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 | NAPP2114542940 |
| District RP | |
| Facility ID | |
| Application ID | |

# Release Notification

## Responsible Party

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

## Location of Release Source

Latitude 32.21013 Longitude -103.84285
*(NAD 83 in decimal degrees to 5 decimal places)*

| | |
|---|---|
| Site Name PLU 13 DTD 901H | Site Type Production Well |
| Date Release Discovered 05/11/2021 | API# *(if applicable)* |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| D | 24 | 24S | 30E | Eddy |

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

## Nature and Volume of Release

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

| | | |
|---|---|---|
| ☒ Crude Oil | Volume Released (bbls) .04 | Volume Recovered (bbls) .03 |
| ☒ Produced Water | Volume Released (bbls) 22.63 | Volume Recovered (bbls) 14.97 |
| | 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 | Vibration caused the choke to malfunction, overlowing fluids from the frac tank. A third party contractor has been retained for remediation activities. | |

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2114542940 |
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| Facility ID | |
| Application ID | |

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

## Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell
Title: Environmental Manager
Signature:
Date: 5-25-21
email: kyle.littrell@exxonmobil.com
Telephone: 432-221-7331

**OCD Only**

Received by: Ramona Marcus
Date: 5/25/2021

NAPP2114542940

| Location: | PLU 13 DTD 901H | |
|---|---|---|
| Spill Date: | 5/11/2021 | |
| **Area 1** | | |
| Approximate Area = | 630.00 | sq. ft. |
| Average Saturation (or depth) of spill = | 4.00 | inches |
| | | |
| Average Porosity Factor = | 0.20 | |
| | | |
| VOLUME OF LEAK | | |
| Total Crude Oil = | 0.04 | bbls |
| Total Produced Water = | 22.44 | bbls |
| **Area 2** | | |
| Approximate Area = | 1728.00 | sq. ft. |
| Average Saturation (or depth) of spill = | 0.25 | inches |
| | | |
| Average Porosity Factor = | 0.03 | |
| | | |
| VOLUME OF LEAK | | |
| Total Crude Oil = | 0.00 | bbls |
| Total Produced Water = | 0.19 | bbls |

| **TOTAL VOLUME OF LEAK** | | |
|---|---|---|
| **Total Crude Oil =** | **0.04** | **bbls** |
| **Total Produced Water =** | **22.63** | **bbls** |
| **TOTAL VOLUME RECOVERED** | | |
| **Total Crude Oil =** | **0.03** | **bbls** |
| **Total Produced Water =** | **14.97** | **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

| | |
|---|---|
| Operator:<br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br>5380 |
| | Action Number:<br>29435 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| rmarcus | None | 5/25/2021 |

| | |
|---|---|
| Incident ID | NAPP2114542940 |
| District RP | |
| Facility ID | |
| Application ID | |

# Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2114542940 |
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| Facility ID | |
| Application ID | |

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/09/2021

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

**OCD Only**

Received by: Date:

| | |
|---|---|
| Incident ID | NAPP2114542940 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/09/2021

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

**OCD Only**

Received by: Date:

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

Closure Approved by: Date:

Printed Name: Title:

State of New Mexico
Oil Conservation Division

| | |
|---|---|
| Incident ID | NAPP2114542940 |
| District RP | |
| Facility ID | |
| Application ID | |

# Closure

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☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/09/2021

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

**OCD Only**

Received by: Robert Hamlet Date: 11/5/2021

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

Closure Approved by: Robert Hamlet Date: 11/5/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

August 9, 2021

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

**RE: Closure Request**
**PLU 13 DTD 901H**
**Incident Number NAPP2114542940**
**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, soil sampling, and excavation activities at the Poker Lake Unit (PLU) 13 DTD 901H (Site) in Unit D, Section 24, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of crude oil and 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 NAPP2114542940.

**RELEASE BACKGROUND**

On May 11, 2021, vibrations caused the choke to malfunction, resulting in the release of 0.04 barrels (bbls) of crude oil and 22.63 bbls of produced water onto the well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; approximately 0.03 bbls of crude oil and 14.97 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form (Form C-141) on May 25, 2021. The release was assigned Incident Number NAPP2114542940.

**SITE CHARACTERIZATION**

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled to determine depth to groundwater in the region. In November 2020, WSP installed a soil boring (C-4483) within 0.5 miles of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-4483 was drilled to a depth of 110 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered

during drilling activities. The well record and log is included in Attachment 1. The location of the borehole is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

The closest continuously flowing water or significant watercourse to the Site is an emergent wetland located approximately 1,673 feet southwest 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

**SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS**

On June 15, 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 three preliminary assessment soil samples (SS01 through SS03) within the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent of impacted soil. Soil from the preliminary soil samples was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positing 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 (Xenco) in Carlsbad, New Mexico, for analysis of BTEX

following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria in preliminary soil samples SS02 and SS03. Laboratory analytical results indicated that TPH-GRO/TPH-DRO and TPH concentrations exceeded the Closure Criteria in preliminary soil sample SS01. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

**DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES**

Between June 23, 2021 and June 24, 2021, WSP personnel returned to the Site to oversee delineation and excavation activities as indicated by visual observations, field screening activities, and laboratory analytical results for the preliminary soil samples.

Potholes PH01 and PH02 were advanced via truck-mounted backhoe to a depth of 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 1 foot to 4 feet bgs. Soil from the potholes were field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach© chloride QuanTab© test strips, respectively. Field screening results and observations for each pothole were logged on lithologic/soil sampling logs, which are included in Attachment 2. The pothole and delineation soil sample locations are presented on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico. Photographic documentation was conducted during the Site visits. A photographic log is included in Attachment 3.

Based on laboratory analytical results for the preliminary and delineation soil samples and visible staining in the release area, excavation activities were completed to remove the impacted soil. Excavation activities were performed using track-mounted backhoe and transport vehicle. To direct excavation activities, WSP screened soils for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a depth of 2 feet bgs. Following removal of impacted soil, WSP collected 5-point composite soil samples every 200 square feet from the floor 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 FS14 were collected from the floor of the excavation, from a depth of 2 feet bgs. Composite soil samples SW01 through SW04 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 2 feet bgs. The excavation soil samples were collected, handled, and analyzed as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.

The final excavation extent measured approximately 2,688 square feet. A total of approximately 199 cubic yards of impacted soil were removed during excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility located in Hobbs, New Mexico. After the completion of confirmation sampling, the excavation was secured with fencing.

**SOIL ANALYTICAL RESULTS**

Laboratory analytical results for delineation soil samples PH01A, PH01B, PH02, and PH02A indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for delineation soil sample PH01, collected at 1-foot bgs, indicated that TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria and was subsequently excavated.

Laboratory analytical results for excavation floor samples FS01 through FS14 and sidewall samples SW01 through SW04, collected from the final excavation extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. The laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 4.

**CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the May 11, 2021 release of crude oil and produced water. Based on visible staining and laboratory analytical results for the preliminary 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. Based on the excavation soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. As such, XTO respectfully requests NFA for Incident Number NAPP2114542940.

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

Sincerely,

WSP USA Inc.

Kaleb Henry
Assistant Consultant, Geologist

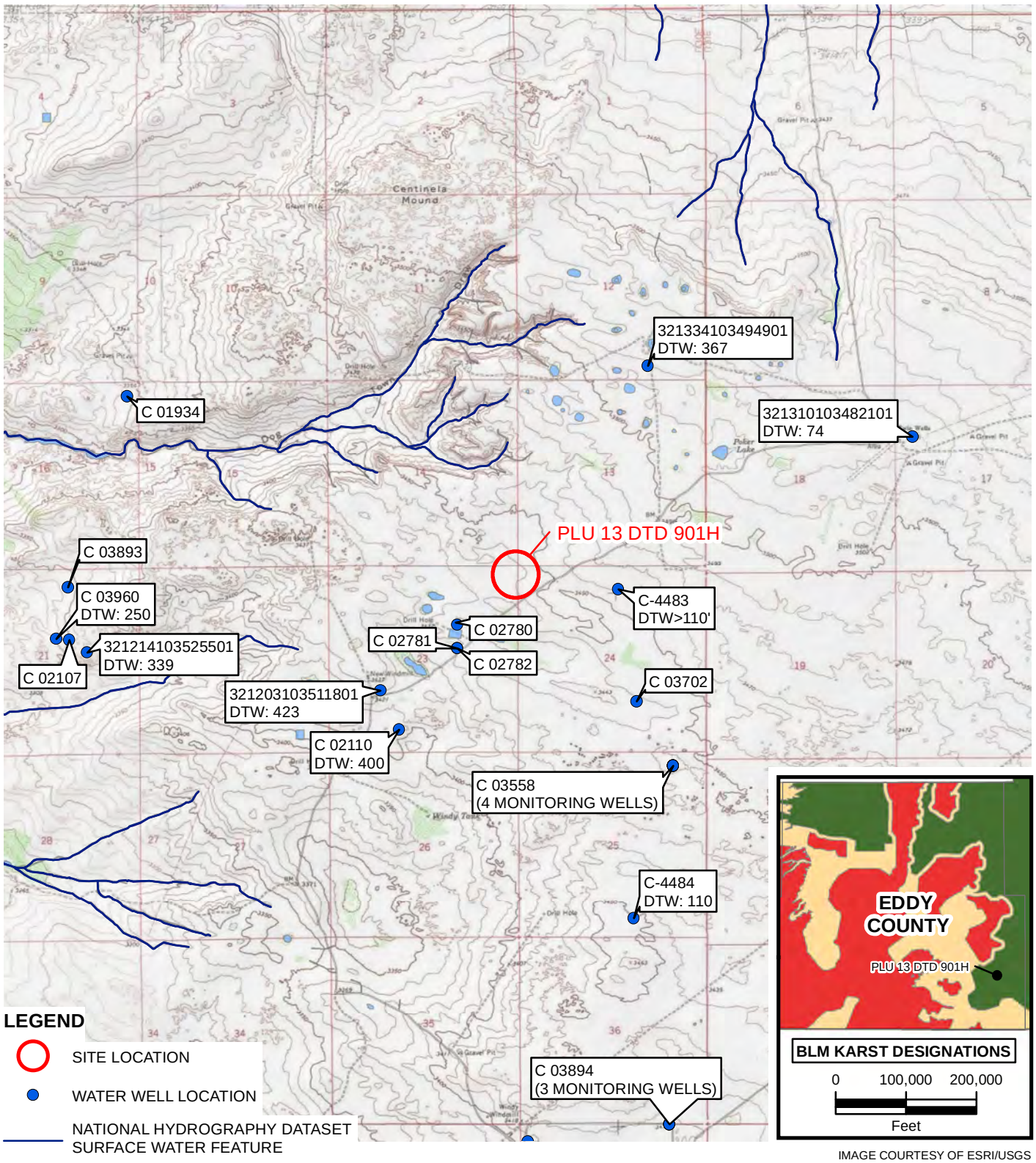
Ashley L. Ager, P.G.
Managing Director, Geologist

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

Attachments:

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

FIGURES




**LEGEND**

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NAPP2114542940

FIGURE 1
SITE LOCATION MAP
PLU 13 DTD 901H
UNIT D SEC 24 T24S R30E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC**

P:\XTO Energy\GIS\MXD\31403236.015.0129_PLU 13 DTD 901H\31403236.015_FIG01_SL_RECEPTOR_2021.mxd


IMAGE COURTESY OF ESRI

**LEGEND**

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

0 50 100
Feet

N

NOTE: INCIDENT NUMBER NAPP2114542940
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
PLU 13 DTD 901H
UNIT D SEC 24 T24S R30E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\31403236.015.0129_PLU 13 DTD 901H\31403236.015_FIG02_PRELIMINARY_2021.mxd


**LEGEND**

- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA THAT HAS BEEN REMOVED AND THE TERMINAL SAMPLE IS IN COMPLIANCE
- RELEASE EXTENT

NOTE: INCIDENT NUMBER NAPP2114542940
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
PLU 13 DTD 901H
UNIT D SEC 24 T24S R30E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\31403236.015.0129_PLU 13 DTD 901H\31403236.015_FIG03_DELINEATION_2021.mxd


**LEGEND**

FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

SIDEWALL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

EXCAVATION EXTENT

IMAGE COURTESY OF ESRI

0 50 100

Feet

N

NOTE: INCIDENT NUMBER NAPP2114542940
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
PLU 13 DTD 901H
UNIT D SEC 24 T24S R30E
EDDY COUNTY, NEW MEXICO
**XTO ENERGY, INC.**

P:\XTO Energy\GIS\MXD\31403236.015.0129_PLU 13 DTD 901H\31403236.015_FIG04_EXCAVATION_2021.mxd

TABLES

**Table 1**

**Soil Analytical Results**
**PLU 13 DTD 901H**
**Incident Number NAPP2114542940**
**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 |
| **Surface Samples** | | | | | | | | | | |
| SS01 | 06/15/2021 | 0.5 | <0.00200 | 0.943 | 5,040 | 201 | <49.9 | **5,240** | **5,240** | 77.7 |
| SS02 | 06/15/2021 | 0.5 | <0.00199 | 0.00614 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 5,930 |
| SS03 | 06/15/2021 | 0.5 | <0.00198 | <0.00397 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 371 |
| **Delineation Samples** | | | | | | | | | | |
| PH01 | 06/23/2021 | 1 | <0.00201 | 0.0642 | 1,610 | 119 | <50.0 | 1,729 | 1,730 | 2,380 |
| PH01A | 06/23/2021 | 2 | <0.00200 | <0.00400 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 1,890 |
| PH01B | 06/23/2021 | 4 | <0.00200 | <0.00399 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 1,820 |
| PH02 | 06/23/2021 | 1 | <0.00200 | <0.00399 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 818 |
| PH02A | 06/23/2021 | 4 | <0.00200 | <0.00401 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 28.2 |
| **Floor Samples** | | | | | | | | | | |
| FS01 | 06/24/2021 | 2 | <0.00200 | <0.00399 | <49.7 | <49.7 | <49.7 | <49.7 | <49.7 | 200 |
| FS02 | 06/24/2021 | 2 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 404 |
| FS03 | 06/24/2021 | 2 | <0.00201 | <0.00402 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 72.1 |
| FS04 | 06/24/2021 | 2 | <0.00202 | <0.00403 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 86.4 |
| FS05 | 06/24/2021 | 2 | <0.00201 | <0.00402 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 11.6 |
| FS06 | 06/24/2021 | 2 | <0.00200 | <0.00399 | <49.7 | <49.7 | <49.7 | <49.7 | <49.7 | 24.3 |
| FS07 | 06/24/2021 | 2 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 99.4 |
| FS08 | 06/24/2021 | 2 | <0.00200 | <0.00401 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 205 |
| FS09 | 06/24/2021 | 2 | <0.00200 | <0.00399 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 744 |
| FS10 | 06/24/2021 | 2 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 24.6 |
| FS11 | 06/24/2021 | 2 | <0.00200 | <0.00399 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 97.2 |

**Table 1**

**Soil Analytical Results**
**PLU 13 DTD 901H**
**Incident Number NAPP2114542940**
**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 |
| FS12 | 06/24/2021 | 2 | <0.00200 | <0.00401 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 56.8 |
| FS13 | 06/24/2021 | 2 | <0.00201 | <0.00402 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 10.3 |
| FS14 | 06/24/2021 | 2 | <0.00202 | <0.00403 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 12.3 |
| **Sidewall Samples** | | | | | | | | | | |
| SW01 | 06/24/2021 | 0 - 2 | <0.00201 | <0.00402 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 5.38 |
| SW02 | 06/24/2021 | 0 - 2 | <0.00201 | <0.00402 | <49.8 | <49.8 | <49.8 | <49.8 | <49.8 | 37.3 |
| SW03 | 06/24/2021 | 0 - 2 | <0.00199 | <0.00398 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | 19.7 |
| SW04 | 06/24/2021 | 0 - 2 | <0.00199 | <0.00398 | <49.9 | <49.9 | <49.9 | <49.9 | <49.9 | 60.8 |

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

ATTACHMENT 1: REFERENCED WELL RECORDS

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

12/16/2020

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

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4483 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4483 Pod1.

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

APPLICANT COPY

Sincerely,

OSE DII DEC 17 2020 PM1:55

Lucas Middleton

Enclosures: as noted above

# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIT DEC 17 2020 PM 1:55

APPLICANT COPY

### 1. GENERAL AND WELL LOCATION

| OSE POD NO. (WELL NO.) | WELL TAG ID NO. | OSE FILE NO(S). |
|---|---|---|
| POD1 (BH-01) | n/a | C-4483 |

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

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

| WELL LOCATION (FROM GPS) | | DEGREES | MINUTES | SECONDS | |
|---|---|---|---|---|---|
| | LATITUDE | 32° | 12' | 31.77" | N |
| | LONGITUDE | -104° | 50' | 0.72" | W |

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

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

NW NW NE Sec. 24 T24S R30E

### 2. DRILLING & CASING INFORMATION

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

| DRILLING STARTED | DRILLING ENDED | DEPTH OF COMPLETED WELL (FT) | BORE HOLE DEPTH (FT) | DEPTH WATER FIRST ENCOUNTERED (FT) |
|---|---|---|---|---|
| 11/24/2020 | 11/24/2020 | temporary well material | 110 | n/a |

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

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

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

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

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | BORE HOLE DIAM (inches) | CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) | CASING CONNECTION TYPE (add coupling diameter) | CASING INSIDE DIAM. (inches) | CASING WALL THICKNESS (inches) | SLOT SIZE (inches) |
|---|---|---|---|---|---|---|---|
| 0 | 110 | ±8.5 | Boring- HSA | -- | -- | -- | -- |

### 3. ANNULAR MATERIAL

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

FOR OSE INTERNAL USE

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

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

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APPLICATION COPY

**4. HYDROGEOLOGIC LOG OF WELL**

| DEPTH (feet bgl) FROM | DEPTH (feet bgl) TO | THICKNESS (feet) | COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units) | WATER BEARING? (YES / NO) | ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm) |
|---|---|---|---|---|---|
| 0 | 24 | 24 | Sand, Fine-grained,poorly-graded, with caliche, Tan-Off-White | Y ✓ N | |
| 24 | 34 | 10 | Sand, Fine-grained,poorly-graded, silty, with caliche gravel, Tan-Off-White | Y ✓ N | |
| 34 | 51 | 17 | Sand, Fine-grained,poorly-graded, silty, with caliche gravel, Light Brown | Y ✓ N | |
| 51 | 54 | 3 | Sand, Fine-grained,poorly-graded, silty, with caliche gravel, Light Brown-Brown | Y ✓ N | |
| 54 | 76 | 22 | Sand, Fine-grained,poorly-graded, Brown, dry | Y ✓ N | |
| 76 | 101 | 25 | Sand, Fine-grained,poorly-graded, Light-Brown, dry | Y ✓ N | |
| 101 | 110 | 9 | Sand, Fine-grained,poorly-graded, with gravel, Light-Brown, dry-moist | Y ✓ N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |
| | | | | Y N | |

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

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

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

**5. TEST; RIG SUPERVISION**

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

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

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

Shane Eldridge

**6. SIGNATURE**

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

Jack Atkins — Jackie D. Atkins — 12/14/20

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

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

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

OSE DII DEC 17 2020 PM1:55

# PLUGGING RECORD

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

APPLICANT COPY

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4483-POD1

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

Mailing address: 6401 Holiday Hill Dr.

City: Midland State: Texas Zip code: 79707

## II. WELL PLUGGING INFORMATION:

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

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

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

4) Date well plugging began: 11/30/2020 Date well plugging concluded: 11/30/2020

5) GPS Well Location: Latitude: 32 deg, 12 min, 31.77 sec
Longitude: -104 deg, 50 min, 0.72 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 110 ft below ground level (bgl), by the following manner: weighted tape

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

8) Date well plugging plan of operations was approved by the State Engineer: 09/29/2020

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

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

**For each interval plugged, describe within the following columns:**

| Depth (ft bgl) | Plugging Material Used (include any additives used) | Volume of Material Placed (gallons) | Theoretical Volume of Borehole/ Casing (gallons) | Placement Method (tremie pipe, other) | Comments ("casing perforated first", "open annular space also plugged", etc.) |
|---|---|---|---|---|---|
| | 0-10' Hydrated Bentonite | Approx. 26 gallons | 26 gallons | Augers | |
| | 10'-110' Drill Cuttings | Approx. 163 gallons | 163 gallons | Boring | |

OSE DII DEC 17 2020 PM1:55

APPLICANT COPY

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

**III. SIGNATURE:**

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

Jack Atkins

Signature of Well Driller

12/14/2020

Date

Version: September 8, 2009
Page 2 of 2

# 2020-12-15_C-4483_POD1_OSE_Well Record and Log_plu13-forsign

Final Audit Report 2020-12-15

| | |
|---|---|
| Created: | 2020-12-15 |
| By: | Lucas Middleton (lucas@atkinseng.com) |
| Status: | Signed |
| Transaction ID: | CBJCHBCAABAARxff6o4VHy1EHZsp0Yo_uFsm-rYe4wj2 |

APPLICANT COPY

OSE DIT DEC 17 2020 PM1:55

## "2020-12-15_C-4483_POD1_OSE_Well Record and Log_plu13-forsign" History

Document created by Lucas Middleton (lucas@atkinseng.com)
2020-12-15 - 8:03:25 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2020-12-15 - 8:03:56 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2020-12-15 - 8:27:59 PM GMT- IP address: 74.50.153.115

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2020-12-15 - 8:29:23 PM GMT - Time Source: server- IP address: 74.50.153.115

Agreement completed.
2020-12-15 - 8:29:23 PM GMT

Adobe Sign

National Water Information System: Web Interface

USGS Water Resources

Data Category: Site Information | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the **NEW** USGS National Water Dashboard to access real-time data from over 13,500 stations nationwide.
- Full News

# USGS 321203103511801 24S.30E.23.3124143

Available data for this site SUMMARY OF ALL AVAILABLE DATA | GO

## Well Site

DESCRIPTION:

Latitude 32°12'03", Longitude 103°51'18" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 474 feet
Land surface altitude: 3,423 feet above NAVD88.
Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

| Data Type | Begin Date | End Date | Count |
|---|---|---|---|
| Field groundwater-level measurements | 1959-03-26 | 1959-03-26 | 1 |
| Revisions | Unavailable (site:0) (timeseries:0) | | |

OPERATION:

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

---

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms

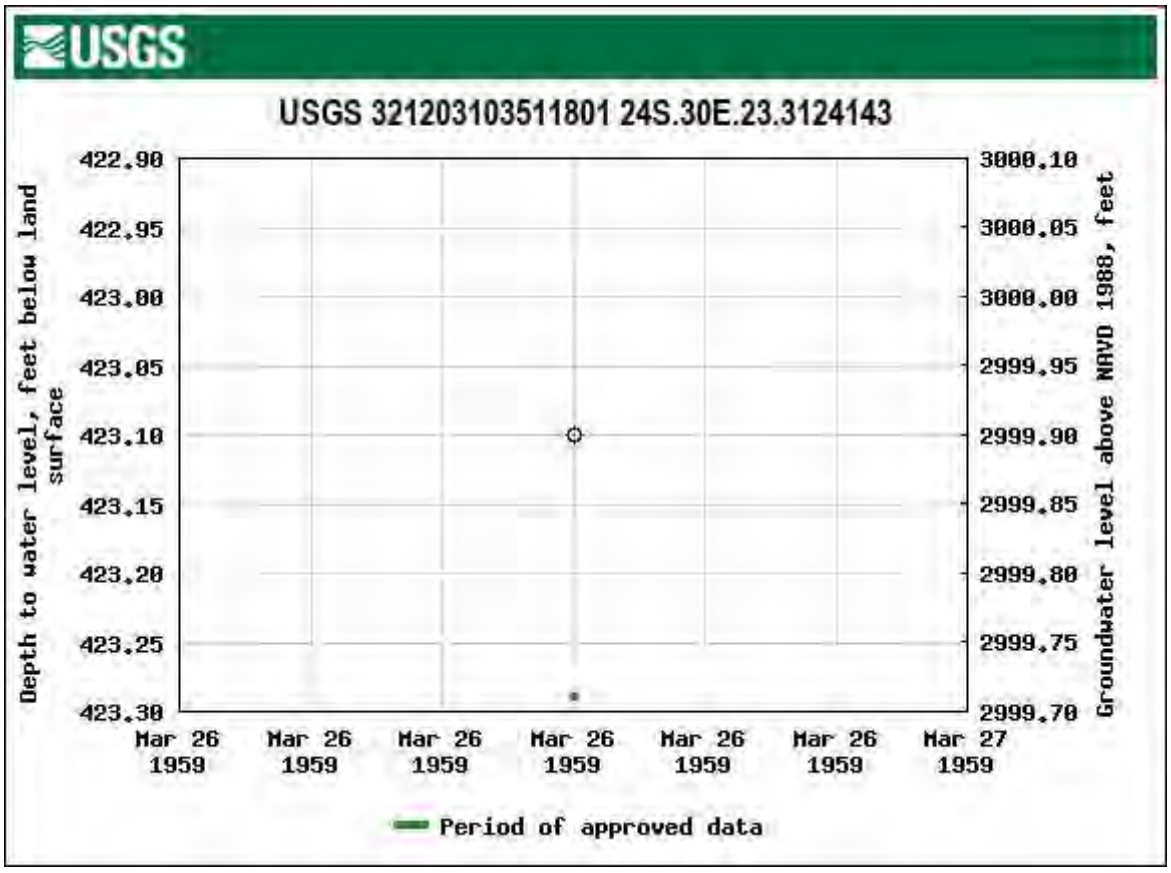
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

**Title: NWIS Site Information for USA: Site Inventory**
**URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=321203103511801**

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2021-06-07 15:43:11 EDT
0.27 0.25 caww01


USGS
USGS 321203103511801 24S.30E.23.3124143
Depth to water level, feet below land surface
422.90
422.95
423.00
423.05
423.10
423.15
423.20
423.25
423.30
Groundwater level above NAVD 1988, feet
3000.10
3000.05
3000.00
2999.95
2999.90
2999.85
2999.80
2999.75
2999.70
Mar 26 1959
Mar 26 1959
Mar 26 1959
Mar 26 1959
Mar 26 1959
Mar 26 1959
Mar 27 1959
Period of approved data

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| BH or PH Name: | Date: |
|---|---|
| PH01 | 6/23/2021 |
| Site Name: PLU 13 DTD 901H | |
| RP or Incident Number: NAPP2114542940 | |
| LTE Job Number: 31403236.015.0129 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| Logged By: LAD | Method: Backhoe |
|---|---|

| Lat/Long: | Field Screening: Chloride, PID | Hole Diameter: | 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 | SM | SANDY CLAY, dark brown, moist, fine grain, strong TPH odor, no stain |
| m | 2,273.6 | 989.4 | N | PH01 | 1' | 1 | | |
| m | 2,413.6 | 18.5 | N | PH01A | 2' | 2 | | |
| | | | | | | 3 | | |
| m | 2,732.4 | 3.0 | N | PH01B | 4' | 4 | | |

Total Depth: 4 feet bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

| BH or PH Name: | Date: |
|---|---|
| PH02 | 6/23/2021 |
| Site Name: PLU 13 DTD 901H | |
| RP or Incident Number: NAPP2114542940 | |
| LTE Job Number: 31403236.015.0129 | |

**LITHOLOGIC / SOIL SAMPLING LOG**

| Logged By: LAD | Method: Backhoe |
|---|---|

| Lat/Long: | Field Screening: Chloride, PID | Hole Diameter: | 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 | SM | SANDY CLAY, dark brown, moist, fine grain, strong TPH odor, no stain |
| m | <179.2 | 0.0 | N | PH02 | 1' | 1 | | |
| | | | | | | 2 | | |
| | | | | | | 3 | | |
| m | <179.2 | 0.1 | N | PH02A | 4' | 4 | | |

Total Depth: 4 feet bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| XTO Energy, Inc. | PLU 13 DTD 901H<br>Eddy County, New Mexico | 31403236.015.0129 |

| Photo No. | Date |
|---|---|
| 1 | June 7, 2021 |

South facing view of the release extent.

| Photo No. | Date |
|---|---|
| 2 | June 16, 2021 |

Southwest facing view of release extent.

| PHOTOGRAPHIC LOG | | |
|---|---|---|
| XTO Energy, Inc. | PLU 13 DTD 901H<br>Eddy County, New Mexico | 31403236.015.0129 |

| Photo No. | Date |
|---|---|
| 3 | June 25, 2021 |

East facing view of excavation extent.


| Photo No. | Date |
|---|---|
| 4 | June 25, 2021 |

Northeast facing view of excavation extent.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

# ANALYTICAL REPORT

Job Number: 890-808-1

Job Description: PLU 13 DTD 901H

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

Attention: Tacoma Morrissey

Approved for release.
Jessica Kramer
Project Manager
6/24/2021 10:14 AM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
06/24/2021

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

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

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

# Client Sample Result Summary



Client: WSP USA Inc.
Job ID: 890-808-1
Project/Site: PLU 13 DTD 901H

| | | | |
|---|---|---|---|
| **Lab Sample ID:** | 890-808-1 | 890-808-2 | 890-808-3 |
| **Client Sample ID:** | SS01 | SS02 | SS03 |
| **Depth:** | 0.5 | 0.5 | 0.5 |
| **Matrix:** | Solid | Solid | Solid |
| **Date Collected:** | 06/15/2021 09:33 | 06/15/2021 09:38 | 06/15/2021 09:43 |

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

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Prepared:** | 06/16/2021 10:17 | | 06/16/2021 10:17 | | 06/16/2021 10:17 | |
| | **Analyzed:** | 06/17/2021 06:26 | | 06/17/2021 06:46 | | 06/17/2021 07:07 | |
| **Analyte** | **Unit/RL:** | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Benzene | | <0.00200 U | 0.00200 | <0.00199 U | 0.00199 | <0.00198 U | 0.00198 |
| Toluene | | <0.00200 U | 0.00200 | <0.00199 U | 0.00199 | <0.00198 U | 0.00198 |
| Ethylbenzene | | **0.0855** | 0.00200 | <0.00199 U | 0.00199 | <0.00198 U | 0.00198 |
| m-Xylene & p-Xylene | | **0.566** | 0.00400 | **0.00614** | 0.00398 | <0.00397 U | 0.00397 |
| o-Xylene | | **0.291** | 0.00200 | <0.00199 U | 0.00199 | <0.00198 U | 0.00198 |
| Xylenes, Total | | **0.857** | 0.00400 | **0.00614** | 0.00398 | <0.00397 U | 0.00397 |
| Total BTEX | | **0.943** | 0.00400 | **0.00614** | 0.00398 | <0.00397 U | 0.00397 |

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

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Prepared:** | 06/22/2021 11:24 | | 06/22/2021 11:24 | | 06/22/2021 11:24 | |
| | **Analyzed:** | 06/23/2021 04:25 | | 06/23/2021 04:50 | | 06/23/2021 05:10 | |
| **Analyte** | **Unit/RL:** | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Gasoline Range Organics (GRO)-C6-C10 | | **201** | 49.9 | <49.9 U | 49.9 | <49.8 U | 49.8 |
| Diesel Range Organics (Over C10-C28) | | **5040** | 49.9 | <49.9 U | 49.9 | <49.8 U | 49.8 |
| Oil Range Organics (Over C28-C36) | | <49.9 U | 49.9 | <49.9 U | 49.9 | <49.8 U | 49.8 |
| Total TPH | | **5240** | 49.9 | <49.9 U | 49.9 | <49.8 U | 49.8 |

## Method: 300.0 - Anions, Ion Chromatography - Soluble

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Prepared:** | | | | | | |
| | **Analyzed:** | 06/16/2021 20:13 | | 06/16/2021 20:17 | | 06/16/2021 20:32 | |
| **Analyte** | **Unit/RL:** | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Chloride | | **77.7** | 5.01 | **5930** | 50.5 | **371** | 5.04 |

eurofins | Environment Testing America

# ANALYTICAL REPORT

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

Laboratory Job ID: 890-808-1
Client Project/Site: PLU 13 DTD 901H

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

Attn: Tacoma Morrissey

JKramer

*Authorized for release by:*
*6/24/2021 10:14:32 AM*

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Laboratory Job ID: 890-808-1

# Table of Contents

# Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-808-1
Project/Site: PLU 13 DTD 901H

## Qualifiers

### GC VOA

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

### GC Semi VOA

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

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| 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 13 DTD 901H

Job ID: 890-808-1

## Job ID: 890-808-1

### Laboratory: Eurofins Xenco, Carlsbad

**Narrative**

**Job Narrative**
**890-808-1**

**Receipt**
The samples were received on 6/15/2021 12:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.2°C

**Receipt Exceptions**
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS01 (890-808-1), SS02 (890-808-2) and SS03 (890-808-3).

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

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

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

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

## Client Sample ID: SS01

**Lab Sample ID: 890-808-1**
**Matrix: Solid**
**Date Collected: 06/15/21 09:33**
**Date Received: 06/15/21 12:00**
**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 | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| **Ethylbenzene** | **0.0855** | | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| **m-Xylene & p-Xylene** | **0.566** | | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| **o-Xylene** | **0.291** | | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| **Xylenes, Total** | **0.857** | | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |
| **Total BTEX** | **0.943** | | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *303* | *S1+* | *70 - 130* | *06/16/21 10:17* | *06/17/21 06:26* | *1* |
| *1,4-Difluorobenzene (Surr)* | *105* | | *70 - 130* | *06/16/21 10:17* | *06/17/21 06:26* | *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** | **201** | | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:25 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **5040** | | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:25 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:25 | 1 |
| **Total TPH** | **5240** | | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *129* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 04:25* | *1* |
| *o-Terphenyl* | *90* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 04:25* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **77.7** | | 5.01 | | mg/Kg | | | 06/16/21 20:13 | 1 |

## Client Sample ID: SS02

**Lab Sample ID: 890-808-2**
**Matrix: Solid**
**Date Collected: 06/15/21 09:38**
**Date Received: 06/15/21 12:00**
**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 | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| **m-Xylene & p-Xylene** | **0.00614** | | 0.00398 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| **Xylenes, Total** | **0.00614** | | 0.00398 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |
| **Total BTEX** | **0.00614** | | 0.00398 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 06:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *136* | *S1+* | *70 - 130* | *06/16/21 10:17* | *06/17/21 06:46* | *1* |
| *1,4-Difluorobenzene (Surr)* | *106* | | *70 - 130* | *06/16/21 10:17* | *06/17/21 06:46* | *1* |

# Client Sample Results

Client: WSP USA Inc. Job ID: 890-808-1
Project/Site: PLU 13 DTD 901H

## Client Sample ID: SS02 Lab Sample ID: 890-808-2

**Date Collected: 06/15/21 09:38** **Matrix: Solid**
**Date Received: 06/15/21 12:00**
**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 | | 06/22/21 11:24 | 06/23/21 04:50 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:50 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:50 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 04:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *111* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 04:50* | *1* |
| *o-Terphenyl* | *126* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 04:50* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **5930** | | 50.5 | | mg/Kg | | | 06/16/21 20:17 | 10 |

## Client Sample ID: SS03 Lab Sample ID: 890-808-3

**Date Collected: 06/15/21 09:43** **Matrix: Solid**
**Date Received: 06/15/21 12:00**
**Sample Depth: - 0.5**

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00198 | U | 0.00198 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| Toluene | <0.00198 | U | 0.00198 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| Ethylbenzene | <0.00198 | U | 0.00198 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| m-Xylene & p-Xylene | <0.00397 | U | 0.00397 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| o-Xylene | <0.00198 | U | 0.00198 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| Xylenes, Total | <0.00397 | U | 0.00397 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |
| Total BTEX | <0.00397 | U | 0.00397 | | mg/Kg | | 06/16/21 10:17 | 06/17/21 07:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *138* | *S1+* | *70 - 130* | *06/16/21 10:17* | *06/17/21 07:07* | *1* |
| *1,4-Difluorobenzene (Surr)* | *103* | | *70 - 130* | *06/16/21 10:17* | *06/17/21 07:07* | *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 | <49.8 | U | 49.8 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 05:10 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 05:10 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 05:10 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 06/22/21 11:24 | 06/23/21 05:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *111* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 05:10* | *1* |
| *o-Terphenyl* | *124* | | *70 - 130* | *06/22/21 11:24* | *06/23/21 05:10* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **371** | | 5.04 | | mg/Kg | | | 06/16/21 20:32 | 1 |

# Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BFB1 | DFBZ1 | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | | | |
| 890-808-1 | SS01 | 303 S1+ | 105 | | | | | | | | | | |
| 890-808-2 | SS02 | 136 S1+ | 106 | | | | | | | | | | |
| 890-808-3 | SS03 | 138 S1+ | 103 | | | | | | | | | | |
| LCS 880-4169/1-A | Lab Control Sample | 115 | 103 | | | | | | | | | | |
| LCSD 880-4169/2-A | Lab Control Sample Dup | 124 | 104 | | | | | | | | | | |
| MB 880-4155/5-A | Method Blank | 88 | 90 | | | | | | | | | | |
| MB 880-4169/5-A | Method Blank | 98 | 90 | | | | | | | | | | |

**Surrogate Legend**

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

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1CO1 | OTPH1 | | | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | | | |
| 890-808-1 | SS01 | 129 | 90 | | | | | | | | | | |
| 890-808-2 | SS02 | 111 | 126 | | | | | | | | | | |
| 890-808-3 | SS03 | 111 | 124 | | | | | | | | | | |
| LCS 880-4472/2-A | Lab Control Sample | 101 | 104 | | | | | | | | | | |
| LCSD 880-4472/3-A | Lab Control Sample Dup | 100 | 108 | | | | | | | | | | |
| MB 880-4472/1-A | Method Blank | 95 | 105 | | | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

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

**Lab Sample ID: MB 880-4155/5-A**
**Matrix: Solid**
**Analysis Batch: 4156**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4155**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 08:28 | 06/16/21 11:47 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *88* | | *70 - 130* | *06/16/21 08:28* | *06/16/21 11:47* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *06/16/21 08:28* | *06/16/21 11:47* | *1* |

**Lab Sample ID: MB 880-4169/5-A**
**Matrix: Solid**
**Analysis Batch: 4156**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4169**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/16/21 10:17 | 06/16/21 23:16 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | *06/16/21 10:17* | *06/16/21 23:16* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *06/16/21 10:17* | *06/16/21 23:16* | *1* |

**Lab Sample ID: LCS 880-4169/1-A**
**Matrix: Solid**
**Analysis Batch: 4156**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4169**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1009 | | mg/Kg | | 101 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.09800 | | mg/Kg | | 98 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.1031 | | mg/Kg | | 103 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.2214 | | mg/Kg | | 111 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.1146 | | mg/Kg | | 115 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *115* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *103* | | *70 - 130* |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

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

**Lab Sample ID: LCSD 880-4169/2-A**
**Matrix: Solid**
**Analysis Batch: 4156**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4169**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.1009 | | mg/Kg | | 101 | 70 - 130 | 0 | 35 |
| Toluene | | | 0.100 | 0.09782 | | mg/Kg | | 98 | 70 - 130 | 0 | 35 |
| Ethylbenzene | | | 0.100 | 0.1042 | | mg/Kg | | 104 | 70 - 130 | 1 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.2249 | | mg/Kg | | 112 | 70 - 130 | 2 | 35 |
| o-Xylene | | | 0.100 | 0.1160 | | mg/Kg | | 116 | 70 - 130 | 1 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *124* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *104* | | *70 - 130* |

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

**Lab Sample ID: MB 880-4472/1-A**
**Matrix: Solid**
**Analysis Batch: 4465**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4472**

| 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 | | 06/22/21 11:24 | 06/22/21 20:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/22/21 11:24 | 06/22/21 20:22 | 1 |
| OII Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/22/21 11:24 | 06/22/21 20:22 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/22/21 11:24 | 06/22/21 20:22 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *95* | | *70 - 130* | *06/22/21 11:24* | *06/22/21 20:22* | *1* |
| *o-Terphenyl* | *105* | | *70 - 130* | *06/22/21 11:24* | *06/22/21 20:22* | *1* |

**Lab Sample ID: LCS 880-4472/2-A**
**Matrix: Solid**
**Analysis Batch: 4465**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4472**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 858.8 | | mg/Kg | | 86 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 942.0 | | mg/Kg | | 94 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* |
| *o-Terphenyl* | *104* | | *70 - 130* |

**Lab Sample ID: LCSD 880-4472/3-A**
**Matrix: Solid**
**Analysis Batch: 4465**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4472**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 865.2 | | mg/Kg | | 87 | 70 - 130 | 1 | 20 |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

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

**Lab Sample ID: LCSD 880-4472/3-A**
**Matrix: Solid**
**Analysis Batch: 4465**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4472**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | | | 1000 | 968.5 | | mg/Kg | | 97 | 70 - 130 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *100* | | *70 - 130* |
| *o-Terphenyl* | *108* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-4180/1-A**
**Matrix: Solid**
**Analysis Batch: 4201**

**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 | | | 06/16/21 19:33 | 1 |

**Lab Sample ID: LCS 880-4180/2-A**
**Matrix: Solid**
**Analysis Batch: 4201**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 231.4 | | mg/Kg | | 93 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-4180/3-A**
**Matrix: Solid**
**Analysis Batch: 4201**

**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 | 231.6 | | mg/Kg | | 93 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

## GC VOA

### Prep Batch: 4155

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-4155/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 4156

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Total/NA | Solid | 8021B | 4169 |
| 890-808-2 | SS02 | Total/NA | Solid | 8021B | 4169 |
| 890-808-3 | SS03 | Total/NA | Solid | 8021B | 4169 |
| MB 880-4155/5-A | Method Blank | Total/NA | Solid | 8021B | 4155 |
| MB 880-4169/5-A | Method Blank | Total/NA | Solid | 8021B | 4169 |
| LCS 880-4169/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 4169 |
| LCSD 880-4169/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 4169 |

### Prep Batch: 4169

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Total/NA | Solid | 5035 | |
| 890-808-2 | SS02 | Total/NA | Solid | 5035 | |
| 890-808-3 | SS03 | Total/NA | Solid | 5035 | |
| MB 880-4169/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-4169/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-4169/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

## GC Semi VOA

### Analysis Batch: 4465

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Total/NA | Solid | 8015B NM | 4472 |
| 890-808-2 | SS02 | Total/NA | Solid | 8015B NM | 4472 |
| 890-808-3 | SS03 | Total/NA | Solid | 8015B NM | 4472 |
| MB 880-4472/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4472 |
| LCS 880-4472/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4472 |
| LCSD 880-4472/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4472 |

### Prep Batch: 4472

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Total/NA | Solid | 8015NM Prep | |
| 890-808-2 | SS02 | Total/NA | Solid | 8015NM Prep | |
| 890-808-3 | SS03 | Total/NA | Solid | 8015NM Prep | |
| MB 880-4472/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4472/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4472/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

## HPLC/IC

### Leach Batch: 4180

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Soluble | Solid | DI Leach | |
| 890-808-2 | SS02 | Soluble | Solid | DI Leach | |
| 890-808-3 | SS03 | Soluble | Solid | DI Leach | |
| MB 880-4180/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4180/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4180/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

# QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

## HPLC/IC

### Analysis Batch: 4201

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Soluble | Solid | 300.0 | 4180 |
| 890-808-2 | SS02 | Soluble | Solid | 300.0 | 4180 |
| 890-808-3 | SS03 | Soluble | Solid | 300.0 | 4180 |
| MB 880-4180/1-A | Method Blank | Soluble | Solid | 300.0 | 4180 |
| LCS 880-4180/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4180 |
| LCSD 880-4180/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4180 |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

## Client Sample ID: SS01

**Lab Sample ID: 890-808-1**

**Date Collected: 06/15/21 09:33**
**Matrix: Solid**
**Date Received: 06/15/21 12:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4169 | 06/16/21 10:17 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4156 | 06/17/21 06:26 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4472 | 06/22/21 11:24 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4465 | 06/23/21 04:25 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4180 | 06/16/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4201 | 06/16/21 20:13 | CH | XEN MID |

## Client Sample ID: SS02

**Lab Sample ID: 890-808-2**

**Date Collected: 06/15/21 09:38**
**Matrix: Solid**
**Date Received: 06/15/21 12:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4169 | 06/16/21 10:17 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4156 | 06/17/21 06:46 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4472 | 06/22/21 11:24 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4465 | 06/23/21 04:50 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4180 | 06/16/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 10 | 4201 | 06/16/21 20:17 | CH | XEN MID |

## Client Sample ID: SS03

**Lab Sample ID: 890-808-3**

**Date Collected: 06/15/21 09:43**
**Matrix: Solid**
**Date Received: 06/15/21 12:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4169 | 06/16/21 10:17 | KL | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4156 | 06/17/21 07:07 | KL | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4472 | 06/22/21 11:24 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4465 | 06/23/21 05:10 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4180 | 06/16/21 11:58 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4201 | 06/16/21 20:32 | 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.
Job ID: 890-808-1
Project/Site: PLU 13 DTD 901H

## Laboratory: Eurofins Xenco, Midland

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

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

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

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

# Method Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (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.

**Laboratory References:**

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

# Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-808-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-808-1 | SS01 | Solid | 06/15/21 09:33 | 06/15/21 12:00 | - 0.5 |
| 890-808-2 | SS02 | Solid | 06/15/21 09:38 | 06/15/21 12:00 | - 0.5 |
| 890-808-3 | SS03 | Solid | 06/15/21 09:43 | 06/15/21 12:00 | - 0.5 |

# Chain of Custody

XENCO LABORATORIES

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

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**Work Order No:** _____



| | | | |
|---|---|---|---|
| Project Manager: | Tacoma Morrissey | Bill to: (if different) | Kyle Littrell |
| Company Name: | WSP USA Inc. | Company Name: | XTO Energy |
| Address: | 3300 North A Street | Address: | 3104 E Green Street |
| City, State ZIP: | Midland, TX 79705 | City, State ZIP: | Carlsbad, NM 88220 |
| Phone: | 432.236.3849 | Email: | luis.delval@wsp.com; tacoma.morrissey@wsp.com |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | PLU 13 DTD 901H | Turn Around | |
| Project Number: | 31403236.015.0129 | Routine ☒ 5day | |
| P.O. Number: | CC: 1665071001 | Rush: | |
| Sampler's Name: | Luis Del Val | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No | |
| Temperature (°C): | 10.4 | Thermometer ID | | |
| Received Intact: | (Yes) No | | T-NM-007 | |
| Cooler Custody Seals: | Yes No (N/A) | Correction Factor: | 10.2 | |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | | |

**ANALYSIS REQUEST**

**Work Order Notes**

Incident #: NAPP2114542940

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 0=8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| SS01 | S | 6/15/2021 | 933 | 0.5' | 1 | X | X | X | |
| SS02 | S | 6/15/2021 | 938 | 0.5' | 1 | X | X | X | |
| SS03 | S | 6/15/2021 | 943 | 0.5' | 1 | X | X | X | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

890-808 Chain of Custody

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

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

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

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | Gabby Urdiales | 6/15/21 12:00 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev 2018.1

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

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler | Lab PM: Kramer Jessica | Carrier Tracking No(s): | COC No: 890-262.1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone | E-Mail: jessica kramer@eurofinset com | State of Origin: New Mexico | Page: Page 1 of 1 |
| Company: Eurofins Xenco | | Accreditations Required (See note): NELAP - Louisiana NELAP - Texas | | Job #: 890-808-1 |
| Address: 1211 W Florida Ave | Due Date Requested: 6/21/2021 | | | |
| City: Midland | TAT Requested (days): | | | |
| State Zip: TX 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email | WO #: | | | |
| Project Name: PLU 13 DTD 901H | Project #: 89000004 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8015MOD_NM/8015NM_S_Prep Full TPH | 300_ORGFM_28D/DI_LEACH Chloride | 8021B/5035FP_Calc BTEX | Total Number of containers | Special Instructions/Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Preservation Code: | | | | | | | | | | | |
| SS01 (890-808-1) | 6/15/21 | 09 33 Mountain | | Solid | | | X | X | X | 1 | |
| SS02 (890-808-2) | 6/15/21 | 09 38 Mountain | | Solid | | | X | X | X | 1 | |
| SS03 (890-808-3) | 6/15/21 | 09 43 Mountain | | Solid | | | X | X | X | 1 | |

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

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

| Empty Kit Relinquished by | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Gabby Drabner | 6/15/21 | | | 6-16-21 11:30a.m | |
| 2 | Relinquished by | Date/Time: | Company | Received by | Date/Time: | Company |
| 3 | Relinquished by | Date/Time: | Company | Received by | Date/Time | Company |

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

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-808-1
SDG Number:

**Login Number: 808**
**List Number: 1**
**Creator: Ordonez, Gabby**

**List Source: Eurofins Xenco, Carlsbad**

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

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-808-1
SDG Number:

**Login Number: 808**
**List Number: 2**
**Creator: Copeland, Tatiana**

**List Source: Eurofins Xenco, Midland**
**List Creation: 06/16/21 11:39 AM**

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

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# ANALYTICAL REPORT

Job Number: 890-868-1

SDG Number: 31403236.015.0129

Job Description: PLU 13 DTD 901H

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
6/30/2021 4:17 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
06/30/2021

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

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

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

# Client Sample Result Summary



Client: WSP USA Inc.
Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H
SDG: 31403236.015.0129

| | | | | | |
|---|---|---|---|---|---|
| **Lab Sample ID:** | 890-868-1 | 890-868-2 | 890-868-3 | 890-868-4 | 890-868-5 |
| **Client Sample ID:** | PH01 | PH01A | PH01B | PH02 | PH02A |
| **Depth:** | 1 | 2 | 4 | 1 | 4 |
| **Matrix:** | Solid | Solid | Solid | Solid | Solid |
| **Date Collected:** | 06/23/2021 11:33 | 06/23/2021 11:38 | 06/23/2021 11:43 | 06/23/2021 12:25 | 06/23/2021 12:36 |

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

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Prepared:** | 06/25/2021 15:19 | | 06/25/2021 15:19 | | 06/25/2021 15:19 | | 06/25/2021 15:19 | | 06/25/2021 15:19 | |
| **Analyzed:** | 06/26/2021 21:14 | | 06/26/2021 21:40 | | 06/26/2021 22:05 | | 06/26/2021 22:31 | | 06/26/2021 22:56 | |
| **Analyte** | **Unit/RL:** mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Benzene | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 |
| Toluene | **0.0608** | 0.00201 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 |
| Ethylbenzene | **0.00337** | 0.00201 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 |
| m-Xylene & p-Xylene | <0.00402 U | 0.00402 | <0.00400 U | 0.00400 | <0.00399 U | 0.00399 | <0.00399 U | 0.00399 | <0.00401 U | 0.00401 |
| o-Xylene | <0.00201 U | 0.00201 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 | <0.00200 U | 0.00200 |
| Xylenes, Total | <0.00402 U | 0.00402 | <0.00400 U | 0.00400 | <0.00399 U | 0.00399 | <0.00399 U | 0.00399 | <0.00401 U | 0.00401 |
| Total BTEX | **0.0642** | 0.00402 | <0.00400 U | 0.00400 | <0.00399 U | 0.00399 | <0.00399 U | 0.00399 | <0.00401 U | 0.00401 |

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

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Prepared:** | 06/25/2021 14:16 | | 06/25/2021 14:16 | | 06/25/2021 14:16 | | 06/25/2021 14:16 | | 06/25/2021 14:16 | |
| **Analyzed:** | 06/26/2021 04:01 | | 06/26/2021 04:23 | | 06/26/2021 04:44 | | 06/26/2021 05:05 | | 06/26/2021 05:26 | |
| **Analyte** | **Unit/RL:** mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Gasoline Range Organics (GRO)-C6-C10 | **119** | 50.0 | <50.0 U | 50.0 | <49.8 U | 49.8 | <50.0 U | 50.0 | <49.9 U | 49.9 |
| Diesel Range Organics (Over C10-C28) | **1610** | 50.0 | <50.0 U | 50.0 | <49.8 U | 49.8 | <50.0 U | 50.0 | <49.9 U | 49.9 |
| Oil Range Organics (Over C28-C36) | <50.0 U | 50.0 | <50.0 U | 50.0 | <49.8 U | 49.8 | <50.0 U | 50.0 | <49.9 U | 49.9 |
| Total TPH | **1730** | 50.0 | <50.0 U | 50.0 | <49.8 U | 49.8 | <50.0 U | 50.0 | <49.9 U | 49.9 |

## Method: 300.0 - Anions, Ion Chromatography - Soluble

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Prepared:** | | | | | | | | | | |
| **Analyzed:** | 06/30/2021 10:14 | | 06/30/2021 10:19 | | 06/30/2021 10:24 | | 06/30/2021 10:29 | | 06/30/2021 10:33 | |
| **Analyte** | **Unit/RL:** mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL | mg/Kg | RL |
| Chloride | **2380** | 24.8 | **1890** | 25.2 | **1820** | 25.0 | **818** | 4.97 | **28.2** | 5.01 |

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# ANALYTICAL REPORT

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

Laboratory Job ID: 890-868-1
Laboratory Sample Delivery Group: 31403236.015.0129
Client Project/Site: PLU 13 DTD 901H

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

Attn: Dan Moir

JKramer

*Authorized for release by:*
*6/30/2021 4:17:11 PM*

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



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

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Laboratory Job ID: 890-868-1
SDG: 31403236.015.0129

# Table of Contents

# Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## 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 |
|---|---|
| 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 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

## Job ID: 890-868-1

### Laboratory: Eurofins Xenco, Carlsbad

**Narrative**

**Job Narrative**
**890-868-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 6/24/2021 10:22 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 was 3.0º C.

**Receipt Exceptions**

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH01 (890-868-1), PH01A (890-868-2), PH01B (890-868-3), PH02 (890-868-4) and PH02A (890-868-5).

**GC VOA**
Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: PH01 (890-868-1), PH01A (890-868-2) and PH02A (890-868-5). The sample(s) shows evidence of matrix interference.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-4647 and analytical batch 880-4608 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

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

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

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

## Client Sample ID: PH01

**Lab Sample ID: 890-868-1**
**Matrix: Solid**
**Date Collected: 06/23/21 11:33**
**Date Received: 06/24/21 10:22**
**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 | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| **Toluene** | **0.0608** | | 0.00201 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| **Ethylbenzene** | **0.00337** | | 0.00201 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |
| **Total BTEX** | **0.0642** | | 0.00402 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *91* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 21:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 21:14* | *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** | **119** | | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:01 | 1 |
| **Diesel Range Organics (Over C10-C28)** | **1610** | | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:01 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:01 | 1 |
| **Total TPH** | **1730** | | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *107* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:01* | *1* |
| *o-Terphenyl* | *91* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:01* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **2380** | | 24.8 | | mg/Kg | | | 06/30/21 10:14 | 5 |

## Client Sample ID: PH01A

**Lab Sample ID: 890-868-2**
**Matrix: Solid**
**Date Collected: 06/23/21 11:38**
**Date Received: 06/24/21 10:22**
**Sample Depth: - 2**

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 21:40 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *84* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 21:40* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 21:40* | *1* |

# Client Sample Results

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Client Sample ID: PH01A
**Lab Sample ID: 890-868-2**
**Date Collected: 06/23/21 11:38** **Matrix: Solid**
**Date Received: 06/24/21 10:22**
**Sample Depth: - 2**

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:23 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:23 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:23 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:23* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:23* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1890** | | 25.2 | | mg/Kg | | | 06/30/21 10:19 | 5 |

## Client Sample ID: PH01B
**Lab Sample ID: 890-868-3**
**Date Collected: 06/23/21 11:43** **Matrix: Solid**
**Date Received: 06/24/21 10:22**
**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 | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:05* | *1* |
| *1,4-Difluorobenzene (Surr)* | *100* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:05* | *1* |

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8 | U | 49.8 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:44 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:44 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:44 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 04:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *102* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:44* | *1* |
| *o-Terphenyl* | *113* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 04:44* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **1820** | | 25.0 | | mg/Kg | | | 06/30/21 10:24 | 5 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

## Client Sample ID: PH02

**Lab Sample ID: 890-868-4**
**Matrix: Solid**
**Date Collected: 06/23/21 12:25**
**Date Received: 06/24/21 10:22**
**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 | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:31 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:31* | *1* |
| *1,4-Difluorobenzene (Surr)* | *98* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:31* | *1* |

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:05 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:05 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:05 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *104* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 05:05* | *1* |
| *o-Terphenyl* | *112* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 05:05* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **818** | | 4.97 | | mg/Kg | | | 06/30/21 10:29 | 1 |

## Client Sample ID: PH02A

**Lab Sample ID: 890-868-5**
**Matrix: Solid**
**Date Collected: 06/23/21 12:36**
**Date Received: 06/24/21 10:22**
**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 | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 22:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *86* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:56* | *1* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 22:56* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

**Client Sample ID: PH02A**
**Date Collected: 06/23/21 12:36**
**Date Received: 06/24/21 10:22**
**Sample Depth: - 4**

**Lab Sample ID: 890-868-5**
**Matrix: Solid**

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

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9 | U | 49.9 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:26 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:26 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:26 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/25/21 14:16 | 06/26/21 05:26 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *96* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 05:26* | *1* |
| *o-Terphenyl* | *104* | | *70 - 130* | *06/25/21 14:16* | *06/26/21 05:26* | *1* |

## Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **28.2** | | 5.01 | | mg/Kg | | | 06/30/21 10:33 | 1 |

# Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | BFB1 | DFBZ1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 890-868-1 | PH01 | 91 | 90 |
| 890-868-2 | PH01A | 84 | 94 |
| 890-868-3 | PH01B | 93 | 100 |
| 890-868-4 | PH02 | 94 | 98 |
| 890-868-5 | PH02A | 86 | 93 |
| LCS 880-4647/1-A | Lab Control Sample | 86 | 101 |
| LCSD 880-4647/2-A | Lab Control Sample Dup | 83 | 102 |
| MB 880-4593/5-A | Method Blank | 58 S1- | 83 |
| MB 880-4647/5-A | Method Blank | 56 S1- | 84 |

**Surrogate Legend**

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

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | 1CO1 | OTPH1 |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) |
| 890-868-1 | PH01 | 107 | 91 |
| 890-868-2 | PH01A | 101 | 111 |
| 890-868-3 | PH01B | 102 | 113 |
| 890-868-4 | PH02 | 104 | 112 |
| 890-868-5 | PH02A | 96 | 104 |
| LCS 880-4640/2-A | Lab Control Sample | 103 | 100 |
| LCSD 880-4640/3-A | Lab Control Sample Dup | 98 | 97 |
| MB 880-4640/1-A | Method Blank | 101 | 113 |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

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

**Lab Sample ID: MB 880-4593/5-A**
**Matrix: Solid**
**Analysis Batch: 4608**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4593**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/24/21 13:24 | 06/26/21 01:41 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *58* | *S1-* | *70 - 130* | *06/24/21 13:24* | *06/26/21 01:41* | *1* |
| *1,4-Difluorobenzene (Surr)* | *83* | | *70 - 130* | *06/24/21 13:24* | *06/26/21 01:41* | *1* |

**Lab Sample ID: MB 880-4647/5-A**
**Matrix: Solid**
**Analysis Batch: 4608**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4647**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/25/21 15:19 | 06/26/21 14:55 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *56* | *S1-* | *70 - 130* | *06/25/21 15:19* | *06/26/21 14:55* | *1* |
| *1,4-Difluorobenzene (Surr)* | *84* | | *70 - 130* | *06/25/21 15:19* | *06/26/21 14:55* | *1* |

**Lab Sample ID: LCS 880-4647/1-A**
**Matrix: Solid**
**Analysis Batch: 4608**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4647**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08830 | | mg/Kg | | 88 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.08240 | | mg/Kg | | 82 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.07737 | | mg/Kg | | 77 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.1645 | | mg/Kg | | 82 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.09031 | | mg/Kg | | 90 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *86* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *101* | | *70 - 130* |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

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

**Lab Sample ID: LCSD 880-4647/2-A**
**Matrix: Solid**
**Analysis Batch: 4608**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4647**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08880 | | mg/Kg | | 89 | 70 - 130 | 1 | 35 |
| Toluene | | | 0.100 | 0.08283 | | mg/Kg | | 83 | 70 - 130 | 1 | 35 |
| Ethylbenzene | | | 0.100 | 0.07670 | | mg/Kg | | 77 | 70 - 130 | 1 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.1626 | | mg/Kg | | 81 | 70 - 130 | 1 | 35 |
| o-Xylene | | | 0.100 | 0.08401 | | mg/Kg | | 84 | 70 - 130 | 7 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *83* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *102* | | *70 - 130* |

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

**Lab Sample ID: MB 880-4640/1-A**
**Matrix: Solid**
**Analysis Batch: 4609**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4640**

| 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 | | 06/25/21 14:16 | 06/25/21 21:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/25/21 21:17 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/25/21 21:17 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/25/21 14:16 | 06/25/21 21:17 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* | *06/25/21 14:16* | *06/25/21 21:17* | *1* |
| *o-Terphenyl* | *113* | | *70 - 130* | *06/25/21 14:16* | *06/25/21 21:17* | *1* |

**Lab Sample ID: LCS 880-4640/2-A**
**Matrix: Solid**
**Analysis Batch: 4609**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4640**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 991.5 | | mg/Kg | | 99 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1068 | | mg/Kg | | 107 | 70 - 130 | | |

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

**Lab Sample ID: LCSD 880-4640/3-A**
**Matrix: Solid**
**Analysis Batch: 4609**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4640**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 908.3 | | mg/Kg | | 91 | 70 - 130 | 9 | 20 |

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# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

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

**Lab Sample ID: LCSD 880-4640/3-A**
**Matrix: Solid**
**Analysis Batch: 4609**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4640**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (Over C10-C28) | | | 1000 | 1034 | | mg/Kg | | 103 | 70 - 130 | 3 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *98* | | *70 - 130* |
| *o-Terphenyl* | *97* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-4680/1-A**
**Matrix: Solid**
**Analysis Batch: 4736**

**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 | | | 06/30/21 08:17 | 1 |

**Lab Sample ID: LCS 880-4680/2-A**
**Matrix: Solid**
**Analysis Batch: 4736**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 250 | 242.1 | | mg/Kg | | 97 | 90 - 110 | | |

**Lab Sample ID: LCSD 880-4680/3-A**
**Matrix: Solid**
**Analysis Batch: 4736**

**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 | 242.5 | | mg/Kg | | 97 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## GC VOA

### Prep Batch: 4593

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 880-4593/5-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 4608

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Total/NA | Solid | 8021B | 4647 |
| 890-868-2 | PH01A | Total/NA | Solid | 8021B | 4647 |
| 890-868-3 | PH01B | Total/NA | Solid | 8021B | 4647 |
| 890-868-4 | PH02 | Total/NA | Solid | 8021B | 4647 |
| 890-868-5 | PH02A | Total/NA | Solid | 8021B | 4647 |
| MB 880-4593/5-A | Method Blank | Total/NA | Solid | 8021B | 4593 |
| MB 880-4647/5-A | Method Blank | Total/NA | Solid | 8021B | 4647 |
| LCS 880-4647/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 4647 |
| LCSD 880-4647/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 4647 |

### Prep Batch: 4647

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Total/NA | Solid | 5035 | |
| 890-868-2 | PH01A | Total/NA | Solid | 5035 | |
| 890-868-3 | PH01B | Total/NA | Solid | 5035 | |
| 890-868-4 | PH02 | Total/NA | Solid | 5035 | |
| 890-868-5 | PH02A | Total/NA | Solid | 5035 | |
| MB 880-4647/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-4647/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-4647/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

## GC Semi VOA

### Analysis Batch: 4609

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Total/NA | Solid | 8015B NM | 4640 |
| 890-868-2 | PH01A | Total/NA | Solid | 8015B NM | 4640 |
| 890-868-3 | PH01B | Total/NA | Solid | 8015B NM | 4640 |
| 890-868-4 | PH02 | Total/NA | Solid | 8015B NM | 4640 |
| 890-868-5 | PH02A | Total/NA | Solid | 8015B NM | 4640 |
| MB 880-4640/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4640 |
| LCS 880-4640/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4640 |
| LCSD 880-4640/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4640 |

### Prep Batch: 4640

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Total/NA | Solid | 8015NM Prep | |
| 890-868-2 | PH01A | Total/NA | Solid | 8015NM Prep | |
| 890-868-3 | PH01B | Total/NA | Solid | 8015NM Prep | |
| 890-868-4 | PH02 | Total/NA | Solid | 8015NM Prep | |
| 890-868-5 | PH02A | Total/NA | Solid | 8015NM Prep | |
| MB 880-4640/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4640/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4640/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## HPLC/IC

### Leach Batch: 4680

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Soluble | Solid | DI Leach | |
| 890-868-2 | PH01A | Soluble | Solid | DI Leach | |
| 890-868-3 | PH01B | Soluble | Solid | DI Leach | |
| 890-868-4 | PH02 | Soluble | Solid | DI Leach | |
| 890-868-5 | PH02A | Soluble | Solid | DI Leach | |
| MB 880-4680/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4680/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4680/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |

### Analysis Batch: 4736

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Soluble | Solid | 300.0 | 4680 |
| 890-868-2 | PH01A | Soluble | Solid | 300.0 | 4680 |
| 890-868-3 | PH01B | Soluble | Solid | 300.0 | 4680 |
| 890-868-4 | PH02 | Soluble | Solid | 300.0 | 4680 |
| 890-868-5 | PH02A | Soluble | Solid | 300.0 | 4680 |
| MB 880-4680/1-A | Method Blank | Soluble | Solid | 300.0 | 4680 |
| LCS 880-4680/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4680 |
| LCSD 880-4680/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4680 |

# Lab Chronicle

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Client Sample ID: PH01 Lab Sample ID: 890-868-1

**Date Collected: 06/23/21 11:33** **Matrix: Solid**
**Date Received: 06/24/21 10:22**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4647 | 06/25/21 15:19 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4608 | 06/26/21 21:14 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4640 | 06/25/21 14:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4609 | 06/26/21 04:01 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | 4736 | 06/30/21 10:14 | CH | XEN MID |

## Client Sample ID: PH01A Lab Sample ID: 890-868-2

**Date Collected: 06/23/21 11:38** **Matrix: Solid**
**Date Received: 06/24/21 10:22**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4647 | 06/25/21 15:19 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4608 | 06/26/21 21:40 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4640 | 06/25/21 14:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4609 | 06/26/21 04:23 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | 4736 | 06/30/21 10:19 | CH | XEN MID |

## Client Sample ID: PH01B Lab Sample ID: 890-868-3

**Date Collected: 06/23/21 11:43** **Matrix: Solid**
**Date Received: 06/24/21 10:22**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4647 | 06/25/21 15:19 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4608 | 06/26/21 22:05 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4640 | 06/25/21 14:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4609 | 06/26/21 04:44 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 5 | 4736 | 06/30/21 10:24 | CH | XEN MID |

## Client Sample ID: PH02 Lab Sample ID: 890-868-4

**Date Collected: 06/23/21 12:25** **Matrix: Solid**
**Date Received: 06/24/21 10:22**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4647 | 06/25/21 15:19 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4608 | 06/26/21 22:31 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4640 | 06/25/21 14:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4609 | 06/26/21 05:05 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4736 | 06/30/21 10:29 | CH | XEN MID |

# Lab Chronicle

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Client Sample ID: PH02A
**Lab Sample ID: 890-868-5**

**Date Collected: 06/23/21 12:36** **Matrix: Solid**
**Date Received: 06/24/21 10:22**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4647 | 06/25/21 15:19 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4608 | 06/26/21 22:56 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4640 | 06/25/21 14:16 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4609 | 06/26/21 05:26 | AJ | XEN MID |
| Soluble | Leach | DI Leach | | | 4680 | 06/28/21 10:31 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4736 | 06/30/21 10:33 | 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. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Laboratory: Eurofins Xenco, Midland

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

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

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

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

# Method Summary

Client: WSP USA Inc. Job ID: 890-868-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (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.

**Laboratory References:**

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

# Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-868-1
SDG: 31403236.015.0129

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-868-1 | PH01 | Solid | 06/23/21 11:33 | 06/24/21 10:22 | - 1 |
| 890-868-2 | PH01A | Solid | 06/23/21 11:38 | 06/24/21 10:22 | - 2 |
| 890-868-3 | PH01B | Solid | 06/23/21 11:43 | 06/24/21 10:22 | - 4 |
| 890-868-4 | PH02 | Solid | 06/23/21 12:25 | 06/24/21 10:22 | - 1 |
| 890-868-5 | PH02A | Solid | 06/23/21 12:36 | 06/24/21 10:22 | - 4 |

# Chain of Custody

XENCO LABORATORIES

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

www.xenco.com Page 1 of 1

**Work Order No:** _____



| | | | |
|---|---|---|---|
| Project Manager: | Tacoma Morrissey | Bill to: (if different) | Kyle Littrell |
| Company Name: | WSP USA Inc. | Company Name: | XTO Energy |
| Address: | 3300 North A Street | Address: | 3104 E Green Street |
| City, State ZIP: | Midland, TX 79705 | City, State ZIP: | Carlsbad, NM 88220 |
| Phone: | 432.236.3849 | Email: | luis.delval@wsp.com; tacoma.morrissey@wsp.com |

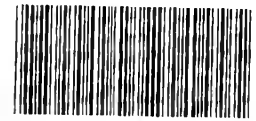
**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | PLU 13 DTD 901H | Turn Around | |
| Project Number: | 31403236.015.0129 | Routine | ☒ |
| P.O. Number: | CC: 1665071001 | Rush: | |
| Sampler's Name: | Luis Del Val | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | Yes (No) | Wet Ice: | (Yes) No | |
| Temperature (°C): | 3.2/3.0 | Thermometer ID | | |
| Received Intact: | (Yes) No | | ENM-007 | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No N/A | Total Containers: | | |

**ANALYSIS REQUEST**


890-868 Chain of Custody

**Work Order Notes**

Incident Number:
NAPP2114542940

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| PH01 | S | 6/23/2021 | 1133 | 1' | 1 | X | X | X | |
| PH01A | S | 6/23/2021 | 1138 | 2' | 1 | X | X | X | |
| PH01B | S | 6/23/2021 | 1143 | 4' | 1 | X | X | X | |
| PH02 | S | 6/23/2021 | 1225 | 1' | 1 | X | X | X | |
| PH02A | S | 6/23/2021 | 1236 | 4' | 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 Tl Sn U V Zn

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



| | Relinquished by: (Signature) | Received by: (Signature) | Date/Time | | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|---|---|
| 1 | | | 6/24/21 @ 1015 | 2 | | | 6-24-21 1022 |
| 3 | | | | 4 | | | |
| 5 | | | | 6 | | | |

Revised Date 051418 Rev 2018 1

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-868-1
SDG Number: 31403236.015.0129

**Login Number: 868**
**List Number: 1**
**Creator: Clifton, Cloe**

**List Source: Eurofins Xenco, Carlsbad**

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

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-868-1
SDG Number: 31403236.015.0129

**Login Number: 868**
**List Number: 2**
**Creator: Copeland, Tatiana**

**List Source: Eurofins Xenco, Midland**
**List Creation: 06/25/21 11:11 AM**

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

eurofins | Environment Testing America

# ANALYTICAL REPORT

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

Laboratory Job ID: 890-873-1
Laboratory Sample Delivery Group: 31403236.015.0129
Client Project/Site: PLU 13 DTD 901H
Revision: 1

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

Attn: Tacoma Morrissey

JKramer

*Authorized for release by:*
*7/1/2021 1:27:06 PM*

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



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

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

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Laboratory Job ID: 890-873-1
SDG: 31403236.015.0129

# Table of Contents

# Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-873-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Qualifiers

### GC VOA

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

### GC Semi VOA

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

### HPLC/IC

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

## Glossary

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

# Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Job ID: 890-873-1

### Laboratory: Eurofins Xenco, Carlsbad

**Narrative**

**Job Narrative**
**890-873-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 6/25/2021 10:08 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 was 2.8º C.

**Receipt Exceptions**

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS01 (890-873-1), FS02 (890-873-2), FS03 (890-873-3), FS04 (890-873-4), FS05 (890-873-5), FS06 (890-873-6), FS07 (890-873-7), FS08 (890-873-8), FS09 (890-873-9), FS10 (890-873-10), FS11 (890-873-11), FS12 (890-873-12), FS13 (890-873-13), FS14 (890-873-14), SW01 (890-873-15), SW02 (890-873-16), SW03 (890-873-17) and SW04 (890-873-18).

**GC VOA**
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-4727 and analytical batch 880-4730 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: FS01 (890-873-1), FS14 (890-873-14), SW01 (890-873-15), (880-3474-A-1-C MS) and (880-3474-A-1-D 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**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

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

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

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS01

**Lab Sample ID: 890-873-1**
**Matrix: Solid**
**Date Collected: 06/24/21 11:13**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 16:54* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 16:54* | *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 | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *92* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:08* | *1* |
| *o-Terphenyl* | *103* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:08* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **200** | | 4.99 | | mg/Kg | | | 06/30/21 01:53 | 1 |

## Client Sample ID: FS02

**Lab Sample ID: 890-873-2**
**Matrix: Solid**
**Date Collected: 06/24/21 11:17**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:14 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *105* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:14* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:14* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS02

**Date Collected: 06/24/21 11:17**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-2

**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 | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *93* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:12* | *1* |
| *o-Terphenyl* | *103* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:12* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **404** | | 5.04 | | mg/Kg | | | 06/30/21 01:58 | 1 |

## Client Sample ID: FS03

**Date Collected: 06/24/21 11:20**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-3

**Matrix: Solid**

### 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 | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:35* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:35* | *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 | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *96* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:34* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:34* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **72.1** | | 5.05 | | mg/Kg | | | 06/30/21 02:02 | 1 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS04

**Lab Sample ID: 890-873-4**
**Matrix: Solid**
**Date Collected: 06/24/21 11:27**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 17:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *122* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:55* | *1* |
| *1,4-Difluorobenzene (Surr)* | *91* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 17:55* | *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 | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *94* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:55* | *1* |
| *o-Terphenyl* | *102* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:55* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **86.4** | | 5.04 | | mg/Kg | | | 06/30/21 02:17 | 1 |

## Client Sample ID: FS05

**Lab Sample ID: 890-873-5**
**Matrix: Solid**
**Date Collected: 06/24/21 11:31**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:16* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:16* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS05

**Date Collected: 06/24/21 11:31**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-5

**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 | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *96* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:17* | *1* |
| *o-Terphenyl* | *106* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:17* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **11.6** | | 4.97 | | mg/Kg | | | 06/30/21 02:21 | 1 |

## Client Sample ID: FS06

**Date Collected: 06/24/21 11:34**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-6

**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 | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *109* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:36* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:36* | *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 | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:39 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:39 | 1 |
| Oil Range Organics (Over C28-C36) | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:39 | 1 |
| Total TPH | <49.7 | U | 49.7 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:39 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:39* | *1* |
| *o-Terphenyl* | *106* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:39* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **24.3** | | 4.96 | | mg/Kg | | | 06/30/21 02:26 | 1 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS07

**Lab Sample ID: 890-873-7**
**Matrix: Solid**
**Date Collected: 06/24/21 11:37**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 18:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:57* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 18:57* | *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 | | 06/28/21 13:55 | 06/29/21 02:00 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:00 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:00 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *98* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 02:00* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 02:00* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **99.4** | | 4.96 | | mg/Kg | | | 06/30/21 02:31 | 1 |

## Client Sample ID: FS08

**Lab Sample ID: 890-873-8**
**Matrix: Solid**
**Date Collected: 06/24/21 11:42**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 19:17* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 19:17* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS08

**Lab Sample ID: 890-873-8**
**Matrix: Solid**
**Date Collected: 06/24/21 11:42**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/28/21 13:55 | 06/29/21 02:22 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:22 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:22 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 02:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 02:22* | *1* |
| *o-Terphenyl* | *105* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 02:22* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **205** | | 4.99 | | mg/Kg | | | 06/30/21 02:35 | 1 |

## Client Sample ID: FS09

**Lab Sample ID: 890-873-9**
**Matrix: Solid**
**Date Collected: 06/24/21 11:43**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 19:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 19:37* | *1* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 19:37* | *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 | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *94* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:03* | *1* |
| *o-Terphenyl* | *97* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:03* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **744** | **F1** | 5.03 | | mg/Kg | | | 06/30/21 02:40 | 1 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS10

**Lab Sample ID: 890-873-10**
**Matrix: Solid**
**Date Collected: 06/24/21 11:47**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:27 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *130* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 21:27* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 21:27* | *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 | | 06/28/21 13:55 | 06/28/21 22:25 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:25 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:25 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *89* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:25* | *1* |
| *o-Terphenyl* | *99* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:25* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **24.6** | | 4.97 | | mg/Kg | | | 06/30/21 02:54 | 1 |

## Client Sample ID: FS11

**Lab Sample ID: 890-873-11**
**Matrix: Solid**
**Date Collected: 06/24/21 11:50**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| m-Xylene & p-Xylene | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| Xylenes, Total | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |
| Total BTEX | <0.00399 | U | 0.00399 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 21:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *113* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 21:47* | *1* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 21:47* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS11

**Lab Sample ID: 890-873-11**
**Matrix: Solid**
**Date Collected: 06/24/21 11:50**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/28/21 13:55 | 06/28/21 22:47 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:47 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:47 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *99* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:47* | *1* |
| *o-Terphenyl* | *107* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:47* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **97.2** | | 4.99 | | mg/Kg | | | 06/30/21 02:59 | 1 |

## Client Sample ID: FS12

**Lab Sample ID: 890-873-12**
**Matrix: Solid**
**Date Collected: 06/24/21 11:53**
**Date Received: 06/25/21 10:08**
**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 | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| m-Xylene & p-Xylene | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| Xylenes, Total | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |
| Total BTEX | <0.00401 | U | 0.00401 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:08* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:08* | *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 | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *86* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:08* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:08* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **56.8** | | 5.01 | | mg/Kg | | | 06/30/21 03:13 | 1 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS13

**Date Collected: 06/24/21 11:57**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-13

**Matrix: Solid**

### 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 | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *111* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:28* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:28* | *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 | | 06/28/21 13:55 | 06/28/21 23:29 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:29 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:29 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *104* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:29* | *1* |
| *o-Terphenyl* | *112* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:29* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **10.3** | | 5.00 | | mg/Kg | | | 06/30/21 03:18 | 1 |

## Client Sample ID: FS14

**Date Collected: 06/24/21 12:00**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

## Lab Sample ID: 890-873-14

**Matrix: Solid**

### 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 | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| Toluene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| Ethylbenzene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| m-Xylene & p-Xylene | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| o-Xylene | <0.00202 | U | 0.00202 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| Xylenes, Total | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |
| Total BTEX | <0.00403 | U | 0.00403 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 22:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *147* | *S1+* | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:49* | *1* |
| *1,4-Difluorobenzene (Surr)* | *86* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 22:49* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS14

**Lab Sample ID: 890-873-14**
**Matrix: Solid**
**Date Collected: 06/24/21 12:00**
**Date Received: 06/25/21 10:08**
**Sample Depth: - 2**

### 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 | | 06/28/21 13:55 | 06/28/21 23:50 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:50 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:50 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 23:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *90* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:50* | *1* |
| *o-Terphenyl* | *97* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 23:50* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **12.3** | | 5.01 | | mg/Kg | | | 06/30/21 03:22 | 1 |

## Client Sample ID: SW01

**Lab Sample ID: 890-873-15**
**Matrix: Solid**
**Date Collected: 06/24/21 12:03**
**Date Received: 06/25/21 10:08**
**Sample Depth: 2 - 0**

### 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 | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *137* | *S1+* | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:09* | *1* |
| *1,4-Difluorobenzene (Surr)* | *87* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:09* | *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 | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *86* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:12* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:12* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **5.38** | | 4.99 | | mg/Kg | | | 06/30/21 03:27 | 1 |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: SW02

**Lab Sample ID: 890-873-16**
**Matrix: Solid**
**Date Collected: 06/24/21 12:08**
**Date Received: 06/25/21 10:08**
**Sample Depth: 2 - 0**

### 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 | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| Toluene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| Ethylbenzene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| m-Xylene & p-Xylene | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| o-Xylene | <0.00201 | U | 0.00201 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| Xylenes, Total | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |
| Total BTEX | <0.00402 | U | 0.00402 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:30* | *1* |
| *1,4-Difluorobenzene (Surr)* | *92* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:30* | *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 | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Oil Range Organics (Over C28-C36) | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |
| Total TPH | <49.8 | U | 49.8 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *94* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:34* | *1* |
| *o-Terphenyl* | *105* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:34* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **37.3** | | 5.04 | | mg/Kg | | | 06/30/21 03:32 | 1 |

## Client Sample ID: SW03

**Lab Sample ID: 890-873-17**
**Matrix: Solid**
**Date Collected: 06/24/21 12:12**
**Date Received: 06/25/21 10:08**
**Sample Depth: 2 - 0**

### 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 | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 23:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *109* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:50* | *1* |
| *1,4-Difluorobenzene (Surr)* | *97* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 23:50* | *1* |

# Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: SW03

**Date Collected: 06/24/21 12:12**
**Date Received: 06/25/21 10:08**
**Sample Depth: 2 - 0**

## Lab Sample ID: 890-873-17

**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 | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 00:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *86* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:55* | *1* |
| *o-Terphenyl* | *95* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 00:55* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19.7** | | 4.99 | | mg/Kg | | | 06/30/21 03:37 | 1 |

## Client Sample ID: SW04

**Date Collected: 06/24/21 12:18**
**Date Received: 06/25/21 10:08**
**Sample Depth: 2 - 0**

## Lab Sample ID: 890-873-18

**Matrix: Solid**

### 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 | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| Toluene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| Ethylbenzene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| m-Xylene & p-Xylene | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| o-Xylene | <0.00199 | U | 0.00199 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| Xylenes, Total | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |
| Total BTEX | <0.00398 | U | 0.00398 | | mg/Kg | | 06/29/21 10:36 | 06/30/21 00:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *70 - 130* | *06/29/21 10:36* | *06/30/21 00:10* | *1* |
| *1,4-Difluorobenzene (Surr)* | *94* | | *70 - 130* | *06/29/21 10:36* | *06/30/21 00:10* | *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 | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Diesel Range Organics (Over C10-C28) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Oil Range Organics (Over C28-C36) | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |
| Total TPH | <49.9 | U | 49.9 | | mg/Kg | | 06/28/21 13:55 | 06/29/21 01:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *84* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:17* | *1* |
| *o-Terphenyl* | *89* | | *70 - 130* | *06/28/21 13:55* | *06/29/21 01:17* | *1* |

### Method: 300.0 - Anions, Ion Chromatography - Soluble

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **60.8** | | 5.03 | | mg/Kg | | | 06/30/21 03:41 | 1 |

# Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | BFB1 (70-130) | DFBZ1 (70-130) |
| 890-873-1 | FS01 | 102 | 94 |
| 890-873-2 | FS02 | 105 | 94 |
| 890-873-3 | FS03 | 102 | 94 |
| 890-873-4 | FS04 | 122 | 91 |
| 890-873-5 | FS05 | 104 | 94 |
| 890-873-6 | FS06 | 109 | 94 |
| 890-873-7 | FS07 | 103 | 94 |
| 890-873-8 | FS08 | 104 | 94 |
| 890-873-9 | FS09 | 104 | 93 |
| 890-873-10 | FS10 | 130 | 90 |
| 890-873-11 | FS11 | 113 | 90 |
| 890-873-12 | FS12 | 102 | 92 |
| 890-873-13 | FS13 | 111 | 94 |
| 890-873-14 | FS14 | 147 S1+ | 86 |
| 890-873-15 | SW01 | 137 S1+ | 87 |
| 890-873-16 | SW02 | 104 | 92 |
| 890-873-17 | SW03 | 109 | 97 |
| 890-873-18 | SW04 | 104 | 94 |
| LCS 880-4727/1-A | Lab Control Sample | 93 | 90 |
| LCSD 880-4727/2-A | Lab Control Sample Dup | 93 | 90 |
| MB 880-4727/5-A | Method Blank | 114 | 93 |

**Surrogate Legend**

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

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| Lab Sample ID | Client Sample ID | 1CO1 (70-130) | OTPH1 (70-130) |
| 890-873-1 | FS01 | 92 | 103 |
| 890-873-1 MS | FS01 | 97 | 99 |
| 890-873-1 MSD | FS01 | 114 | 118 |
| 890-873-2 | FS02 | 93 | 103 |
| 890-873-3 | FS03 | 96 | 107 |
| 890-873-4 | FS04 | 94 | 102 |
| 890-873-5 | FS05 | 96 | 106 |
| 890-873-6 | FS06 | 97 | 106 |
| 890-873-7 | FS07 | 98 | 111 |
| 890-873-8 | FS08 | 97 | 105 |
| 890-873-9 | FS09 | 94 | 97 |
| 890-873-10 | FS10 | 89 | 99 |
| 890-873-11 | FS11 | 99 | 107 |
| 890-873-12 | FS12 | 86 | 95 |
| 890-873-13 | FS13 | 104 | 112 |
| 890-873-14 | FS14 | 90 | 97 |
| 890-873-15 | SW01 | 86 | 95 |
| 890-873-16 | SW02 | 94 | 105 |

# Surrogate Summary

Client: WSP USA Inc. Job ID: 890-873-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1CO1 | OTPH1 | | | | | | | | |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | | | | | | | | |
| 890-873-17 | SW03 | 86 | 95 | | | | | | | | |
| 890-873-18 | SW04 | 84 | 89 | | | | | | | | |
| LCS 880-4704/2-A | Lab Control Sample | 101 | 104 | | | | | | | | |
| LCSD 880-4704/3-A | Lab Control Sample Dup | 102 | 105 | | | | | | | | |
| MB 880-4704/1-A | Method Blank | 98 | 111 | | | | | | | | |

**Surrogate Legend**

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

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

### Lab Sample ID: MB 880-4727/5-A
**Matrix: Solid**
**Analysis Batch: 4730**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4727**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| Toluene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| Ethylbenzene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| m-Xylene & p-Xylene | <0.00400 | U | 0.00400 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| o-Xylene | <0.00200 | U | 0.00200 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| Xylenes, Total | <0.00400 | U | 0.00400 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |
| Total BTEX | <0.00400 | U | 0.00400 | | mg/Kg | | 06/29/21 10:36 | 06/29/21 16:05 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *114* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 16:05* | *1* |
| *1,4-Difluorobenzene (Surr)* | *93* | | *70 - 130* | *06/29/21 10:36* | *06/29/21 16:05* | *1* |

### Lab Sample ID: LCS 880-4727/1-A
**Matrix: Solid**
**Analysis Batch: 4730**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4727**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08331 | | mg/Kg | | 83 | 70 - 130 | | |
| Toluene | | | 0.100 | 0.1026 | | mg/Kg | | 103 | 70 - 130 | | |
| Ethylbenzene | | | 0.100 | 0.1105 | | mg/Kg | | 111 | 70 - 130 | | |
| m-Xylene & p-Xylene | | | 0.200 | 0.2255 | | mg/Kg | | 113 | 70 - 130 | | |
| o-Xylene | | | 0.100 | 0.1105 | | mg/Kg | | 111 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* |

### Lab Sample ID: LCSD 880-4727/2-A
**Matrix: Solid**
**Analysis Batch: 4730**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4727**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 0.100 | 0.08665 | | mg/Kg | | 87 | 70 - 130 | 4 | 35 |
| Toluene | | | 0.100 | 0.1041 | | mg/Kg | | 104 | 70 - 130 | 1 | 35 |
| Ethylbenzene | | | 0.100 | 0.1108 | | mg/Kg | | 111 | 70 - 130 | 0 | 35 |
| m-Xylene & p-Xylene | | | 0.200 | 0.2259 | | mg/Kg | | 113 | 70 - 130 | 0 | 35 |
| o-Xylene | | | 0.100 | 0.1099 | | mg/Kg | | 110 | 70 - 130 | 1 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *93* | | *70 - 130* |
| *1,4-Difluorobenzene (Surr)* | *90* | | *70 - 130* |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

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

**Lab Sample ID: MB 880-4704/1-A**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| 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 | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Diesel Range Organics (Over C10-C28) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Oil Range Organics (Over C28-C36) | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |
| Total TPH | <50.0 | U | 50.0 | | mg/Kg | | 06/28/21 13:55 | 06/28/21 22:03 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1-Chlorooctane* | *98* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:03* | *1* |
| *o-Terphenyl* | *111* | | *70 - 130* | *06/28/21 13:55* | *06/28/21 22:03* | *1* |

**Lab Sample ID: LCS 880-4704/2-A**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 930.1 | | mg/Kg | | 93 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 988.6 | | mg/Kg | | 99 | 70 - 130 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *101* | | *70 - 130* |
| *o-Terphenyl* | *104* | | *70 - 130* |

**Lab Sample ID: LCSD 880-4704/3-A**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | | | 1000 | 897.2 | | mg/Kg | | 90 | 70 - 130 | 4 | 20 |
| Diesel Range Organics (Over C10-C28) | | | 1000 | 996.2 | | mg/Kg | | 100 | 70 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *102* | | *70 - 130* |
| *o-Terphenyl* | *105* | | *70 - 130* |

**Lab Sample ID: 890-873-1 MS**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: FS01**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO)-C6-C10 | <49.7 | U | 999 | 904.5 | | mg/Kg | | 91 | 70 - 130 | | |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 999 | 1008 | | mg/Kg | | 101 | 70 - 130 | | |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

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

**Lab Sample ID: 890-873-1 MS**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: FS01**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *97* | | *70 - 130* |
| *o-Terphenyl* | *99* | | *70 - 130* |

**Lab Sample ID: 890-873-1 MSD**
**Matrix: Solid**
**Analysis Batch: 4694**

**Client Sample ID: FS01**
**Prep Type: Total/NA**
**Prep Batch: 4704**

| 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 | <49.7 | U | 997 | 1101 | | mg/Kg | | 110 | 70 - 130 | 20 | 20 |
| Diesel Range Organics (Over C10-C28) | <49.7 | U | 997 | 1221 | | mg/Kg | | 122 | 70 - 130 | 19 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1-Chlorooctane* | *114* | | *70 - 130* |
| *o-Terphenyl* | *118* | | *70 - 130* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 880-4681/1-A**
**Matrix: Solid**
**Analysis Batch: 4737**

**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 | | | 06/30/21 01:20 | 1 |

**Lab Sample ID: LCS 880-4681/2-A**
**Matrix: Solid**
**Analysis Batch: 4737**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 250 | 240.2 | | mg/Kg | | 96 | 90 - 110 |

**Lab Sample ID: LCSD 880-4681/3-A**
**Matrix: Solid**
**Analysis Batch: 4737**

**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 | 241.2 | | mg/Kg | | 96 | 90 - 110 | 0 | 20 |

**Lab Sample ID: 890-873-9 MS**
**Matrix: Solid**
**Analysis Batch: 4737**

**Client Sample ID: FS09**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 744 | F1 | 252 | 965.8 | F1 | mg/Kg | | 88 | 90 - 110 |

# QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 890-873-9 MSD**
**Matrix: Solid**
**Analysis Batch: 4737**

**Client Sample ID: FS09**
**Prep Type: Soluble**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 744 | F1 | 252 | 968.2 | F1 | mg/Kg | | 89 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## GC VOA

### Prep Batch: 4727

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Total/NA | Solid | 5035 | |
| 890-873-2 | FS02 | Total/NA | Solid | 5035 | |
| 890-873-3 | FS03 | Total/NA | Solid | 5035 | |
| 890-873-4 | FS04 | Total/NA | Solid | 5035 | |
| 890-873-5 | FS05 | Total/NA | Solid | 5035 | |
| 890-873-6 | FS06 | Total/NA | Solid | 5035 | |
| 890-873-7 | FS07 | Total/NA | Solid | 5035 | |
| 890-873-8 | FS08 | Total/NA | Solid | 5035 | |
| 890-873-9 | FS09 | Total/NA | Solid | 5035 | |
| 890-873-10 | FS10 | Total/NA | Solid | 5035 | |
| 890-873-11 | FS11 | Total/NA | Solid | 5035 | |
| 890-873-12 | FS12 | Total/NA | Solid | 5035 | |
| 890-873-13 | FS13 | Total/NA | Solid | 5035 | |
| 890-873-14 | FS14 | Total/NA | Solid | 5035 | |
| 890-873-15 | SW01 | Total/NA | Solid | 5035 | |
| 890-873-16 | SW02 | Total/NA | Solid | 5035 | |
| 890-873-17 | SW03 | Total/NA | Solid | 5035 | |
| 890-873-18 | SW04 | Total/NA | Solid | 5035 | |
| MB 880-4727/5-A | Method Blank | Total/NA | Solid | 5035 | |
| LCS 880-4727/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| LCSD 880-4727/2-A | Lab Control Sample Dup | Total/NA | Solid | 5035 | |

### Analysis Batch: 4730

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Total/NA | Solid | 8021B | 4727 |
| 890-873-2 | FS02 | Total/NA | Solid | 8021B | 4727 |
| 890-873-3 | FS03 | Total/NA | Solid | 8021B | 4727 |
| 890-873-4 | FS04 | Total/NA | Solid | 8021B | 4727 |
| 890-873-5 | FS05 | Total/NA | Solid | 8021B | 4727 |
| 890-873-6 | FS06 | Total/NA | Solid | 8021B | 4727 |
| 890-873-7 | FS07 | Total/NA | Solid | 8021B | 4727 |
| 890-873-8 | FS08 | Total/NA | Solid | 8021B | 4727 |
| 890-873-9 | FS09 | Total/NA | Solid | 8021B | 4727 |
| 890-873-10 | FS10 | Total/NA | Solid | 8021B | 4727 |
| 890-873-11 | FS11 | Total/NA | Solid | 8021B | 4727 |
| 890-873-12 | FS12 | Total/NA | Solid | 8021B | 4727 |
| 890-873-13 | FS13 | Total/NA | Solid | 8021B | 4727 |
| 890-873-14 | FS14 | Total/NA | Solid | 8021B | 4727 |
| 890-873-15 | SW01 | Total/NA | Solid | 8021B | 4727 |
| 890-873-16 | SW02 | Total/NA | Solid | 8021B | 4727 |
| 890-873-17 | SW03 | Total/NA | Solid | 8021B | 4727 |
| 890-873-18 | SW04 | Total/NA | Solid | 8021B | 4727 |
| MB 880-4727/5-A | Method Blank | Total/NA | Solid | 8021B | 4727 |
| LCS 880-4727/1-A | Lab Control Sample | Total/NA | Solid | 8021B | 4727 |
| LCSD 880-4727/2-A | Lab Control Sample Dup | Total/NA | Solid | 8021B | 4727 |

## GC Semi VOA

### Analysis Batch: 4694

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Total/NA | Solid | 8015B NM | 4704 |

# QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## GC Semi VOA (Continued)

### Analysis Batch: 4694 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-2 | FS02 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-3 | FS03 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-4 | FS04 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-5 | FS05 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-6 | FS06 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-7 | FS07 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-8 | FS08 | Total/NA | Solid | 8015B NM | 4704 |
| MB 880-4704/1-A | Method Blank | Total/NA | Solid | 8015B NM | 4704 |
| LCS 880-4704/2-A | Lab Control Sample | Total/NA | Solid | 8015B NM | 4704 |
| LCSD 880-4704/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-1 MS | FS01 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-1 MSD | FS01 | Total/NA | Solid | 8015B NM | 4704 |

### Analysis Batch: 4696

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-9 | FS09 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-10 | FS10 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-11 | FS11 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-12 | FS12 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-13 | FS13 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-14 | FS14 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-15 | SW01 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-16 | SW02 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-17 | SW03 | Total/NA | Solid | 8015B NM | 4704 |
| 890-873-18 | SW04 | Total/NA | Solid | 8015B NM | 4704 |

### Prep Batch: 4704

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Total/NA | Solid | 8015NM Prep | |
| 890-873-2 | FS02 | Total/NA | Solid | 8015NM Prep | |
| 890-873-3 | FS03 | Total/NA | Solid | 8015NM Prep | |
| 890-873-4 | FS04 | Total/NA | Solid | 8015NM Prep | |
| 890-873-5 | FS05 | Total/NA | Solid | 8015NM Prep | |
| 890-873-6 | FS06 | Total/NA | Solid | 8015NM Prep | |
| 890-873-7 | FS07 | Total/NA | Solid | 8015NM Prep | |
| 890-873-8 | FS08 | Total/NA | Solid | 8015NM Prep | |
| 890-873-9 | FS09 | Total/NA | Solid | 8015NM Prep | |
| 890-873-10 | FS10 | Total/NA | Solid | 8015NM Prep | |
| 890-873-11 | FS11 | Total/NA | Solid | 8015NM Prep | |
| 890-873-12 | FS12 | Total/NA | Solid | 8015NM Prep | |
| 890-873-13 | FS13 | Total/NA | Solid | 8015NM Prep | |
| 890-873-14 | FS14 | Total/NA | Solid | 8015NM Prep | |
| 890-873-15 | SW01 | Total/NA | Solid | 8015NM Prep | |
| 890-873-16 | SW02 | Total/NA | Solid | 8015NM Prep | |
| 890-873-17 | SW03 | Total/NA | Solid | 8015NM Prep | |
| 890-873-18 | SW04 | Total/NA | Solid | 8015NM Prep | |
| MB 880-4704/1-A | Method Blank | Total/NA | Solid | 8015NM Prep | |
| LCS 880-4704/2-A | Lab Control Sample | Total/NA | Solid | 8015NM Prep | |
| LCSD 880-4704/3-A | Lab Control Sample Dup | Total/NA | Solid | 8015NM Prep | |
| 890-873-1 MS | FS01 | Total/NA | Solid | 8015NM Prep | |
| 890-873-1 MSD | FS01 | Total/NA | Solid | 8015NM Prep | |

# QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## HPLC/IC

### Leach Batch: 4681

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Soluble | Solid | DI Leach | |
| 890-873-2 | FS02 | Soluble | Solid | DI Leach | |
| 890-873-3 | FS03 | Soluble | Solid | DI Leach | |
| 890-873-4 | FS04 | Soluble | Solid | DI Leach | |
| 890-873-5 | FS05 | Soluble | Solid | DI Leach | |
| 890-873-6 | FS06 | Soluble | Solid | DI Leach | |
| 890-873-7 | FS07 | Soluble | Solid | DI Leach | |
| 890-873-8 | FS08 | Soluble | Solid | DI Leach | |
| 890-873-9 | FS09 | Soluble | Solid | DI Leach | |
| 890-873-10 | FS10 | Soluble | Solid | DI Leach | |
| 890-873-11 | FS11 | Soluble | Solid | DI Leach | |
| 890-873-12 | FS12 | Soluble | Solid | DI Leach | |
| 890-873-13 | FS13 | Soluble | Solid | DI Leach | |
| 890-873-14 | FS14 | Soluble | Solid | DI Leach | |
| 890-873-15 | SW01 | Soluble | Solid | DI Leach | |
| 890-873-16 | SW02 | Soluble | Solid | DI Leach | |
| 890-873-17 | SW03 | Soluble | Solid | DI Leach | |
| 890-873-18 | SW04 | Soluble | Solid | DI Leach | |
| MB 880-4681/1-A | Method Blank | Soluble | Solid | DI Leach | |
| LCS 880-4681/2-A | Lab Control Sample | Soluble | Solid | DI Leach | |
| LCSD 880-4681/3-A | Lab Control Sample Dup | Soluble | Solid | DI Leach | |
| 890-873-9 MS | FS09 | Soluble | Solid | DI Leach | |
| 890-873-9 MSD | FS09 | Soluble | Solid | DI Leach | |

### Analysis Batch: 4737

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Soluble | Solid | 300.0 | 4681 |
| 890-873-2 | FS02 | Soluble | Solid | 300.0 | 4681 |
| 890-873-3 | FS03 | Soluble | Solid | 300.0 | 4681 |
| 890-873-4 | FS04 | Soluble | Solid | 300.0 | 4681 |
| 890-873-5 | FS05 | Soluble | Solid | 300.0 | 4681 |
| 890-873-6 | FS06 | Soluble | Solid | 300.0 | 4681 |
| 890-873-7 | FS07 | Soluble | Solid | 300.0 | 4681 |
| 890-873-8 | FS08 | Soluble | Solid | 300.0 | 4681 |
| 890-873-9 | FS09 | Soluble | Solid | 300.0 | 4681 |
| 890-873-10 | FS10 | Soluble | Solid | 300.0 | 4681 |
| 890-873-11 | FS11 | Soluble | Solid | 300.0 | 4681 |
| 890-873-12 | FS12 | Soluble | Solid | 300.0 | 4681 |
| 890-873-13 | FS13 | Soluble | Solid | 300.0 | 4681 |
| 890-873-14 | FS14 | Soluble | Solid | 300.0 | 4681 |
| 890-873-15 | SW01 | Soluble | Solid | 300.0 | 4681 |
| 890-873-16 | SW02 | Soluble | Solid | 300.0 | 4681 |
| 890-873-17 | SW03 | Soluble | Solid | 300.0 | 4681 |
| 890-873-18 | SW04 | Soluble | Solid | 300.0 | 4681 |
| MB 880-4681/1-A | Method Blank | Soluble | Solid | 300.0 | 4681 |
| LCS 880-4681/2-A | Lab Control Sample | Soluble | Solid | 300.0 | 4681 |
| LCSD 880-4681/3-A | Lab Control Sample Dup | Soluble | Solid | 300.0 | 4681 |
| 890-873-9 MS | FS09 | Soluble | Solid | 300.0 | 4681 |
| 890-873-9 MSD | FS09 | Soluble | Solid | 300.0 | 4681 |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS01
**Date Collected: 06/24/21 11:13**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-1
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 16:54 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/28/21 23:08 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 01:53 | CH | XEN MID |

## Client Sample ID: FS02
**Date Collected: 06/24/21 11:17**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-2
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 17:14 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 00:12 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 01:58 | CH | XEN MID |

## Client Sample ID: FS03
**Date Collected: 06/24/21 11:20**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-3
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 17:35 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 00:34 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:02 | CH | XEN MID |

## Client Sample ID: FS04
**Date Collected: 06/24/21 11:27**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-4
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 17:55 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 00:55 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:17 | CH | XEN MID |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS05
**Date Collected: 06/24/21 11:31**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-5
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 18:16 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 01:17 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:21 | CH | XEN MID |

## Client Sample ID: FS06
**Date Collected: 06/24/21 11:34**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-6
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 18:36 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 01:39 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:26 | CH | XEN MID |

## Client Sample ID: FS07
**Date Collected: 06/24/21 11:37**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-7
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 18:57 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 02:00 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:31 | CH | XEN MID |

## Client Sample ID: FS08
**Date Collected: 06/24/21 11:42**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-8
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 19:17 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4694 | 06/29/21 02:22 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:35 | CH | XEN MID |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS09
**Date Collected: 06/24/21 11:43**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-9
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 19:37 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 22:03 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:40 | CH | XEN MID |

## Client Sample ID: FS10
**Date Collected: 06/24/21 11:47**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-10
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 21:27 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 22:25 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:54 | CH | XEN MID |

## Client Sample ID: FS11
**Date Collected: 06/24/21 11:50**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-11
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 21:47 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 22:47 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 02:59 | CH | XEN MID |

## Client Sample ID: FS12
**Date Collected: 06/24/21 11:53**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-12
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 22:08 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 23:08 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:13 | CH | XEN MID |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: FS13
**Date Collected: 06/24/21 11:57**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-13
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 22:28 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 23:29 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:18 | CH | XEN MID |

## Client Sample ID: FS14
**Date Collected: 06/24/21 12:00**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-14
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 22:49 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/28/21 23:50 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:22 | CH | XEN MID |

## Client Sample ID: SW01
**Date Collected: 06/24/21 12:03**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-15
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 23:09 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/29/21 00:12 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:27 | CH | XEN MID |

## Client Sample ID: SW02
**Date Collected: 06/24/21 12:08**
**Date Received: 06/25/21 10:08**

## Lab Sample ID: 890-873-16
**Matrix: Solid**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 23:30 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/29/21 00:34 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:32 | CH | XEN MID |

# Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

## Client Sample ID: SW03

**Lab Sample ID: 890-873-17**
**Matrix: Solid**
**Date Collected: 06/24/21 12:12**
**Date Received: 06/25/21 10:08**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/29/21 23:50 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/29/21 00:55 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:37 | CH | XEN MID |

## Client Sample ID: SW04

**Lab Sample ID: 890-873-18**
**Matrix: Solid**
**Date Collected: 06/24/21 12:18**
**Date Received: 06/25/21 10:08**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 4727 | 06/29/21 10:36 | MR | XEN MID |
| Total/NA | Analysis | 8021B | | 1 | 4730 | 06/30/21 00:10 | MR | XEN MID |
| Total/NA | Prep | 8015NM Prep | | | 4704 | 06/28/21 13:55 | DM | XEN MID |
| Total/NA | Analysis | 8015B NM | | 1 | 4696 | 06/29/21 01:17 | AM | XEN MID |
| Soluble | Leach | DI Leach | | | 4681 | 06/28/21 10:33 | CH | XEN MID |
| Soluble | Analysis | 300.0 | | 1 | 4737 | 06/30/21 03:41 | 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. Job ID: 890-873-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

## Laboratory: Eurofins Xenco, Midland

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

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

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

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

# Method Summary

Client: WSP USA Inc. Job ID: 890-873-1
Project/Site: PLU 13 DTD 901H SDG: 31403236.015.0129

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8021B | Volatile Organic Compounds (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.

**Laboratory References:**

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

# Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 13 DTD 901H

Job ID: 890-873-1
SDG: 31403236.015.0129

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Depth |
|---|---|---|---|---|---|
| 890-873-1 | FS01 | Solid | 06/24/21 11:13 | 06/25/21 10:08 | - 2 |
| 890-873-2 | FS02 | Solid | 06/24/21 11:17 | 06/25/21 10:08 | - 2 |
| 890-873-3 | FS03 | Solid | 06/24/21 11:20 | 06/25/21 10:08 | - 2 |
| 890-873-4 | FS04 | Solid | 06/24/21 11:27 | 06/25/21 10:08 | - 2 |
| 890-873-5 | FS05 | Solid | 06/24/21 11:31 | 06/25/21 10:08 | - 2 |
| 890-873-6 | FS06 | Solid | 06/24/21 11:34 | 06/25/21 10:08 | - 2 |
| 890-873-7 | FS07 | Solid | 06/24/21 11:37 | 06/25/21 10:08 | - 2 |
| 890-873-8 | FS08 | Solid | 06/24/21 11:42 | 06/25/21 10:08 | - 2 |
| 890-873-9 | FS09 | Solid | 06/24/21 11:43 | 06/25/21 10:08 | - 2 |
| 890-873-10 | FS10 | Solid | 06/24/21 11:47 | 06/25/21 10:08 | - 2 |
| 890-873-11 | FS11 | Solid | 06/24/21 11:50 | 06/25/21 10:08 | - 2 |
| 890-873-12 | FS12 | Solid | 06/24/21 11:53 | 06/25/21 10:08 | - 2 |
| 890-873-13 | FS13 | Solid | 06/24/21 11:57 | 06/25/21 10:08 | - 2 |
| 890-873-14 | FS14 | Solid | 06/24/21 12:00 | 06/25/21 10:08 | - 2 |
| 890-873-15 | SW01 | Solid | 06/24/21 12:03 | 06/25/21 10:08 | 2 - 0 |
| 890-873-16 | SW02 | Solid | 06/24/21 12:08 | 06/25/21 10:08 | 2 - 0 |
| 890-873-17 | SW03 | Solid | 06/24/21 12:12 | 06/25/21 10:08 | 2 - 0 |
| 890-873-18 | SW04 | Solid | 06/24/21 12:18 | 06/25/21 10:08 | 2 - 0 |

# Chain of Custody

XENCO LABORATORIES

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

**Work Order No:** _____

www.xenco.com Page 1 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Tacoma Morrissey | Bill to: (if different) | Kyle Littrell |
| Company Name: | WSP USA Inc. | Company Name: | XTO Energy |
| Address: | 3300 North A Street | Address: | 3104 E Green Street |
| City, State ZIP: | Midland, TX 79705 | City, State ZIP: | Carlsbad, NM 88220 |
| Phone: | 432.236.3849 | Email: | luis.delval@wsp.com; tacoma.morrissey@wsp.com |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | PLU 13 DTD 901H | Turn Around | |
| Project Number: | 31403236.015.0129 | Routine | ☒ 5y |
| P.O. Number: | CC: 1665071001 | Rush: | |
| Sampler's Name: | Luis Del Val | Due Date: | |

| SAMPLE RECEIPT | | | | |
|---|---|---|---|---|
| Temp Blank: | (Yes) No | Wet Ice: | (Yes) No | |
| Temperature (°C): | 3.0 / 2.8 | Thermometer ID | | |
| Received Intact: | (Yes) No | T-NM-007 | | |
| Cooler Custody Seals: | Yes No N/A | Correction Factor: | -0.2 | |
| Sample Custody Seals: | Yes No (N/A) | Total Containers: | | |

**ANALYSIS REQUEST**

890-873 Chain of Custody

**Work Order Notes**

Incident Number:
NAPP2114542940

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| FS01 | S | 6/24/2021 | 1113 | 2' | 1 | X | X | X | Composite Sample |
| FS02 | S | 6/24/2021 | 1117 | 2' | 1 | X | X | X | Composite Sample |
| FS03 | S | 6/24/2021 | 1120 | 2' | 1 | X | X | X | Composite Sample |
| FS04 | S | 6/24/2021 | 1127 | 2' | 1 | X | X | X | Composite Sample |
| FS05 | S | 6/24/2021 | 1131 | 2' | 1 | X | X | X | Composite Sample |
| FS06 | S | 6/24/2021 | 1134 | 2' | 1 | X | X | X | Composite Sample |
| FS07 | S | 6/24/2021 | 1137 | 2' | 1 | X | X | X | Composite Sample |
| FS08 | S | 6/24/2021 | 1142 | 2' | 1 | X | X | X | Composite Sample |
| FS09 | S | 6/24/2021 | 1143 | 2' | 1 | X | X | X | Composite Sample |
| FS10 | S | 6/24/2021 | 1147 | 2' | 1 | X | X | X | Composite Sample |

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

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

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | 6/25/21 954 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev 2018 1

# Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 2 of 2

| | | | |
|---|---|---|---|
| Project Manager: | Tacoma Morrissey | Bill to: (if different) | Kyle Littrell |
| Company Name: | WSP USA Inc. | Company Name: | XTO Energy |
| Address: | 3300 North A Street | Address: | 3104 E Green Street |
| City, State ZIP: | Midland, TX 79705 | City, State ZIP: | Carlsbad, NM 88220 |
| Phone: | 432.236.3849 | Email: | luis.delval@wsp.com; tacoma.morrissey@wsp.com |

**Work Order Comments**

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

| | | | |
|---|---|---|---|
| Project Name: | PLU 13 DTD 901H | Turn Around | |
| Project Number: | 31403236.015.0129 | Routine | 5 Day |
| P.O. Number: | CC: 1665071001 | Rush: | |
| Sampler's Name: | Luis Del Val | Due Date: | |

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

**ANALYSIS REQUEST**

**Work Order Notes**

Incident Number:
NAPP2114542940

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

| Sample Identification | Matrix | Date Sampled | Time Sampled | Depth | Number of Containers | TPH (EPA 8015) | BTEX (EPA 0=8021) | Chloride (EPA 300.0) | Sample Comments |
|---|---|---|---|---|---|---|---|---|---|
| FS11 | S | 6/24/2021 | 1150 | 2' | 1 | X | X | X | Composite Sample |
| FS12 | S | 6/24/2021 | 1153 | 2' | 1 | X | X | X | Composite Sample |
| FS13 | S | 6/24/2021 | 1157 | 2' | 1 | X | X | X | Composite Sample |
| FS14 | S | 6/24/2021 | 1200 | 2' | 1 | X | X | X | Composite Sample |
| SW01 | S | 6/24/2021 | 1203 | 0-2' | 1 | X | X | X | Composite Sample |
| SW02 | S | 6/24/2021 | 1208 | 0-2' | 1 | X | X | X | Composite Sample |
| SW03 | S | 6/24/2021 | 1212 | 0-2' | 1 | X | X | X | Composite Sample |
| SW04 | S | 6/24/2021 | 1218 | 0-2' | 1 | X | X | X | Composite Sample |
| | | | | | | | | | |
| | | | | | | | | | |

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

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



| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|---|---|---|
| 1 | | 6/25/21 19:55 | 2 | | |
| 3 | | | 4 | | |
| 5 | | | 6 | | |

Revised Date 051418 Rev 2018 1

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

# Chain of Custody Record

eurofins | Environment Testing America

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Kramer Jessica | Carrier Tracking No(s): | COC No: 890-279 1 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: jessica kramer@eurofinset.com | State of Origin: New Mexico | Page: Page 1 of 2 |
| Company: Eurofins Xenco | | Accreditations Required (See note): NELAP - Texas | | Job #: 890-873-1 |
| Address: 1211 W Florida Ave | Due Date Requested: 7/1/2021 | | | |
| City: Midland | TAT Requested (days): | | | |
| State, Zip: TX, 79701 | | | | |
| Phone: 432-704-5440(Tel) | PO #: | | | |
| Email | WO #: | | | |
| Project Name: PLU 13 DTD 901H | Project #: 88000107 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes**

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

Other

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8021B/5035FP_Calc BTEX | 8015MOD_NM/8015NM_S_Prep Full TPH | 300_ORGFM_28D/DI_LEACH Cl | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | |
| FS01 (890-873-1) | 6/24/21 | 11 13 Mountain | | Solid | | | X | X | X | 1 | |
| FS02 (890-873-2) | 6/24/21 | 11 17 Mountain | | Solid | | | X | X | X | 1 | |
| FS03 (890-873-3) | 6/24/21 | 11 20 Mountain | | Solid | | | X | X | X | 1 | |
| FS04 (890-873-4) | 6/24/21 | 11 27 Mountain | | Solid | | | X | X | X | 1 | |
| FS05 (890-873-5) | 6/24/21 | 11 31 Mountain | | Solid | | | X | X | X | 1 | |
| FS06 (890-873-6) | 6/24/21 | 11 34 Mountain | | Solid | | | X | X | X | 1 | |
| FS07 (890-873-7) | 6/24/21 | 11 37 Mountain | | Solid | | | X | X | X | 1 | |
| FS08 (890-873-8) | 6/24/21 | 11 42 Mountain | | Solid | | | X | X | X | 1 | |
| FS09 (890-873-9) | 6/24/21 | 11 43 Mountain | | Solid | | | X | X | X | 1 | |

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

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

| Empty Kit Relinquished by | Date | Time | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

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

Ver: 11/01/2020

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-873-1
SDG Number: 31403236.015.0129

**Login Number: 873**
**List Number: 1**
**Creator: Olivas, Nathaniel**

**List Source: Eurofins Xenco, Carlsbad**

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

# Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-873-1
SDG Number: 31403236.015.0129

**Login Number: 873**
**List Number: 2**
**Creator: Copeland, Tatiana**

**List Source: Eurofins Xenco, Midland**
**List Creation: 06/28/21 09:15 AM**

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

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

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

CONDITIONS

Action 40787

## CONDITIONS

| | |
|---|---|
| Operator:<br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br>5380 |
| | Action Number:<br>40787 |
| | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| rhamlet | We have received your closure report and final C-141 for Incident #NAPP2114542940 PLU 13 DTD 13 901H, thank you. This closure is approved. | 11/5/2021 |