14:03

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 3

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		02/01/22 15:55	02/02/22 12:16	1
Toluene	<0.00199	U F2 F1	0.00199	mg/Kg		02/01/22 15:55	02/02/22 12:16	1
Ethylbenzene	<0.00199	U F2 F1	0.00199	mg/Kg		02/01/22 15:55	02/02/22 12:16	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398	mg/Kg		02/01/22 15:55	02/02/22 12:16	1
o-Xylene	<0.00199	U F1	0.00199	mg/Kg		02/01/22 15:55	02/02/22 12:16	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		02/01/22 15:55	02/02/22 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	02/01/22 15:55	02/02/22 12:16	1
1,4-Difluorobenzene (Surr)	108		70 - 130	02/01/22 15:55	02/02/22 12:16	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS22

Lab Sample ID: 880-10781-13

Date Collected: 01/31/22 14:03

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 17:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			02/01/22 13:29	02/04/22 17:45	1
o-Terphenyl	82		70 - 130			02/01/22 13:29	02/04/22 17:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	209	F1	5.02	mg/Kg			02/04/22 20:26	1

Client Sample ID: FS23

Lab Sample ID: 880-10781-14

Date Collected: 01/31/22 14:05

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/02/22 11:00	02/02/22 18:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 18:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 18:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/02/22 11:00	02/02/22 18:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 18:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/02/22 11:00	02/02/22 18:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			02/02/22 11:00	02/02/22 18:49	1
1,4-Difluorobenzene (Surr)	121		70 - 130			02/02/22 11:00	02/02/22 18:49	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			02/01/22 13:29	02/04/22 18:04	1
o-Terphenyl	88		70 - 130			02/01/22 13:29	02/04/22 18:04	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS23

Lab Sample ID: 880-10781-14

Date Collected: 01/31/22 14:05

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	279		4.99	mg/Kg			02/04/22 20:45	1

Client Sample ID: FS24

Lab Sample ID: 880-10781-15

Date Collected: 01/31/22 14:08

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/02/22 11:00	02/02/22 19:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/02/22 11:00	02/02/22 19:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/02/22 11:00	02/02/22 19:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/02/22 11:00	02/02/22 19:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/02/22 11:00	02/02/22 19:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/02/22 11:00	02/02/22 19:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130			02/02/22 11:00	02/02/22 19:09	1
1,4-Difluorobenzene (Surr)	109		70 - 130			02/02/22 11:00	02/02/22 19:09	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 18:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 18:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 18:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			02/01/22 13:29	02/04/22 18:24	1
o-Terphenyl	84		70 - 130			02/01/22 13:29	02/04/22 18:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	272		5.00	mg/Kg			02/04/22 20:51	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS25

Lab Sample ID: 880-10781-16

Date Collected: 01/31/22 14:10

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/02/22 11:00	02/02/22 19:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 19:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 19:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/02/22 11:00	02/02/22 19:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/02/22 11:00	02/02/22 19:30	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/02/22 11:00	02/02/22 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	02/02/22 11:00	02/02/22 19:30	1
1,4-Difluorobenzene (Surr)	114		70 - 130	02/02/22 11:00	02/02/22 19:30	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	02/01/22 13:29	02/04/22 18:44	1
o-Terphenyl	93		70 - 130	02/01/22 13:29	02/04/22 18:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	356		24.9	mg/Kg			02/04/22 21:09	5

Client Sample ID: FS26

Lab Sample ID: 880-10781-17

Date Collected: 01/31/22 09:38

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1	0.00202	mg/Kg		02/01/22 11:04	02/02/22 01:26	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		02/01/22 11:04	02/02/22 01:26	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		02/01/22 11:04	02/02/22 01:26	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403	mg/Kg		02/01/22 11:04	02/02/22 01:26	1
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		02/01/22 11:04	02/02/22 01:26	1
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		02/01/22 11:04	02/02/22 01:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	02/01/22 11:04	02/02/22 01:26	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS26

Lab Sample ID: 880-10781-17

Date Collected: 01/31/22 09:38

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	89		70 - 130	02/01/22 11:04	02/02/22 01:26	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			02/01/22 13:29	02/04/22 19:05	1
o-Terphenyl	83		70 - 130			02/01/22 13:29	02/04/22 19:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		4.95	mg/Kg			02/04/22 21:16	1

Client Sample ID: FS27

Lab Sample ID: 880-10781-18

Date Collected: 01/31/22 09:39

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 11:04	02/02/22 01:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 01:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 01:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 01:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 01:54	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 01:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	02/01/22 11:04	02/02/22 01:54	1
1,4-Difluorobenzene (Surr)	89		70 - 130	02/01/22 11:04	02/02/22 01:54	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS27

Lab Sample ID: 880-10781-18

Date Collected: 01/31/22 09:39

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/01/22 13:29	02/04/22 19:26	1
o-Terphenyl	81		70 - 130			02/01/22 13:29	02/04/22 19:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	143		4.95	mg/Kg			02/04/22 21:22	1

Client Sample ID: FS28

Lab Sample ID: 880-10781-19

Date Collected: 01/31/22 09:41

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 11:04	02/02/22 02:21	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:21	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 02:21	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:21	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130			02/01/22 11:04	02/02/22 02:21	1
1,4-Difluorobenzene (Surr)	168	S1+	70 - 130			02/01/22 11:04	02/02/22 02:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 19:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 19:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			02/01/22 13:29	02/04/22 19:46	1
o-Terphenyl	87		70 - 130			02/01/22 13:29	02/04/22 19:46	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS28

Lab Sample ID: 880-10781-19

Date Collected: 01/31/22 09:41

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	780		5.03	mg/Kg			02/04/22 21:28	1

Client Sample ID: FS29

Lab Sample ID: 880-10781-20

Date Collected: 01/31/22 09:43

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 11:04	02/02/22 02:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 02:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 02:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 02:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	231	S1+	70 - 130			02/01/22 11:04	02/02/22 02:49	1
1,4-Difluorobenzene (Surr)	109		70 - 130			02/01/22 11:04	02/02/22 02:49	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 20:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 20:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 13:29	02/04/22 20:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/01/22 13:29	02/04/22 20:07	1
o-Terphenyl	80		70 - 130			02/01/22 13:29	02/04/22 20:07	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2640		49.5	mg/Kg			02/05/22 13:12	10

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS30

Lab Sample ID: 880-10781-21

Date Collected: 01/31/22 09:44

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/01/22 11:04	02/02/22 03:16	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/01/22 11:04	02/02/22 03:16	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/01/22 11:04	02/02/22 03:16	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		02/01/22 11:04	02/02/22 03:16	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/01/22 11:04	02/02/22 03:16	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		02/01/22 11:04	02/02/22 03:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	02/01/22 11:04	02/02/22 03:16	1
1,4-Difluorobenzene (Surr)	79		70 - 130	02/01/22 11:04	02/02/22 03:16	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 16:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/02/22 14:28	02/05/22 17:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		02/02/22 14:28	02/05/22 17:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/02/22 14:28	02/05/22 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	02/02/22 14:28	02/05/22 17:55	1
o-Terphenyl	105		70 - 130	02/02/22 14:28	02/05/22 17:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	314		5.00	mg/Kg			02/04/22 21:40	1

Client Sample ID: FS31

Lab Sample ID: 880-10781-22

Date Collected: 01/31/22 09:46

Matrix: Solid

Date Received: 02/01/22 09:23

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		02/01/22 11:04	02/02/22 03:43	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 03:43	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 03:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 03:43	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 03:43	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 03:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	02/01/22 11:04	02/02/22 03:43	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS31

Lab Sample ID: 880-10781-22

Date Collected: 01/31/22 09:46

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	02/01/22 11:04	02/02/22 03:43	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 16:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/07/22 17:05	02/08/22 14:43	1
Diesel Range Organics (Over C10-C28)	52.3		49.9	mg/Kg		02/07/22 17:05	02/08/22 14:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/07/22 17:05	02/08/22 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130			02/07/22 17:05	02/08/22 14:43	1
o-Terphenyl	68	S1-	70 - 130			02/07/22 17:05	02/08/22 14:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6050		99.8	mg/Kg			02/04/22 21:46	20

Client Sample ID: SW01

Lab Sample ID: 880-10781-23

Date Collected: 01/31/22 14:40

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 04:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 04:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 04:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 04:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 04:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 04:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	02/01/22 11:04	02/02/22 04:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130	02/01/22 11:04	02/02/22 04:10	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 16:46	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW01

Lab Sample ID: 880-10781-23

Date Collected: 01/31/22 14:40

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 18:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U *	50.0	mg/Kg		02/02/22 14:28	02/05/22 18:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 18:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			02/02/22 14:28	02/05/22 18:37	1
o-Terphenyl	103		70 - 130			02/02/22 14:28	02/05/22 18:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.4		5.01	mg/Kg			02/08/22 01:09	1

Client Sample ID: SW02

Lab Sample ID: 880-10781-24

Date Collected: 01/31/22 14:43

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 04:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	203	S1+	70 - 130			02/01/22 11:04	02/02/22 04:38	1
1,4-Difluorobenzene (Surr)	82		70 - 130			02/01/22 11:04	02/02/22 04:38	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 21:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 21:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 21:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			02/01/22 15:02	02/04/22 21:44	1
o-Terphenyl	82		70 - 130			02/01/22 15:02	02/04/22 21:44	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW02

Lab Sample ID: 880-10781-24

Date Collected: 01/31/22 14:43

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2110		50.5	mg/Kg			02/08/22 01:32	10

Client Sample ID: SW03

Lab Sample ID: 880-10781-25

Date Collected: 01/31/22 14:45

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		02/01/22 11:04	02/02/22 05:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			02/01/22 11:04	02/02/22 05:05	1
1,4-Difluorobenzene (Surr)	107		70 - 130			02/01/22 11:04	02/02/22 05:05	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 22:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 22:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 22:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			02/01/22 15:02	02/04/22 22:45	1
o-Terphenyl	96		70 - 130			02/01/22 15:02	02/04/22 22:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	794		24.9	mg/Kg			02/08/22 01:40	5

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW04

Lab Sample ID: 880-10781-26

Date Collected: 01/31/22 14:47

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 05:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 05:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 05:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 05:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 05:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/01/22 11:04	02/02/22 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	177	S1+	70 - 130	02/01/22 11:04	02/02/22 05:32	1
1,4-Difluorobenzene (Surr)	81		70 - 130	02/01/22 11:04	02/02/22 05:32	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 23:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 23:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/04/22 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	02/01/22 15:02	02/04/22 23:05	1
o-Terphenyl	82		70 - 130	02/01/22 15:02	02/04/22 23:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	169		5.00	mg/Kg			02/08/22 01:47	1

Client Sample ID: SW05

Lab Sample ID: 880-10781-27

Date Collected: 01/31/22 14:50

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 07:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 07:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	02/01/22 11:04	02/02/22 07:22	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW05

Lab Sample ID: 880-10781-27

Date Collected: 01/31/22 14:50

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	02/01/22 11:04	02/02/22 07:22	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			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 23:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 23:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 23:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130			02/01/22 15:02	02/04/22 23:26	1
o-Terphenyl	84		70 - 130			02/01/22 15:02	02/04/22 23:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	534		4.99	mg/Kg			02/08/22 01:55	1

Client Sample ID: SW06

Lab Sample ID: 880-10781-28

Date Collected: 01/31/22 14:52

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 07:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 07:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	220	S1+	70 - 130	02/01/22 11:04	02/02/22 07:50	1
1,4-Difluorobenzene (Surr)	88		70 - 130	02/01/22 11:04	02/02/22 07:50	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/07/22 14:34	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW06

Lab Sample ID: 880-10781-28

Date Collected: 01/31/22 14:52

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-4

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		02/01/22 15:02	02/04/22 23:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 23:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			02/01/22 15:02	02/04/22 23:46	1
o-Terphenyl	82		70 - 130			02/01/22 15:02	02/04/22 23:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		5.02	mg/Kg			02/08/22 02:02	1

Client Sample ID: SW07

Lab Sample ID: 880-10781-29

Date Collected: 01/31/22 14:55

Matrix: Solid

Date Received: 02/01/22 09:23

Sample Depth: 0-3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/01/22 11:04	02/02/22 08:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			02/01/22 11:04	02/02/22 08:18	1
1,4-Difluorobenzene (Surr)	74		70 - 130			02/01/22 11:04	02/02/22 08:18	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/07/22 15:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/07/22 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/05/22 00:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/05/22 00:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/01/22 15:02	02/05/22 00:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130			02/01/22 15:02	02/05/22 00:06	1
o-Terphenyl	79		70 - 130			02/01/22 15:02	02/05/22 00:06	1

Eurofins Midland

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW07
Date Collected: 01/31/22 14:55
Date Received: 02/01/22 09:23
Sample Depth: 0-3

Lab Sample ID: 880-10781-29
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	320		4.97	mg/Kg			02/08/22 02:10	1	

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

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-10781-1	FS01	82	100
880-10781-2	FS02	131 S1+	107
880-10781-3	FS04	134 S1+	106
880-10781-4	FS10	124	96
880-10781-5	FS13	132 S1+	97
880-10781-6	FS14	107	95
880-10781-7	FS15	121	85
880-10781-8	FS16	83	95
880-10781-9	FS18	126	98
880-10781-10	FS19	106	105
880-10781-11	FS20	126	114
880-10781-12	FS21	99	102
880-10781-13	FS22	126	108
880-10781-13 MS	FS22	137 S1+	107
880-10781-13 MSD	FS22	116	83
880-10781-14	FS23	130	121
880-10781-15	FS24	130	109
880-10781-16	FS25	133 S1+	114
880-10781-17	FS26	107	89
880-10781-17 MS	FS26	150 S1+	125
880-10781-17 MSD	FS26	92	114
880-10781-18	FS27	89	89
880-10781-19	FS28	80	168 S1+
880-10781-20	FS29	231 S1+	109
880-10781-21	FS30	134 S1+	79
880-10781-22	FS31	109	104
880-10781-23	SW01	99	98
880-10781-24	SW02	203 S1+	82
880-10781-25	SW03	108	107
880-10781-26	SW04	177 S1+	81
880-10781-27	SW05	114	94
880-10781-28	SW06	220 S1+	88
880-10781-29	SW07	96	74
880-10803-A-1-A MS	Matrix Spike	122	101
880-10803-A-1-B MSD	Matrix Spike Duplicate	127	89
LCS 880-18259/1-A	Lab Control Sample	97	104
LCS 880-18290/1-A	Lab Control Sample	119	99
LCS 880-18304/1-A	Lab Control Sample	116	98
LCSD 880-18259/2-A	Lab Control Sample Dup	94	111
LCSD 880-18290/2-A	Lab Control Sample Dup	119	98
LCSD 880-18304/2-A	Lab Control Sample Dup	110	95
MB 880-18134/5-A	Method Blank	111	93
MB 880-18231/8	Method Blank	62 S1-	90
MB 880-18259/5-A	Method Blank	66 S1-	95
MB 880-18290/5-A	Method Blank	124	107
MB 880-18304/5-A	Method Blank	127	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-10781-1	FS01	70	77
880-10781-1 MS	FS01	68 S1-	66 S1-
880-10781-1 MSD	FS01	68 S1-	66 S1-
880-10781-2	FS02	67 S1-	68 S1-
880-10781-3	FS04	73	79
880-10781-4	FS10	72	80
880-10781-5	FS13	69 S1-	73
880-10781-6	FS14	73	84
880-10781-7	FS15	70	75
880-10781-8	FS16	69 S1-	71
880-10781-9	FS18	72	76
880-10781-10	FS19	78	81
880-10781-11	FS20	90	97
880-10781-12	FS21	73	81
880-10781-13	FS22	76	82
880-10781-14	FS23	80	88
880-10781-15	FS24	76	84
880-10781-16	FS25	82	93
880-10781-17	FS26	75	83
880-10781-18	FS27	73	81
880-10781-19	FS28	80	87
880-10781-20	FS29	73	80
880-10781-21	FS30	101	105
880-10781-22	FS31	64 S1-	68 S1-
880-10781-22 MS	FS31	71	64 S1-
880-10781-22 MSD	FS31	71	64 S1-
880-10781-23	SW01	101	103
880-10781-24	SW02	75	82
880-10781-24 MS	SW02	79	77
880-10781-24 MSD	SW02	76	74
880-10781-25	SW03	88	96
880-10781-26	SW04	78	82
880-10781-27	SW05	78	84
880-10781-28	SW06	76	82
880-10781-29	SW07	71	79
880-10891-A-21-D MS	Matrix Spike	72	75
880-10891-A-21-E MSD	Matrix Spike Duplicate	96	86
LCS 880-18289/2-A	Lab Control Sample	92	94
LCS 880-18300/2-A	Lab Control Sample	108	112
LCS 880-18779/2-A	Lab Control Sample	76	71
LCSD 880-18289/3-A	Lab Control Sample Dup	93	94
LCSD 880-18300/3-A	Lab Control Sample Dup	94	97
LCSD 880-18779/3-A	Lab Control Sample Dup	72	68 S1-
MB 880-18289/1-A	Method Blank	73	83
MB 880-18300/1-A	Method Blank	80	94
MB 880-18779/1-A	Method Blank	76	83

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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	OTPH2				
		(70-130)	(70-130)				
LCS 880-18405/2-A	Lab Control Sample	104	109				
LCSD 880-18405/3-A	Lab Control Sample Dup	97	103				
MB 880-18405/1-A	Method Blank	96	97				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-18134/5-A

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18134

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/31/22 10:12	02/01/22 11:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/31/22 10:12	02/01/22 11:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/31/22 10:12	02/01/22 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/31/22 10:12	02/01/22 11:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/31/22 10:12	02/01/22 11:33	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/31/22 10:12	02/01/22 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	01/31/22 10:12	02/01/22 11:33	1
1,4-Difluorobenzene (Surr)	93		70 - 130	01/31/22 10:12	02/01/22 11:33	1

Lab Sample ID: MB 880-18231/8

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			02/01/22 13:28	1
Toluene	<0.00200	U	0.00200	mg/Kg			02/01/22 13:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			02/01/22 13:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			02/01/22 13:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			02/01/22 13:28	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			02/01/22 13:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130		02/01/22 13:28	1
1,4-Difluorobenzene (Surr)	90		70 - 130		02/01/22 13:28	1

Lab Sample ID: MB 880-18259/5-A

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18259

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 00:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 00:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 00:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 11:04	02/02/22 00:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 11:04	02/02/22 00:59	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 11:04	02/02/22 00:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130	02/01/22 11:04	02/02/22 00:59	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/01/22 11:04	02/02/22 00:59	1

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-18259/1-A

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08441		mg/Kg		84	70 - 130
Toluene	0.100	0.07658		mg/Kg		77	70 - 130
Ethylbenzene	0.100	0.07431		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1646		mg/Kg		82	70 - 130
o-Xylene	0.100	0.08285		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-18259/2-A

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18259

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07891		mg/Kg		79	70 - 130	7	35
Toluene	0.100	0.07226		mg/Kg		72	70 - 130	6	35
Ethylbenzene	0.100	0.07784		mg/Kg		78	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1683		mg/Kg		84	70 - 130	2	35
o-Xylene	0.100	0.07996		mg/Kg		80	70 - 130	4	35

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

Lab Sample ID: 880-10781-17 MS

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: FS26

Prep Type: Total/NA

Prep Batch: 18259

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00202	U F1	0.0998	0.03268	F1	mg/Kg		33	70 - 130
Toluene	<0.00202	U F1	0.0998	0.02523	F1	mg/Kg		25	70 - 130
Ethylbenzene	<0.00202	U F1	0.0998	0.03141	F1	mg/Kg		31	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.07251	F1	mg/Kg		36	70 - 130
o-Xylene	<0.00202	U F1	0.0998	0.03566	F1	mg/Kg		36	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	150	S1+	70 - 130
1,4-Difluorobenzene (Surr)	125		70 - 130

Lab Sample ID: 880-10781-17 MSD

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: FS26

Prep Type: Total/NA

Prep Batch: 18259

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00202	U F1	0.0994	0.03702	F1	mg/Kg		37	70 - 130	12	35
Toluene	<0.00202	U F1	0.0994	0.03453	F1	mg/Kg		35	70 - 130	31	35
Ethylbenzene	<0.00202	U F1	0.0994	0.04118	F1	mg/Kg		41	70 - 130	27	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10781-17 MSD

Matrix: Solid

Analysis Batch: 18231

Client Sample ID: FS26

Prep Type: Total/NA

Prep Batch: 18259

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00403	U F1	0.199	0.08046	F1	mg/Kg		40	70 - 130	10	35
o-Xylene	<0.00202	U F1	0.0994	0.04375	F1	mg/Kg		44	70 - 130	20	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	92		70 - 130								
1,4-Difluorobenzene (Surr)	114		70 - 130								

Lab Sample ID: MB 880-18290/5-A

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18290

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 14:11	02/01/22 23:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			02/01/22 14:11	02/01/22 23:09	1
1,4-Difluorobenzene (Surr)	107		70 - 130			02/01/22 14:11	02/01/22 23:09	1

Lab Sample ID: LCS 880-18290/1-A

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	0.100	0.08322		mg/Kg		83	70 - 130	
Toluene	0.100	0.08806		mg/Kg		88	70 - 130	
Ethylbenzene	0.100	0.08925		mg/Kg		89	70 - 130	
m-Xylene & p-Xylene	0.200	0.1841		mg/Kg		92	70 - 130	
o-Xylene	0.100	0.09339		mg/Kg		93	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	119		70 - 130					
1,4-Difluorobenzene (Surr)	99		70 - 130					

Lab Sample ID: LCSD 880-18290/2-A

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18290

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09189		mg/Kg		92	70 - 130	10	35
Toluene	0.100	0.09931		mg/Kg		99	70 - 130	12	35
Ethylbenzene	0.100	0.1025		mg/Kg		102	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.1970		mg/Kg		98	70 - 130	7	35
o-Xylene	0.100	0.09565		mg/Kg		96	70 - 130	2	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-10803-A-1-A MS

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.0998	0.06752	F1	mg/Kg		68	70 - 130
Toluene	<0.00200	U F1	0.0998	0.07065		mg/Kg		71	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.07461		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00400	U F1	0.200	0.1447		mg/Kg		72	70 - 130
o-Xylene	<0.00200	U F1	0.0998	0.07531		mg/Kg		75	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-10803-A-1-B MSD

Matrix: Solid

Analysis Batch: 18230

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.00200	U F1	0.100	0.06064	F1	mg/Kg		60	70 - 130	11	35
Toluene	<0.00200	U F1	0.100	0.06090	F1	mg/Kg		61	70 - 130	15	35
Ethylbenzene	<0.00200	U	0.100	0.07085		mg/Kg		71	70 - 130	5	35
m-Xylene & p-Xylene	<0.00400	U F1	0.201	0.1370	F1	mg/Kg		68	70 - 130	5	35
o-Xylene	<0.00200	U F1	0.100	0.06873	F1	mg/Kg		68	70 - 130	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: MB 880-18304/5-A

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18304

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/22 15:55	02/02/22 11:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/22 15:55	02/02/22 11:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/22 15:55	02/02/22 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/01/22 15:55	02/02/22 11:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/22 15:55	02/02/22 11:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/01/22 15:55	02/02/22 11:47	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
4-Bromofluorobenzene (Surr)	127		70 - 130	02/01/22 15:55	02/02/22 11:47	1		
1,4-Difluorobenzene (Surr)	101		70 - 130	02/01/22 15:55	02/02/22 11:47	1		

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-18304/1-A

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09003		mg/Kg		90	70 - 130
Toluene	0.100	0.08941		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.09570		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09235		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-18304/2-A

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18304

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.07256		mg/Kg		73	70 - 130	21	35
Toluene	0.100	0.08402		mg/Kg		84	70 - 130	6	35
Ethylbenzene	0.100	0.09237		mg/Kg		92	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1772		mg/Kg		89	70 - 130	2	35
o-Xylene	0.100	0.08689		mg/Kg		87	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-10781-13 MS

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: FS22

Prep Type: Total/NA

Prep Batch: 18304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0998	0.07646		mg/Kg		77	70 - 130
Toluene	<0.00199	U F2 F1	0.0998	0.08485		mg/Kg		85	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.0998	0.09338		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1752		mg/Kg		88	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.09049		mg/Kg		91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-10781-13 MSD

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: FS22

Prep Type: Total/NA

Prep Batch: 18304

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	0.100	0.05244	F2 F1	mg/Kg		52	70 - 130	37	35
Toluene	<0.00199	U F2 F1	0.100	0.05902	F2 F1	mg/Kg		59	70 - 130	36	35
Ethylbenzene	<0.00199	U F2 F1	0.100	0.06182	F2 F1	mg/Kg		62	70 - 130	41	35

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10781-13 MSD

Matrix: Solid

Analysis Batch: 18332

Client Sample ID: FS22

Prep Type: Total/NA

Prep Batch: 18304

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1206	F2 F1	mg/Kg		60	70 - 130	37	35
o-Xylene	<0.00199	U F1	0.100	0.06909	F1	mg/Kg		69	70 - 130	27	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	116		70 - 130								
1,4-Difluorobenzene (Surr)	83		70 - 130								

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

Lab Sample ID: MB 880-18289/1-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18289

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 11:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 11:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 13:29	02/04/22 11:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			02/01/22 13:29	02/04/22 11:01	1
o-Terphenyl	83		70 - 130			02/01/22 13:29	02/04/22 11:01	1

Lab Sample ID: LCS 880-18289/2-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	728.4		mg/Kg		73	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	956.8		mg/Kg		96	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: LCSD 880-18289/3-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18289

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	755.8		mg/Kg		76	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	968.7		mg/Kg		97	70 - 130	1	20

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCSD 880-18289/3-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18289

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-10781-1 MS

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 18289

	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	999	841.1		mg/Kg		82	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	944.8		mg/Kg		92	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	68	S1-	70 - 130							
o-Terphenyl	66	S1-	70 - 130							

Lab Sample ID: 880-10781-1 MSD

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: FS01

Prep Type: Total/NA

Prep Batch: 18289

	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	854.9		mg/Kg		83	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	954.6		mg/Kg		93	70 - 130	1	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	68	S1-	70 - 130									
o-Terphenyl	66	S1-	70 - 130									

Lab Sample ID: MB 880-18300/1-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18300

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 20:46	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 20:46	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/01/22 15:02	02/04/22 20:46	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
1-Chlorooctane	80		70 - 130			02/01/22 15:02	02/04/22 20:46	1		
o-Terphenyl	94		70 - 130			02/01/22 15:02	02/04/22 20:46	1		

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-18300/2-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	809.6		mg/Kg		81		70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1180		mg/Kg		118		70 - 130		

Lab Sample ID: LCSD 880-18300/3-A

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18300

Table 1: Data for Table 1										Table 2: Data for Table 2		
Analyte				Spike	LCSD	LCSD				%Rec.	RPD	
				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10				1000	715.2		mg/Kg		72	70 - 130	12	20
Diesel Range Organics (Over C10-C28)				1000	1029		mg/Kg		103	70 - 130	14	20
Table 3: Data for Table 3												
Surrogate	LCSD		Limits									
	%Recovery	Qualifier										
1-Chlorooctane	94		70 - 130									
o-Terphenyl	97		70 - 130									

Lab Sample ID: 880-10781-24 MS

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: SW02

Prep Type: Total/NA

Prep Batch: 18300

	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	999	890.7		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1088		mg/Kg		107	70 - 130		

Lab Sample ID: 880-10781-24 MSD

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: SW02

Prep Type: Total/NA

Prep Batch: 18300

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	867.8		mg/Kg		84	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1050		mg/Kg		103	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	76		70 - 130								

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10781-24 MSD

Matrix: Solid

Analysis Batch: 18545

Client Sample ID: SW02

Prep Type: Total/NA

Prep Batch: 18300

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	74		70 - 130

Lab Sample ID: MB 880-18405/1-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18405

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/02/22 14:28	02/05/22 11:54	1	
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-Chlorooctane	96		70 - 130			02/02/22 14:28	02/05/22 11:54	1	
<i>o</i> -Terphenyl	97		70 - 130			02/02/22 14:28	02/05/22 11:54	1	

Lab Sample ID: LCS 880-18405/2-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18405

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10		1000	1218		mg/Kg		122	70 - 130	
Diesel Range Organics (Over C10-C28)		1000	1331	*+	mg/Kg		133	70 - 130	
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
<i>o</i> -Terphenyl	109		70 - 130						

Lab Sample ID: LCSD 880-18405/3-A

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18405

		Spike	LCSD	LCSD				%Rec.		RPD	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10		1000	1098		mg/Kg		110	70 - 130	10	20	
Diesel Range Organics (Over C10-C28)		1000	1165		mg/Kg		117	70 - 130	13	20	
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	97		70 - 130								
<i>o</i> -Terphenyl	103		70 - 130								

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 880-10891-A-21-D MS

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	996.6		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1 F2	1000	1008		mg/Kg		101	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	72		70 - 130						
o-Terphenyl	75		70 - 130						

Lab Sample ID: 880-10891-A-21-E MSD

Matrix: Solid

Analysis Batch: 18620

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18405

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	<50.0	U	998	1148		mg/Kg		112	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.0	U *+ F1 F2	998	1328	F1 F2	mg/Kg		133	70 - 130	27	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	86		70 - 130								

Lab Sample ID: MB 880-18779/1-A

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18779

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/07/22 17:05	02/08/22 13:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/07/22 17:05	02/08/22 13:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/07/22 17:05	02/08/22 13:37	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			02/07/22 17:05	02/08/22 13:37	1
o-Terphenyl	83		70 - 130			02/07/22 17:05	02/08/22 13:37	1

Lab Sample ID: LCS 880-18779/2-A

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	866.4		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	879.4		mg/Kg		88	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-18779/2-A

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18779

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	71		70 - 130

Lab Sample ID: LCSD 880-18779/3-A

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18779

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	826.6		mg/Kg		83	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	853.7		mg/Kg		85	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	72		70 - 130
o-Terphenyl	68	S1-	70 - 130

Lab Sample ID: 880-10781-22 MS

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: FS31

Prep Type: Total/NA

Prep Batch: 18779

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	1000	865.2		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	52.3		1000	817.4		mg/Kg		77	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 880-10781-22 MSD

Matrix: Solid

Analysis Batch: 18806

Client Sample ID: FS31

Prep Type: Total/NA

Prep Batch: 18779

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	998	868.9		mg/Kg		87	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	52.3		998	821.6		mg/Kg		77	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	64	S1-	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-18271/1-A

Matrix: Solid

Analysis Batch: 18561

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			02/04/22 16:38	1

Lab Sample ID: LCS 880-18271/2-A

Matrix: Solid

Analysis Batch: 18561

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	227.5		mg/Kg		91	90 - 110

Lab Sample ID: LCSD 880-18271/3-A

Matrix: Solid

Analysis Batch: 18561

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	232.7		mg/Kg		93	90 - 110	2	20

Lab Sample ID: 880-10781-13 MS

Matrix: Solid

Analysis Batch: 18561

Client Sample ID: FS22

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	209	F1	251	473.7		mg/Kg		106	90 - 110

Lab Sample ID: 880-10781-13 MSD

Matrix: Solid

Analysis Batch: 18561

Client Sample ID: FS22

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	209	F1	251	428.1	F1	mg/Kg		87	90 - 110	10	20

Lab Sample ID: MB 880-18273/1-A

Matrix: Solid

Analysis Batch: 18605

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			02/07/22 22:31	1

Lab Sample ID: LCS 880-18273/2-A

Matrix: Solid

Analysis Batch: 18605

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	256.3		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-18273/3-A

Matrix: Solid

Analysis Batch: 18605

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	254.2		mg/Kg		102	90 - 110	1	20

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10776-A-1-C MS

Matrix: Solid

Analysis Batch: 18605

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	3120	F1	1240	4522	F1	mg/Kg		113	90 - 110

Lab Sample ID: 880-10776-A-1-D MSD

Matrix: Solid

Analysis Batch: 18605

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	3120	F1	1240	4502	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: 880-10776-A-11-C MS

Matrix: Solid

Analysis Batch: 18605

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	59.4		250	334.4		mg/Kg		110	90 - 110

Lab Sample ID: 880-10776-A-11-D MSD

Matrix: Solid

Analysis Batch: 18605

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	59.4		250	330.6		mg/Kg		109	90 - 110	1	20

Lab Sample ID: MB 880-18367/1-A

Matrix: Solid

Analysis Batch: 18608

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			02/07/22 18:14	1

Lab Sample ID: LCS 880-18367/2-A

Matrix: Solid

Analysis Batch: 18608

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-18367/3-A

Matrix: Solid

Analysis Batch: 18608

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	252.3		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-10781-2 MS

Matrix: Solid

Analysis Batch: 18608

Client Sample ID: FS02

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	320	F1	250	598.9	F1	mg/Kg		112	90 - 110

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-10781-2 MSD							Client Sample ID: FS02					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 18608												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Chloride	320	F1	250	593.3		mg/Kg		109	90 - 110	1	20	

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC VOA

Prep Batch: 18134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18134/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 18230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	8021B	18290
880-10781-2	FS02	Total/NA	Solid	8021B	18290
880-10781-3	FS04	Total/NA	Solid	8021B	18290
880-10781-4	FS10	Total/NA	Solid	8021B	18290
880-10781-5	FS13	Total/NA	Solid	8021B	18290
880-10781-6	FS14	Total/NA	Solid	8021B	18290
880-10781-7	FS15	Total/NA	Solid	8021B	18290
880-10781-8	FS16	Total/NA	Solid	8021B	18290
880-10781-9	FS18	Total/NA	Solid	8021B	18290
880-10781-10	FS19	Total/NA	Solid	8021B	18290
880-10781-11	FS20	Total/NA	Solid	8021B	18290
880-10781-12	FS21	Total/NA	Solid	8021B	18290
MB 880-18134/5-A	Method Blank	Total/NA	Solid	8021B	18134
MB 880-18290/5-A	Method Blank	Total/NA	Solid	8021B	18290
LCS 880-18290/1-A	Lab Control Sample	Total/NA	Solid	8021B	18290
LCSD 880-18290/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18290
880-10803-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	18290
880-10803-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18290

Analysis Batch: 18231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-17	FS26	Total/NA	Solid	8021B	18259
880-10781-18	FS27	Total/NA	Solid	8021B	18259
880-10781-19	FS28	Total/NA	Solid	8021B	18259
880-10781-20	FS29	Total/NA	Solid	8021B	18259
880-10781-21	FS30	Total/NA	Solid	8021B	18259
880-10781-22	FS31	Total/NA	Solid	8021B	18259
880-10781-23	SW01	Total/NA	Solid	8021B	18259
880-10781-24	SW02	Total/NA	Solid	8021B	18259
880-10781-25	SW03	Total/NA	Solid	8021B	18259
880-10781-26	SW04	Total/NA	Solid	8021B	18259
880-10781-27	SW05	Total/NA	Solid	8021B	18259
880-10781-28	SW06	Total/NA	Solid	8021B	18259
880-10781-29	SW07	Total/NA	Solid	8021B	18259
MB 880-18231/8	Method Blank	Total/NA	Solid	8021B	
MB 880-18259/5-A	Method Blank	Total/NA	Solid	8021B	18259
LCS 880-18259/1-A	Lab Control Sample	Total/NA	Solid	8021B	18259
LCSD 880-18259/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18259
880-10781-17 MS	FS26	Total/NA	Solid	8021B	18259
880-10781-17 MSD	FS26	Total/NA	Solid	8021B	18259

Prep Batch: 18259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-17	FS26	Total/NA	Solid	5035	
880-10781-18	FS27	Total/NA	Solid	5035	
880-10781-19	FS28	Total/NA	Solid	5035	
880-10781-20	FS29	Total/NA	Solid	5035	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC VOA (Continued)

Prep Batch: 18259 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-21	FS30	Total/NA	Solid	5035	
880-10781-22	FS31	Total/NA	Solid	5035	
880-10781-23	SW01	Total/NA	Solid	5035	
880-10781-24	SW02	Total/NA	Solid	5035	
880-10781-25	SW03	Total/NA	Solid	5035	
880-10781-26	SW04	Total/NA	Solid	5035	
880-10781-27	SW05	Total/NA	Solid	5035	
880-10781-28	SW06	Total/NA	Solid	5035	
880-10781-29	SW07	Total/NA	Solid	5035	
MB 880-18259/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18259/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18259/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10781-17 MS	FS26	Total/NA	Solid	5035	
880-10781-17 MSD	FS26	Total/NA	Solid	5035	

Prep Batch: 18290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	5035	
880-10781-2	FS02	Total/NA	Solid	5035	
880-10781-3	FS04	Total/NA	Solid	5035	
880-10781-4	FS10	Total/NA	Solid	5035	
880-10781-5	FS13	Total/NA	Solid	5035	
880-10781-6	FS14	Total/NA	Solid	5035	
880-10781-7	FS15	Total/NA	Solid	5035	
880-10781-8	FS16	Total/NA	Solid	5035	
880-10781-9	FS18	Total/NA	Solid	5035	
880-10781-10	FS19	Total/NA	Solid	5035	
880-10781-11	FS20	Total/NA	Solid	5035	
880-10781-12	FS21	Total/NA	Solid	5035	
MB 880-18290/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18290/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18290/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10803-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-10803-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 18304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-13	FS22	Total/NA	Solid	5035	
880-10781-14	FS23	Total/NA	Solid	5035	
880-10781-15	FS24	Total/NA	Solid	5035	
880-10781-16	FS25	Total/NA	Solid	5035	
MB 880-18304/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18304/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18304/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-10781-13 MS	FS22	Total/NA	Solid	5035	
880-10781-13 MSD	FS22	Total/NA	Solid	5035	

Analysis Batch: 18332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-13	FS22	Total/NA	Solid	8021B	18304
880-10781-14	FS23	Total/NA	Solid	8021B	18304

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC VOA (Continued)

Analysis Batch: 18332 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-15	FS24	Total/NA	Solid	8021B	18304
880-10781-16	FS25	Total/NA	Solid	8021B	18304
MB 880-18304/5-A	Method Blank	Total/NA	Solid	8021B	18304
LCS 880-18304/1-A	Lab Control Sample	Total/NA	Solid	8021B	18304
LCSD 880-18304/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18304
880-10781-13 MS	FS22	Total/NA	Solid	8021B	18304
880-10781-13 MSD	FS22	Total/NA	Solid	8021B	18304

Analysis Batch: 18403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	Total BTEX	
880-10781-2	FS02	Total/NA	Solid	Total BTEX	
880-10781-3	FS04	Total/NA	Solid	Total BTEX	
880-10781-4	FS10	Total/NA	Solid	Total BTEX	
880-10781-5	FS13	Total/NA	Solid	Total BTEX	
880-10781-6	FS14	Total/NA	Solid	Total BTEX	
880-10781-7	FS15	Total/NA	Solid	Total BTEX	
880-10781-8	FS16	Total/NA	Solid	Total BTEX	
880-10781-9	FS18	Total/NA	Solid	Total BTEX	
880-10781-10	FS19	Total/NA	Solid	Total BTEX	

Analysis Batch: 18770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-11	FS20	Total/NA	Solid	Total BTEX	
880-10781-12	FS21	Total/NA	Solid	Total BTEX	
880-10781-13	FS22	Total/NA	Solid	Total BTEX	
880-10781-14	FS23	Total/NA	Solid	Total BTEX	
880-10781-15	FS24	Total/NA	Solid	Total BTEX	
880-10781-16	FS25	Total/NA	Solid	Total BTEX	
880-10781-17	FS26	Total/NA	Solid	Total BTEX	
880-10781-18	FS27	Total/NA	Solid	Total BTEX	
880-10781-19	FS28	Total/NA	Solid	Total BTEX	
880-10781-20	FS29	Total/NA	Solid	Total BTEX	
880-10781-21	FS30	Total/NA	Solid	Total BTEX	
880-10781-22	FS31	Total/NA	Solid	Total BTEX	
880-10781-23	SW01	Total/NA	Solid	Total BTEX	
880-10781-24	SW02	Total/NA	Solid	Total BTEX	
880-10781-25	SW03	Total/NA	Solid	Total BTEX	
880-10781-26	SW04	Total/NA	Solid	Total BTEX	
880-10781-27	SW05	Total/NA	Solid	Total BTEX	
880-10781-28	SW06	Total/NA	Solid	Total BTEX	
880-10781-29	SW07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 18289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	8015NM Prep	
880-10781-2	FS02	Total/NA	Solid	8015NM Prep	
880-10781-3	FS04	Total/NA	Solid	8015NM Prep	
880-10781-4	FS10	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC Semi VOA (Continued)

Prep Batch: 18289 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-5	FS13	Total/NA	Solid	8015NM Prep	
880-10781-6	FS14	Total/NA	Solid	8015NM Prep	
880-10781-7	FS15	Total/NA	Solid	8015NM Prep	
880-10781-8	FS16	Total/NA	Solid	8015NM Prep	
880-10781-9	FS18	Total/NA	Solid	8015NM Prep	
880-10781-10	FS19	Total/NA	Solid	8015NM Prep	
880-10781-11	FS20	Total/NA	Solid	8015NM Prep	
880-10781-12	FS21	Total/NA	Solid	8015NM Prep	
880-10781-13	FS22	Total/NA	Solid	8015NM Prep	
880-10781-14	FS23	Total/NA	Solid	8015NM Prep	
880-10781-15	FS24	Total/NA	Solid	8015NM Prep	
880-10781-16	FS25	Total/NA	Solid	8015NM Prep	
880-10781-17	FS26	Total/NA	Solid	8015NM Prep	
880-10781-18	FS27	Total/NA	Solid	8015NM Prep	
880-10781-19	FS28	Total/NA	Solid	8015NM Prep	
880-10781-20	FS29	Total/NA	Solid	8015NM Prep	
MB 880-18289/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18289/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18289/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10781-1 MS	FS01	Total/NA	Solid	8015NM Prep	
880-10781-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Prep Batch: 18300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-24	SW02	Total/NA	Solid	8015NM Prep	
880-10781-25	SW03	Total/NA	Solid	8015NM Prep	
880-10781-26	SW04	Total/NA	Solid	8015NM Prep	
880-10781-27	SW05	Total/NA	Solid	8015NM Prep	
880-10781-28	SW06	Total/NA	Solid	8015NM Prep	
880-10781-29	SW07	Total/NA	Solid	8015NM Prep	
MB 880-18300/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18300/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18300/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10781-24 MS	SW02	Total/NA	Solid	8015NM Prep	
880-10781-24 MSD	SW02	Total/NA	Solid	8015NM Prep	

Prep Batch: 18405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-21	FS30	Total/NA	Solid	8015NM Prep	
880-10781-23	SW01	Total/NA	Solid	8015NM Prep	
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	8015B NM	18289
880-10781-2	FS02	Total/NA	Solid	8015B NM	18289
880-10781-3	FS04	Total/NA	Solid	8015B NM	18289

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC Semi VOA (Continued)

Analysis Batch: 18545 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-4	FS10	Total/NA	Solid	8015B NM	18289
880-10781-5	FS13	Total/NA	Solid	8015B NM	18289
880-10781-6	FS14	Total/NA	Solid	8015B NM	18289
880-10781-7	FS15	Total/NA	Solid	8015B NM	18289
880-10781-8	FS16	Total/NA	Solid	8015B NM	18289
880-10781-9	FS18	Total/NA	Solid	8015B NM	18289
880-10781-10	FS19	Total/NA	Solid	8015B NM	18289
880-10781-11	FS20	Total/NA	Solid	8015B NM	18289
880-10781-12	FS21	Total/NA	Solid	8015B NM	18289
880-10781-13	FS22	Total/NA	Solid	8015B NM	18289
880-10781-14	FS23	Total/NA	Solid	8015B NM	18289
880-10781-15	FS24	Total/NA	Solid	8015B NM	18289
880-10781-16	FS25	Total/NA	Solid	8015B NM	18289
880-10781-17	FS26	Total/NA	Solid	8015B NM	18289
880-10781-18	FS27	Total/NA	Solid	8015B NM	18289
880-10781-19	FS28	Total/NA	Solid	8015B NM	18289
880-10781-20	FS29	Total/NA	Solid	8015B NM	18289
880-10781-24	SW02	Total/NA	Solid	8015B NM	18300
880-10781-25	SW03	Total/NA	Solid	8015B NM	18300
880-10781-26	SW04	Total/NA	Solid	8015B NM	18300
880-10781-27	SW05	Total/NA	Solid	8015B NM	18300
880-10781-28	SW06	Total/NA	Solid	8015B NM	18300
880-10781-29	SW07	Total/NA	Solid	8015B NM	18300
MB 880-18289/1-A	Method Blank	Total/NA	Solid	8015B NM	18289
MB 880-18300/1-A	Method Blank	Total/NA	Solid	8015B NM	18300
LCS 880-18289/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18289
LCS 880-18300/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18300
LCSD 880-18289/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18289
LCSD 880-18300/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18300
880-10781-1 MS	FS01	Total/NA	Solid	8015B NM	18289
880-10781-1 MSD	FS01	Total/NA	Solid	8015B NM	18289
880-10781-24 MS	SW02	Total/NA	Solid	8015B NM	18300
880-10781-24 MSD	SW02	Total/NA	Solid	8015B NM	18300

Analysis Batch: 18620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-21	FS30	Total/NA	Solid	8015B NM	18405
880-10781-23	SW01	Total/NA	Solid	8015B NM	18405
MB 880-18405/1-A	Method Blank	Total/NA	Solid	8015B NM	18405
LCS 880-18405/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18405
LCSD 880-18405/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18405
880-10891-A-21-D MS	Matrix Spike	Total/NA	Solid	8015B NM	18405
880-10891-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	18405

Analysis Batch: 18746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Total/NA	Solid	8015 NM	
880-10781-2	FS02	Total/NA	Solid	8015 NM	
880-10781-3	FS04	Total/NA	Solid	8015 NM	
880-10781-4	FS10	Total/NA	Solid	8015 NM	
880-10781-5	FS13	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

GC Semi VOA (Continued)

Analysis Batch: 18746 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-6	FS14	Total/NA	Solid	8015 NM	
880-10781-7	FS15	Total/NA	Solid	8015 NM	
880-10781-8	FS16	Total/NA	Solid	8015 NM	
880-10781-9	FS18	Total/NA	Solid	8015 NM	
880-10781-10	FS19	Total/NA	Solid	8015 NM	
880-10781-11	FS20	Total/NA	Solid	8015 NM	
880-10781-12	FS21	Total/NA	Solid	8015 NM	
880-10781-13	FS22	Total/NA	Solid	8015 NM	
880-10781-14	FS23	Total/NA	Solid	8015 NM	
880-10781-15	FS24	Total/NA	Solid	8015 NM	
880-10781-16	FS25	Total/NA	Solid	8015 NM	
880-10781-17	FS26	Total/NA	Solid	8015 NM	
880-10781-18	FS27	Total/NA	Solid	8015 NM	
880-10781-19	FS28	Total/NA	Solid	8015 NM	
880-10781-20	FS29	Total/NA	Solid	8015 NM	
880-10781-24	SW02	Total/NA	Solid	8015 NM	
880-10781-25	SW03	Total/NA	Solid	8015 NM	
880-10781-26	SW04	Total/NA	Solid	8015 NM	
880-10781-27	SW05	Total/NA	Solid	8015 NM	
880-10781-28	SW06	Total/NA	Solid	8015 NM	
880-10781-29	SW07	Total/NA	Solid	8015 NM	

Analysis Batch: 18777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-21	FS30	Total/NA	Solid	8015 NM	
880-10781-22	FS31	Total/NA	Solid	8015 NM	
880-10781-23	SW01	Total/NA	Solid	8015 NM	

Prep Batch: 18779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-22	FS31	Total/NA	Solid	8015NM Prep	
MB 880-18779/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18779/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18779/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10781-22 MS	FS31	Total/NA	Solid	8015NM Prep	
880-10781-22 MSD	FS31	Total/NA	Solid	8015NM Prep	

Analysis Batch: 18806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-22	FS31	Total/NA	Solid	8015B NM	18779
MB 880-18779/1-A	Method Blank	Total/NA	Solid	8015B NM	18779
LCS 880-18779/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18779
LCSD 880-18779/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18779
880-10781-22 MS	FS31	Total/NA	Solid	8015B NM	18779
880-10781-22 MSD	FS31	Total/NA	Solid	8015B NM	18779

HPLC/IC

Leach Batch: 18271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-7	FS15	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

HPLC/IC (Continued)

Leach Batch: 18271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-8	FS16	Soluble	Solid	DI Leach	
880-10781-9	FS18	Soluble	Solid	DI Leach	
880-10781-10	FS19	Soluble	Solid	DI Leach	
880-10781-11	FS20	Soluble	Solid	DI Leach	
880-10781-12	FS21	Soluble	Solid	DI Leach	
880-10781-13	FS22	Soluble	Solid	DI Leach	
880-10781-14	FS23	Soluble	Solid	DI Leach	
880-10781-15	FS24	Soluble	Solid	DI Leach	
880-10781-16	FS25	Soluble	Solid	DI Leach	
880-10781-17	FS26	Soluble	Solid	DI Leach	
880-10781-18	FS27	Soluble	Solid	DI Leach	
880-10781-19	FS28	Soluble	Solid	DI Leach	
880-10781-20	FS29	Soluble	Solid	DI Leach	
880-10781-21	FS30	Soluble	Solid	DI Leach	
880-10781-22	FS31	Soluble	Solid	DI Leach	
MB 880-18271/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18271/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18271/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10781-13 MS	FS22	Soluble	Solid	DI Leach	
880-10781-13 MSD	FS22	Soluble	Solid	DI Leach	

Leach Batch: 18273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-23	SW01	Soluble	Solid	DI Leach	
880-10781-24	SW02	Soluble	Solid	DI Leach	
880-10781-25	SW03	Soluble	Solid	DI Leach	
880-10781-26	SW04	Soluble	Solid	DI Leach	
880-10781-27	SW05	Soluble	Solid	DI Leach	
880-10781-28	SW06	Soluble	Solid	DI Leach	
880-10781-29	SW07	Soluble	Solid	DI Leach	
MB 880-18273/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18273/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18273/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10776-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10776-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-10776-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-10776-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 18367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Soluble	Solid	DI Leach	
880-10781-2	FS02	Soluble	Solid	DI Leach	
880-10781-3	FS04	Soluble	Solid	DI Leach	
880-10781-4	FS10	Soluble	Solid	DI Leach	
880-10781-5	FS13	Soluble	Solid	DI Leach	
880-10781-6	FS14	Soluble	Solid	DI Leach	
MB 880-18367/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-18367/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-18367/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-10781-2 MS	FS02	Soluble	Solid	DI Leach	
880-10781-2 MSD	FS02	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

HPLC/IC

Analysis Batch: 18561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-7	FS15	Soluble	Solid	300.0	18271
880-10781-8	FS16	Soluble	Solid	300.0	18271
880-10781-9	FS18	Soluble	Solid	300.0	18271
880-10781-10	FS19	Soluble	Solid	300.0	18271
880-10781-11	FS20	Soluble	Solid	300.0	18271
880-10781-12	FS21	Soluble	Solid	300.0	18271
880-10781-13	FS22	Soluble	Solid	300.0	18271
880-10781-14	FS23	Soluble	Solid	300.0	18271
880-10781-15	FS24	Soluble	Solid	300.0	18271
880-10781-16	FS25	Soluble	Solid	300.0	18271
880-10781-17	FS26	Soluble	Solid	300.0	18271
880-10781-18	FS27	Soluble	Solid	300.0	18271
880-10781-19	FS28	Soluble	Solid	300.0	18271
880-10781-20	FS29	Soluble	Solid	300.0	18271
880-10781-21	FS30	Soluble	Solid	300.0	18271
880-10781-22	FS31	Soluble	Solid	300.0	18271
MB 880-18271/1-A	Method Blank	Soluble	Solid	300.0	18271
LCS 880-18271/2-A	Lab Control Sample	Soluble	Solid	300.0	18271
LCSD 880-18271/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18271
880-10781-13 MS	FS22	Soluble	Solid	300.0	18271
880-10781-13 MSD	FS22	Soluble	Solid	300.0	18271

Analysis Batch: 18605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-23	SW01	Soluble	Solid	300.0	18273
880-10781-24	SW02	Soluble	Solid	300.0	18273
880-10781-25	SW03	Soluble	Solid	300.0	18273
880-10781-26	SW04	Soluble	Solid	300.0	18273
880-10781-27	SW05	Soluble	Solid	300.0	18273
880-10781-28	SW06	Soluble	Solid	300.0	18273
880-10781-29	SW07	Soluble	Solid	300.0	18273
MB 880-18273/1-A	Method Blank	Soluble	Solid	300.0	18273
LCS 880-18273/2-A	Lab Control Sample	Soluble	Solid	300.0	18273
LCSD 880-18273/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18273
880-10776-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	18273
880-10776-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18273
880-10776-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	18273
880-10776-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	18273

Analysis Batch: 18608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-1	FS01	Soluble	Solid	300.0	18367
880-10781-2	FS02	Soluble	Solid	300.0	18367
880-10781-3	FS04	Soluble	Solid	300.0	18367
880-10781-4	FS10	Soluble	Solid	300.0	18367
880-10781-5	FS13	Soluble	Solid	300.0	18367
880-10781-6	FS14	Soluble	Solid	300.0	18367
MB 880-18367/1-A	Method Blank	Soluble	Solid	300.0	18367
LCS 880-18367/2-A	Lab Control Sample	Soluble	Solid	300.0	18367
LCSD 880-18367/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	18367
880-10781-2 MS	FS02	Soluble	Solid	300.0	18367

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

HPLC/IC (Continued)

Analysis Batch: 18608 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-10781-2 MSD	FS02	Soluble	Solid	300.0	18367

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

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS01

Lab Sample ID: 880-10781-1

Date Collected: 01/31/22 11:06

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 02:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 12:10	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 20:15	CH	XEN MID

Client Sample ID: FS02

Lab Sample ID: 880-10781-2

Date Collected: 01/31/22 11:08

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 02:42	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 13:17	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 20:22	CH	XEN MID

Client Sample ID: FS04

Lab Sample ID: 880-10781-3

Date Collected: 01/31/22 11:09

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 04:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 13:40	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 20:45	CH	XEN MID

Client Sample ID: FS10

Lab Sample ID: 880-10781-4

Date Collected: 01/31/22 11:11

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 04:53	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS10

Lab Sample ID: 880-10781-4

Date Collected: 01/31/22 11:11

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 14:02	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 20:52	CH	XEN MID

Client Sample ID: FS13

Lab Sample ID: 880-10781-5

Date Collected: 01/31/22 11:13

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 05:13	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 14:24	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 21:15	CH	XEN MID

Client Sample ID: FS14

Lab Sample ID: 880-10781-6

Date Collected: 01/31/22 11:05

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 05:33	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 14:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18367	02/02/22 12:03	CH	XEN MID
Soluble	Analysis	300.0		1			18608	02/07/22 21:22	CH	XEN MID

Client Sample ID: FS15

Lab Sample ID: 880-10781-7

Date Collected: 01/31/22 11:18

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 05:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 15:07	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS15

Lab Sample ID: 880-10781-7

Date Collected: 01/31/22 11:18

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 19:37	CH	XEN MID

Client Sample ID: FS16

Lab Sample ID: 880-10781-8

Date Collected: 01/31/22 11:21

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 06:14	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 15:30	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 19:56	CH	XEN MID

Client Sample ID: FS18

Lab Sample ID: 880-10781-9

Date Collected: 01/31/22 11:23

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 06:35	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 15:53	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:02	CH	XEN MID

Client Sample ID: FS19

Lab Sample ID: 880-10781-10

Date Collected: 01/31/22 13:00

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 06:55	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18403	02/02/22 14:23	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 16:15	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		5			18561	02/04/22 20:08	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS20

Lab Sample ID: 880-10781-11

Date Collected: 01/31/22 13:03

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 07:15	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 16:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:14	CH	XEN MID

Client Sample ID: FS21

Lab Sample ID: 880-10781-12

Date Collected: 01/31/22 14:00

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18290	02/01/22 14:11	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18230	02/02/22 07:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 17:22	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:20	CH	XEN MID

Client Sample ID: FS22

Lab Sample ID: 880-10781-13

Date Collected: 01/31/22 14:03

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18304	02/01/22 15:55	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18332	02/02/22 12:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 17:45	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:26	CH	XEN MID

Client Sample ID: FS23

Lab Sample ID: 880-10781-14

Date Collected: 01/31/22 14:05

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18304	02/02/22 11:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18332	02/02/22 18:49	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS23

Lab Sample ID: 880-10781-14

Date Collected: 01/31/22 14:05

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 18:04	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:45	CH	XEN MID

Client Sample ID: FS24

Lab Sample ID: 880-10781-15

Date Collected: 01/31/22 14:08

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18304	02/02/22 11:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18332	02/02/22 19:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 18:24	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 20:51	CH	XEN MID

Client Sample ID: FS25

Lab Sample ID: 880-10781-16

Date Collected: 01/31/22 14:10

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18304	02/02/22 11:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18332	02/02/22 19:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 18:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		5			18561	02/04/22 21:09	CH	XEN MID

Client Sample ID: FS26

Lab Sample ID: 880-10781-17

Date Collected: 01/31/22 09:38

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 01:26	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 19:05	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS26

Date Collected: 01/31/22 09:38

Date Received: 02/01/22 09:23

Lab Sample ID: 880-10781-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 21:16	CH	XEN MID

Client Sample ID: FS27

Date Collected: 01/31/22 09:39

Date Received: 02/01/22 09:23

Lab Sample ID: 880-10781-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 01:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 19:26	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 21:22	CH	XEN MID

Client Sample ID: FS28

Date Collected: 01/31/22 09:41

Date Received: 02/01/22 09:23

Lab Sample ID: 880-10781-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 02:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 19:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 21:28	CH	XEN MID

Client Sample ID: FS29

Date Collected: 01/31/22 09:43

Date Received: 02/01/22 09:23

Lab Sample ID: 880-10781-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 02:49	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18289	02/01/22 13:29	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 20:07	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		10			18561	02/05/22 13:12	CH	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: FS30

Lab Sample ID: 880-10781-21

Date Collected: 01/31/22 09:44

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 03:16	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18620	02/05/22 17:55	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		1			18561	02/04/22 21:40	CH	XEN MID

Client Sample ID: FS31

Lab Sample ID: 880-10781-22

Date Collected: 01/31/22 09:46

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 03:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18779	02/07/22 17:05	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18806	02/08/22 14:43	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	18271	02/01/22 12:10	SC	XEN MID
Soluble	Analysis	300.0		20			18561	02/04/22 21:46	CH	XEN MID

Client Sample ID: SW01

Lab Sample ID: 880-10781-23

Date Collected: 01/31/22 14:40

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 04:10	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18777	02/07/22 16:46	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18405	02/02/22 14:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18620	02/05/22 18:37	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			18605	02/08/22 01:09	CH	XEN MID

Client Sample ID: SW02

Lab Sample ID: 880-10781-24

Date Collected: 01/31/22 14:43

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 04:38	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW02

Lab Sample ID: 880-10781-24

Date Collected: 01/31/22 14:43

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 21:44	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		10			18605	02/08/22 01:32	CH	XEN MID

Client Sample ID: SW03

Lab Sample ID: 880-10781-25

Date Collected: 01/31/22 14:45

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 05:05	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 22:45	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		5			18605	02/08/22 01:40	CH	XEN MID

Client Sample ID: SW04

Lab Sample ID: 880-10781-26

Date Collected: 01/31/22 14:47

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 05:32	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 23:05	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			18605	02/08/22 01:47	CH	XEN MID

Client Sample ID: SW05

Lab Sample ID: 880-10781-27

Date Collected: 01/31/22 14:50

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 07:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 23:26	AJ	XEN MID

Eurofins Midland

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Client Sample ID: SW05

Lab Sample ID: 880-10781-27

Date Collected: 01/31/22 14:50

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			18605	02/08/22 01:55	CH	XEN MID

Client Sample ID: SW06

Lab Sample ID: 880-10781-28

Date Collected: 01/31/22 14:52

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 07:50	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/04/22 23:46	AJ	XEN MID
Soluble	Leach	DI Leach			4.98 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			18605	02/08/22 02:02	CH	XEN MID

Client Sample ID: SW07

Lab Sample ID: 880-10781-29

Date Collected: 01/31/22 14:55

Matrix: Solid

Date Received: 02/01/22 09:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	18259	02/01/22 11:04	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	18231	02/02/22 08:18	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			18770	02/07/22 15:26	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			18746	02/07/22 14:34	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	18300	02/01/22 15:02	DM	XEN MID
Total/NA	Analysis	8015B NM		1			18545	02/05/22 00:06	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	18273	02/01/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			18605	02/08/22 02:10	CH	XEN MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-10781-1
SDG: 32.2075, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-10781-1	FS01	Solid	01/31/22 11:06	02/01/22 09:23	4
880-10781-2	FS02	Solid	01/31/22 11:08	02/01/22 09:23	4
880-10781-3	FS04	Solid	01/31/22 11:09	02/01/22 09:23	4
880-10781-4	FS10	Solid	01/31/22 11:11	02/01/22 09:23	1.5
880-10781-5	FS13	Solid	01/31/22 11:13	02/01/22 09:23	1.5
880-10781-6	FS14	Solid	01/31/22 11:05	02/01/22 09:23	1.5
880-10781-7	FS15	Solid	01/31/22 11:18	02/01/22 09:23	4
880-10781-8	FS16	Solid	01/31/22 11:21	02/01/22 09:23	1.5
880-10781-9	FS18	Solid	01/31/22 11:23	02/01/22 09:23	1.5
880-10781-10	FS19	Solid	01/31/22 13:00	02/01/22 09:23	4
880-10781-11	FS20	Solid	01/31/22 13:03	02/01/22 09:23	4
880-10781-12	FS21	Solid	01/31/22 14:00	02/01/22 09:23	3
880-10781-13	FS22	Solid	01/31/22 14:03	02/01/22 09:23	3
880-10781-14	FS23	Solid	01/31/22 14:05	02/01/22 09:23	3
880-10781-15	FS24	Solid	01/31/22 14:08	02/01/22 09:23	3
880-10781-16	FS25	Solid	01/31/22 14:10	02/01/22 09:23	3
880-10781-17	FS26	Solid	01/31/22 09:38	02/01/22 09:23	1
880-10781-18	FS27	Solid	01/31/22 09:39	02/01/22 09:23	1
880-10781-19	FS28	Solid	01/31/22 09:41	02/01/22 09:23	1
880-10781-20	FS29	Solid	01/31/22 09:43	02/01/22 09:23	1
880-10781-21	FS30	Solid	01/31/22 09:44	02/01/22 09:23	1
880-10781-22	FS31	Solid	01/31/22 09:46	02/01/22 09:23	1
880-10781-23	SW01	Solid	01/31/22 14:40	02/01/22 09:23	0-3
880-10781-24	SW02	Solid	01/31/22 14:43	02/01/22 09:23	0-4
880-10781-25	SW03	Solid	01/31/22 14:45	02/01/22 09:23	0-3
880-10781-26	SW04	Solid	01/31/22 14:47	02/01/22 09:23	0-3
880-10781-27	SW05	Solid	01/31/22 14:50	02/01/22 09:23	0-4
880-10781-28	SW06	Solid	01/31/22 14:52	02/01/22 09:23	0-4
880-10781-29	SW07	Solid	01/31/22 14:55	02/01/22 09:23	0-3



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 10781

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Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	WSP USA INC.	Company Name:	WSP USA INC.
Address:	3200 North A Street, Unit 212, Bldg 1	Address:	
City, State ZIP:	Midland, TX, 79705	City, State ZIP:	
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com

Work Order Comments Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level ☐ PST/UST ☐ TRF ☐ Level ☒	Deliverables: EDD ☒ ADAPT ☐ Other: ☐

Project Name:	PUJ DAI B 23 SWD	Turn Around	
Project Number:	31403230.021.0129	Routine: ☒	
Project Location:	32.2075, -103.86299	Rush: ☐	
Sample Name:	Fladt Green	Due Date: 5 DAY	
PO #:			
SAMPLE RECEIPT Temperature (°C): <u>50/5.7</u> Temp Blank: Yes ☒ No ☐ Wet Ice: Yes ☒ No ☐ Received Intact: Yes ☒ No ☐ Thermometer ID: <u>118</u> Cooler Custody Seals: Yes ☒ No ☐ Correction Factor: <u>1.0</u> Sample Custody Seals: Yes ☒ No ☐ Total Containers: <u>1</u>			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
FS01	SL	1-31-22	11:06	4	☒ BTEX (EPA 0-8021)		HN03: HN	
FS02			11:08	4	☒ TPH (EPA 8015)		H2S04: H2	
FS04			11:09	4	☒ CHLORIDES (EPA 300)		HCL: HL	
FS10			11:11	1.5			None: NO	
FS13			11:13	1.5			NaOH: Na	
FS14			11:15	1.5			MeOH: Me	
FS15			11:18	4			Zn Acetate+ NaOH: Zn	
FS16			11:21	1.5				
FS18			11:23	1.5				
FS19			13:00	4				



880-10781 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <u>Fladt Green</u>	<u>Fladt Green</u>	2/1/22 9:23			
3					
5					



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 889-6701
 Atlanta, GA (770) 449-8800

Work Order No: 10781

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Project Manager:	Kalci Jennings	Bill to: (if different)	Kalci Jennings
Company Name:	WSP USA INC.	Company Name:	WSP USA Inc
Address:	3300 North Alhambra Blvd, Unit 202	Address:	
City, State ZIP:	Midland, TX 79105	City, State ZIP:	
Phone:	817-683-2503	Email:	Kalci.Jennings@wsp.com

Work Order Comments Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level ☐ PST/US ☐ TRF ☐ Level ☒	Deliverables: EDD ☒ ADAPT ☐ Other: ☐

Project Name:	PLU DEL B 23 SWD	Turn Around	
Project Number:	3443236 02L 0724	Routine: ☒	
Project Location:	32.2075, -103.85294	Rush: ☐	
Sampler's Name:	Hadiu Green	Due Date: 5/14/24	
PO #:			
SAMPLE RECEIPT			
Temperature (°C):	5.6/5.7	Temp Blank: Yes ☐ No ☒	Wet Ice: Yes ☐ No ☒
Received In tact:	Yes ☒ No ☐	Thermometer ID:	TPB
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	.10
Sample Custody Seals:	Yes ☐ No ☒	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST												Preservative Codes	Sample Comments
FS20	SL	1-31-22	13:03	4	1	X	BTEX (EPA 0=8021)											HN03: HN	
FS21			14:00	3		X	TPH (EPA 8015)											H2SO4: H2	
FS22			14:03	3		X	CHLORIDES (EPA 300.0)											HCL: HL	
FS23			14:05	3														None: NO	
FS24			14:08	3														NaOH: Na	
FS25			14:10	3														MeOH: Me	
FS26			0938	1														Zn Acetate+ NaOH: Zn	
FS27			0939	1															
FS28			0941	1															
FS29			0943	1															

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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 1631 / 245.1 / 7470 / 7471: Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Hadiu Green	Hadiu Green	2/1/22 9:23	2		
3			4		
5			6		



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 10781

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Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	WSP USA Inc.	Company Name:	WSP USA Inc.
Address:	3300 North Acworth Blvd, Unit 222	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	817-683-2553	Email:	Kalei.Jennings@wsp.com

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐	
State of Project:	
Reporting Level ☐ Level ☐ PST/UST ☐ TRF ☐ Level ☒	
Deliverables: EDD ☒ ADAPT ☐ Other:	

Project Name:	PU D1 B 23 SWD	Turn Around	
Project Number:	31403230022.0129	Routine:	☒
Project Location:	32.2075-103.85299	Rush:	☐
Sampler's Name:	Hadii Green	Due Date:	5 PM
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐
Temperature (°C):	5.6/5.7	Wet Ice:	Yes ☒ No ☐
Received In tact:	Yes ☒ No ☐	Thermometer ID:	ITB
Cooler Custody Seals:	Yes ☒ No ☐	Correction Factor:	1.0
Sample Custody Seals:	Yes ☒ No ☐	Total Containers:	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
FS30	SL	1-31-22	09:44	1	BTEX (EPA 0-8021)		HNO3: HN	
FS31			09:46	1	TPH (EPA 8015)		H2SO4: H2	
SW01			14:40	0-3	CHLORIDES (EPA 300.0)		HCL: HL	
SW02			14:43	0-4			None: NO	
SW03			14:45	0-3			NaOH: Na	
SW04			14:47	0-3			MeOH: Me	
SW05			14:50	0-4			Zn Acetate+ NaOH: Zn	
SW06			14:52	0-4				
SW07			14:55	0-3				

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 1631 / 245.1 / 7470 / 7471 : Hg

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Hadii Green	Hadii Green	4/22/22 9:23	2		
3			4		
5			6		

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-10781-1

SDG Number: 32.2075, -103.85299

Login Number: 10781

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-11365-1

Laboratory Sample Delivery Group: 32.2075, -103.85799
Client Project/Site: PLU Del B 23 SWD

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:
2/22/2022 9:00:50 PM

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

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www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Laboratory Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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 Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Job ID: 880-11365-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-11365-1****Receipt**

The sample was received on 2/16/2022 2:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 9.1°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW08 (880-11365-1) and (880-11400-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 Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Client Sample ID: SW08

Lab Sample ID: 880-11365-1

Date Collected: 02/16/22 09:50

Matrix: Solid

Date Received: 02/16/22 14:10

Sample Depth: 0-3'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/18/22 08:00	02/19/22 05:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/18/22 08:00	02/19/22 05:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/18/22 08:00	02/19/22 05:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		02/18/22 08:00	02/19/22 05:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/18/22 08:00	02/19/22 05:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/18/22 08:00	02/19/22 05:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	02/18/22 08:00	02/19/22 05:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/18/22 08:00	02/19/22 05:41	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/21/22 19:46	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			02/21/22 19:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/17/22 11:56	02/19/22 20:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/17/22 11:56	02/19/22 20:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/17/22 11:56	02/19/22 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	66	S1-	70 - 130	02/17/22 11:56	02/19/22 20:38	1
o-Terphenyl	64	S1-	70 - 130	02/17/22 11:56	02/19/22 20:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	341		5.05	mg/Kg			02/22/22 16:41	1

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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)
880-11365-1	SW08	121	96
880-11436-A-2-C MS	Matrix Spike	132 S1+	97
880-11436-A-2-D MSD	Matrix Spike Duplicate	155 S1+	44 S1-
LCS 880-19696/1-A	Lab Control Sample	112	99
LCS 880-19707/1-A	Lab Control Sample	108	98
LCSD 880-19696/2-A	Lab Control Sample Dup	113	91
LCSD 880-19707/2-A	Lab Control Sample Dup	109	96
MB 880-19696/5-A	Method Blank	116	89
MB 880-19707/5-A	Method Blank	119	98
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)
880-11365-1	SW08	66 S1-	64 S1-
880-11400-A-1-E MS	Matrix Spike	76	76
880-11400-A-1-F MSD	Matrix Spike Duplicate	69 S1-	69 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 880-19690/2-A	Lab Control Sample	100	108
LCSD 880-19690/3-A	Lab Control Sample Dup	105	112
MB 880-19690/1-A	Method Blank	88	92
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-19696/5-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19696

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/18/22 07:00	02/18/22 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/18/22 07:00	02/18/22 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/18/22 07:00	02/18/22 12:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/18/22 07:00	02/18/22 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/18/22 07:00	02/18/22 12:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/18/22 07:00	02/18/22 12:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	02/18/22 07:00	02/18/22 12:41	1
1,4-Difluorobenzene (Surr)	89		70 - 130	02/18/22 07:00	02/18/22 12:41	1

Lab Sample ID: LCS 880-19696/1-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09002		mg/Kg		90	70 - 130
Toluene	0.100	0.09048		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.1034		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.1884		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09890		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-19696/2-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19696

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08948		mg/Kg		89	70 - 130	1	35
Toluene	0.100	0.09333		mg/Kg		93	70 - 130	3	35
Ethylbenzene	0.100	0.1044		mg/Kg		104	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1926		mg/Kg		96	70 - 130	2	35
o-Xylene	0.100	0.09354		mg/Kg		94	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 880-11436-A-2-C MS

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 19696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.101	0.07205		mg/Kg		71	70 - 130
Toluene	<0.00199	U F1 F2	0.101	0.07874		mg/Kg		78	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: 880-11436-A-2-C MS

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 19696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.101	0.09275		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.202	0.1741		mg/Kg		86	70 - 130
o-Xylene	<0.00199	U F1 F2	0.101	0.09651		mg/Kg		96	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-11436-A-2-D MSD

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 19696

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	0.08192		mg/Kg		82	70 - 130	13	35
Toluene	<0.00199	U F1 F2	0.100	0.04688	F1 F2	mg/Kg		47	70 - 130	51	35
Ethylbenzene	<0.00199	U	0.100	0.08108		mg/Kg		81	70 - 130	13	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.1063	F1 F2	mg/Kg		53	70 - 130	48	35
o-Xylene	<0.00199	U F1 F2	0.100	0.2186	F1 F2	mg/Kg		219	70 - 130	77	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130
1,4-Difluorobenzene (Surr)	44	S1-	70 - 130

Lab Sample ID: MB 880-19707/5-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19707

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/18/22 08:00	02/19/22 00:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/18/22 08:00	02/19/22 00:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/18/22 08:00	02/19/22 00:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/18/22 08:00	02/19/22 00:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/18/22 08:00	02/19/22 00:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/18/22 08:00	02/19/22 00:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	02/18/22 08:00	02/19/22 00:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130	02/18/22 08:00	02/19/22 00:17	1

Lab Sample ID: LCS 880-19707/1-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08860		mg/Kg		89	70 - 130
Toluene	0.100	0.1018		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.09205		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1862		mg/Kg		93	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: LCS 880-19707/1-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.100	0.08996		mg/Kg		90	70 - 130

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

Lab Sample ID: LCSD 880-19707/2-A

Matrix: Solid

Analysis Batch: 19783

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19707

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08442		mg/Kg		84	70 - 130	5	35
Toluene	0.100	0.09326		mg/Kg		93	70 - 130	9	35
Ethylbenzene	0.100	0.09408		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1842		mg/Kg		92	70 - 130	1	35
o-Xylene	0.100	0.08941		mg/Kg		89	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-19690/1-A

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19690

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/17/22 11:56	02/19/22 12:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/17/22 11:56	02/19/22 12:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/17/22 11:56	02/19/22 12:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	02/17/22 11:56	02/19/22 12:29	1
o-Terphenyl	92		70 - 130	02/17/22 11:56	02/19/22 12:29	1

Lab Sample ID: LCS 880-19690/2-A

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19690

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	961.8		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	931.0		mg/Kg		93	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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

Lab Sample ID: LCS 880-19690/2-A

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19690

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-19690/3-A

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19690

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	972.9		mg/Kg		97	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	918.4		mg/Kg		92	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 880-11400-A-1-E MS

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 19690

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	<50.0	U	1000	1155		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	110		1000	1036		mg/Kg		93	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	76		70 - 130

Lab Sample ID: 880-11400-A-1-F MSD

Matrix: Solid

Analysis Batch: 19863

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 19690

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	<50.0	U	998	1159		mg/Kg		115	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	110		998	943.7		mg/Kg		84	70 - 130	9	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	69	S1-	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19802/1-A

Matrix: Solid

Analysis Batch: 19936

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			02/21/22 16:23	1

Lab Sample ID: LCS 880-19802/2-A

Matrix: Solid

Analysis Batch: 19936

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	261.5		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-19802/3-A

Matrix: Solid

Analysis Batch: 19936

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	262.7		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 880-11360-B-4-E MS

Matrix: Solid

Analysis Batch: 19936

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	58.0		249	306.4		mg/Kg		100	90 - 110

Lab Sample ID: 880-11360-B-4-F MSD

Matrix: Solid

Analysis Batch: 19936

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	58.0		249	306.5		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

GC VOA

Prep Batch: 19696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-19696/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19696/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19696/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11436-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-11436-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 19707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	5035	
MB 880-19707/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-19707/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-19707/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 19783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	8021B	19707
MB 880-19696/5-A	Method Blank	Total/NA	Solid	8021B	19696
MB 880-19707/5-A	Method Blank	Total/NA	Solid	8021B	19707
LCS 880-19696/1-A	Lab Control Sample	Total/NA	Solid	8021B	19696
LCS 880-19707/1-A	Lab Control Sample	Total/NA	Solid	8021B	19707
LCSD 880-19696/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19696
LCSD 880-19707/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	19707
880-11436-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	19696
880-11436-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	19696

Analysis Batch: 19999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 19690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	8015NM Prep	
MB 880-19690/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-19690/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-19690/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-11400-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-11400-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 19863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	8015B NM	19690
MB 880-19690/1-A	Method Blank	Total/NA	Solid	8015B NM	19690
LCS 880-19690/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	19690
LCSD 880-19690/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	19690
880-11400-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	19690
880-11400-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	19690

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

GC Semi VOA

Analysis Batch: 19989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 19802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Soluble	Solid	DI Leach	
MB 880-19802/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19802/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19802/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-11360-B-4-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11360-B-4-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 19936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11365-1	SW08	Soluble	Solid	300.0	19802
MB 880-19802/1-A	Method Blank	Soluble	Solid	300.0	19802
LCS 880-19802/2-A	Lab Control Sample	Soluble	Solid	300.0	19802
LCSD 880-19802/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19802
880-11360-B-4-E MS	Matrix Spike	Soluble	Solid	300.0	19802
880-11360-B-4-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19802

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Client Sample ID: SW08

Date Collected: 02/16/22 09:50

Date Received: 02/16/22 14:10

Lab Sample ID: 880-11365-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	19707	02/18/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	19783	02/19/22 05:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			19999	02/21/22 19:46	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			19989	02/21/22 19:16	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	19690	02/17/22 11:56	DM	XEN MID
Total/NA	Analysis	8015B NM		1			19863	02/19/22 20:38	AJ	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	19802	02/18/22 10:18	CH	XEN MID
Soluble	Analysis	300.0		1			19936	02/22/22 16:41	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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 Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

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 Del B 23 SWD

Job ID: 880-11365-1
SDG: 32.2075, -103.85799

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11365-1	SW08	Solid	02/16/22 09:50	02/16/22 14:10	0-3'

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



Chain of Custody

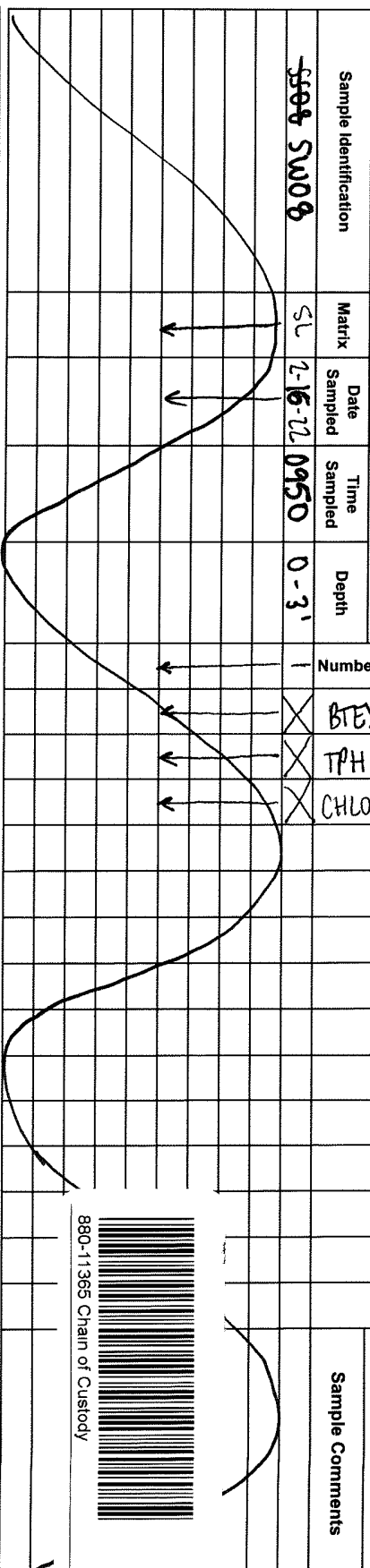
Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5540 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix, AZ (480) 355-0800
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6707
Atlanta GA (770) 449-8800

Work Order No: 11365

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Project Manager	Kalel Jennings	Bill to (if different)	Adrian Baker
Company Name	WSP USA INC	Company Name	XTO Energy INC
Address	3300 North Alhambra Blvd., Unit 222	Address	6401 N. Holiday Hill Dr
City State ZIP	Midland, TX 79705	City State ZIP	Midland, TX
Phone	817-683-2503	Email	Kalel.Jennings@wsp.com

Work Order Comments			
Program	UST/PS	☐ PRP	☐ Brownfields
		☐ RRC	☐ Superfund
State of Project:			
Reporting Level	☐ Level I	☐ PST/UST	☐ TRR
			Level II
Deliverables	EDD	☒	Adapt ☐
			Other

[illegible]

880-11365 Chain of Custody



Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020:	200.7 / 6010
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

Signature or this document and relinquishment of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, 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>Madie Green</i>	<i>Atsien Ks</i>	2/16/22 1410 ²			
2					
3					
4					
5					
6					

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-11365-1

SDG Number: 32.2075, -103.85799

Login Number: 11365

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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 Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-11801-1

Laboratory Sample Delivery Group: 32.2075, -103.85299
Client Project/Site: PLU Del B 23 SWD

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:
3/2/2022 4:47:27 PM

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 Del B 23 SWD

Laboratory Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
SQL	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 Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Job ID: 880-11801-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-11801-1

Receipt

The sample was received on 3/1/2022 8:51 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Client Sample ID: SW09

Lab Sample ID: 880-11801-1

Date Collected: 02/28/22 14:02

Matrix: Solid

Date Received: 03/01/22 08:51

Sample Depth: 0-4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/22 08:00	03/02/22 17:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/22 08:00	03/02/22 17:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/22 08:00	03/02/22 17:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/22 08:00	03/02/22 17:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/22 08:00	03/02/22 17:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/22 08:00	03/02/22 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/02/22 08:00	03/02/22 17:21	1
1,4-Difluorobenzene (Surr)	92		70 - 130	03/02/22 08:00	03/02/22 17:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/02/22 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/01/22 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/01/22 13:00	03/01/22 15:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/01/22 13:00	03/01/22 15:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/01/22 13:00	03/01/22 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	03/01/22 13:00	03/01/22 15:16	1
o-Terphenyl	75		70 - 130	03/01/22 13:00	03/01/22 15:16	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		5.03		mg/Kg			03/01/22 13:13	1

Eurofins Midland

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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)
880-11801-1	SW09	102	92
890-1988-A-3-H MS	Matrix Spike	99	101
890-1988-A-3-I MSD	Matrix Spike Duplicate	101	97
LCS 880-20437/1-A	Lab Control Sample	100	102
LCSD 880-20437/2-A	Lab Control Sample Dup	100	99
MB 880-20437/5-A	Method Blank	97	99
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)
880-11801-1	SW09	87	75
890-2016-A-1-E MS	Matrix Spike	88	84
890-2016-A-1-F MSD	Matrix Spike Duplicate	92	84
LCS 880-20521/2-A	Lab Control Sample	99	100
LCSD 880-20521/3-A	Lab Control Sample Dup	100	90
MB 880-20521/1-A	Method Blank	98	99
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-20437/5-A

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/22 08:00	03/02/22 10:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/22 08:00	03/02/22 10:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/22 08:00	03/02/22 10:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	03/02/22 08:00	03/02/22 10:49	1
1,4-Difluorobenzene (Surr)	99		70 - 130	03/02/22 08:00	03/02/22 10:49	1

Lab Sample ID: LCS 880-20437/1-A

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1060		mg/Kg		106	70 - 130
Toluene	0.100	0.09736		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09807		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2283		mg/Kg		114	70 - 130
o-Xylene	0.100	0.1117		mg/Kg		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-20437/2-A

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.1074		mg/Kg		107	70 - 130	1	35
Toluene	0.100	0.09925		mg/Kg		99	70 - 130	2	35
Ethylbenzene	0.100	0.09990		mg/Kg		100	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2315		mg/Kg		116	70 - 130	1	35
o-Xylene	0.100	0.1138		mg/Kg		114	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-1988-A-3-H MS

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.08921		mg/Kg		88	70 - 130
Toluene	<0.00200	U F1	0.100	0.07678		mg/Kg		75	70 - 130

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: 890-1988-A-3-H MS

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00200	U F1	0.100	0.07371		mg/Kg		72	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1700		mg/Kg		85	70 - 130
o-Xylene	<0.00200	U	0.100	0.08898		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-1988-A-3-I MSD

Matrix: Solid

Analysis Batch: 20657

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20437

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.07968		mg/Kg		79	70 - 130	11	35
Toluene	<0.00200	U F1	0.0998	0.06704	F1	mg/Kg		66	70 - 130	14	35
Ethylbenzene	<0.00200	U F1	0.0998	0.06299	F1	mg/Kg		62	70 - 130	16	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1442		mg/Kg		72	70 - 130	16	35
o-Xylene	<0.00200	U	0.0998	0.07696		mg/Kg		77	70 - 130	14	35

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

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

Lab Sample ID: MB 880-20521/1-A

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20521

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/28/22 14:24	03/01/22 10:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/28/22 14:24	03/01/22 10:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/22 14:24	03/01/22 10:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	02/28/22 14:24	03/01/22 10:41	1
o-Terphenyl	99		70 - 130	02/28/22 14:24	03/01/22 10:41	1

Lab Sample ID: LCS 880-20521/2-A

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	986.7		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	790.2		mg/Kg		79	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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

Lab Sample ID: LCS 880-20521/2-A

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20521

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-20521/3-A

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20521

			Spike	LCSD	LCSD				%Rec.		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	922.9		mg/Kg		92	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)			1000	778.9		mg/Kg		78	70 - 130	1	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	100		70 - 130									
o-Terphenyl	90		70 - 130									

Lab Sample ID: 890-2016-A-1-E MS

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20521

	Sample	Sample	Spike	MS	MS				%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	929.4		mg/Kg		90	70 - 130			
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	726.1		mg/Kg		73	70 - 130			
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	88		70 - 130									
o-Terphenyl	84		70 - 130									

Lab Sample ID: 890-2016-A-1-F MSD

Matrix: Solid

Analysis Batch: 20583

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 20521

	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	<50.0	U	998	922.2		mg/Kg		90	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	998	731.8		mg/Kg		73	70 - 130	1	20	
	MSD	MSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	92		70 - 130									
o-Terphenyl	84		70 - 130									

Eurofins Midland

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-20600/1-A

Matrix: Solid

Analysis Batch: 20602

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/01/22 10:57	1

Lab Sample ID: LCS 880-20600/2-A

Matrix: Solid

Analysis Batch: 20602

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	242.0		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-20600/3-A

Matrix: Solid

Analysis Batch: 20602

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	241.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-11807-A-1-C MS

Matrix: Solid

Analysis Batch: 20602

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	304		250	544.8		mg/Kg		96	90 - 110

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

GC VOA

Prep Batch: 20437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	5035	
MB 880-20437/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-20437/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-20437/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1988-A-3-H MS	Matrix Spike	Total/NA	Solid	5035	
890-1988-A-3-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 20657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	8021B	20437
MB 880-20437/5-A	Method Blank	Total/NA	Solid	8021B	20437
LCS 880-20437/1-A	Lab Control Sample	Total/NA	Solid	8021B	20437
LCSD 880-20437/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	20437
890-1988-A-3-H MS	Matrix Spike	Total/NA	Solid	8021B	20437
890-1988-A-3-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	20437

Analysis Batch: 20728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 20521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	8015NM Prep	
MB 880-20521/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-20521/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-20521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2016-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2016-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 20583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	8015B NM	20521
MB 880-20521/1-A	Method Blank	Total/NA	Solid	8015B NM	20521
LCS 880-20521/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	20521
LCSD 880-20521/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	20521
890-2016-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	20521
890-2016-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	20521

Analysis Batch: 20646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 20600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Soluble	Solid	DI Leach	
MB 880-20600/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-20600/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-20600/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

HPLC/IC (Continued)

Leach Batch: 20600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11807-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-11807-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 20602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-11801-1	SW09	Soluble	Solid	300.0	20600
MB 880-20600/1-A	Method Blank	Soluble	Solid	300.0	20600
LCS 880-20600/2-A	Lab Control Sample	Soluble	Solid	300.0	20600
LCSD 880-20600/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	20600
880-11807-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	20600
880-11807-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	20600

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Client Sample ID: SW09

Lab Sample ID: 880-11801-1

Date Collected: 02/28/22 14:02

Matrix: Solid

Date Received: 03/01/22 08:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	20437	03/02/22 08:00	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	20657	03/02/22 17:21	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			20728	03/02/22 17:39	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			20646	03/01/22 19:48	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	20521	03/01/22 13:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1			20583	03/01/22 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	20600	03/01/22 12:29	SC	XEN MID
Soluble	Analysis	300.0		1			20602	03/01/22 13:13	SC	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 Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

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 Del B 23 SWD

Job ID: 880-11801-1
SDG: 32.2075, -103.85299

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-11801-1	SW09	Solid	02/28/22 14:02	03/01/22 08:51	0-4

- 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 San Antonio TX (210) 509-3334
 Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
 Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900
 Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0747 Delray Beach FL (561) 689-6701
 Atlanta GA (770) 449-8800

Work Order No: 1184

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Project Manager	Kalei Jennings	Bill to (if different)	Adrian Baker
Company Name	WSP USA Inc	Company Name	XTD Energy, Inc
Address	3300 North Armet, Bldg 1, Unit 222	Address	6401 N. Holiday Hill Dr.
City State ZIP	Midland, TX 79705	City State ZIP	Midland, TX 79707
Phone	817-683-2503	Email	Kalei.Jennings@wsp.com

Work Order Comments	
Program: UST/PS-PRP	Brownfields RRC Superfund
State of Project	
Reporting Level: Level 1	Level 2
Deliverables: EDD	Adapt Other

Project Name	PLU DEB 23 SWD	Turn Around	
Project Number	31403236.072.0129	Routine	☐
Project Location	32.2075, -103.85299	Rush	☒
Sampler's Name	Hadi Green	Due Date	2/1/24
PO #			
SAMPLE RECEIPT			
Temperature (°C)	43/42	Temp Blank	Yes (No) Wet Ice Yes (No)
Received Intact:	Yes (No)	Thermometer ID	TRB-1
Cooler Custody Seals	Yes (No)	Correction Factor	
Sample Custody Seals	Yes (No)	Total Containers	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code
SW09	SL	2-28-22	14:02	0-4	1

TPH (EPA 8015)
 BTEX (EPA D-8021)
 CHLORIDES (EPA 300)

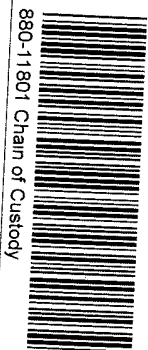
ANALYSIS REQUEST

Preservative Codes

HNO3 HN
 H2SO4 H2
 HCL HL
 None NO
 NaOH Na
 MeOH Me
 Zn Acetate+ NaOH Zn

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

Sample Comments



880-11801 Chain of Custody

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

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
Hadi Green	Hadi Green	2/1/22			
		8:51			

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 880-11801-1

SDG Number: 32.2075, -103.85299

Login Number: 11801

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 87168

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 87168
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Depth to groundwater data greater than 25 years can not be used to evaluate criteria determination. OCD was able to locate a well within 0.5 miles of the site from 2022 and used this data to support criteria determination. Please apply 19.15.29.13 NMAC when P&A.	3/10/2022