

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	NRM1931858285
District RP	2RP-5697
Facility ID	fAB1921929758
Application ID	pRM1931858373

## Release Notification

1RLXK-191014-C-1410

### Responsible Party

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

### Location of Release Source

Latitude 32.182176 Longitude -103.880022  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	PLU Pierce Canyon 28 Fed	Site Type	Tank Battery
Date Release Discovered	10/07/2019	API# (if applicable)	30-015-36830 (Poker Lake Unit CVX JV PC 3H)

Unit Letter	Section	Township	Range	County
P	28	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)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	0.0	Volume Recovered (bbls)	0.0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	52.54	Volume Recovered (bbls)	52.0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	

Cause of Release: Produced water flowline leaked due to internal corrosion. Vacuum truck recovered 52 bbls of produced water from containment and 0.54 bbls impacted pad surface. Additional third party resources have been retained to assist in the remediation.

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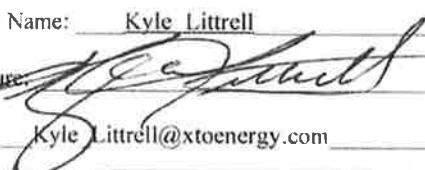
State of New Mexico  
Oil Conservation Division

Incident ID	NRM1931858285
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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  An unauthorized release of fluid over 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  YES, by Amy Ruth to Mike Bratcher, Rob Hamlet, Victoria Venegas, Jim Griswold, and <a href="mailto:blm_nm_cfo_spill@blm.gov">blm_nm_cfo_spill@blm.gov</a> on 10/7/19 at 3:31 PM by email.	

**Initial Response**

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  N/A	
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: <u>Kyle Littrell</u> Signature:  email: <u>Kyle.Littrell@xtoenergy.com</u>	Title: <u>SH&amp;E Supervisor</u> Date: <u>10/14/2019</u> Telephone: _____
<b><u>OCD Only</u></b>  Received by: <u>Ramona Marcus</u> Date: <u>11/14/2019</u>	

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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

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Oil Conservation Division

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

Printed Name: Kyle LittrellTitle: Environmental ManagerSignature: Date: 6-8-21email: kyle.littrell@exxonmobil.comTelephone: 432-221-7331**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

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## Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Kyle LittrellTitle: Environmental ManagerSignature: Date: 6-8-21email: kyle.littrell@exxonmobil.comTelephone: 432-221-7331

### OCD Only

Received by: Chad HensleyDate: 07/12/2021

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: Date: 07/12/2021Printed Name: Chad HensleyTitle: Environmental Specialist Advanced



WSP USA

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

June 3, 2021

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

**Re: Closure and Deferral Request  
Poker Lake Unit Pierce Canyon 28  
Incident Numbers/Remediation Permit Number: NRM1931858285 (2RP-5697) and  
NCE2002742193  
Eddy County, New Mexico**

To Whom it May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Closure and Deferral Request as an update to the approved Remediation Work Plan submitted on December 23, 2020 for the Poker Lake Unit Pierce Canyon 28 (Site) in Unit P, Section 28, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The Remediation Work Plan proposed to complete additional delineation activities for closure of Incident Number NRM1931858285/2RP-5697 and to advance additional lateral delineation points for deferral of Incident Number NCE2002742193.

The Work Plan was approved by the New Mexico Oil Conservation Division (NMOCD) on March 10, 2021 for Incident Number NRM1931858285/2RP-5697 and April 8, 2021 for Incident Number NCE2002742193. The following report describes the implementation of the final delineation soil sampling activities as outlined in the Remediation Work Plan. Based on the delineation activities, soil sample laboratory analytical results, and completion of remediation activities as outlined in the approved Remediation Work Plan, XTO is requesting closure for NRM1931858285 (2RP-5697) and deferral of Incident Number NCE2002742193 until the facility is decommissioned or until major facility construction occurs.

## **RELEASE BACKGROUND**

### **Incident Number NRM1931858285 (2RP-5697)**

On October 7, 2019, a produced water flowline developed a leak, resulting in the release of approximately 52.54 barrels (bbls) of produced water into a lined containment and onto the caliche well pad. A vacuum truck was immediately dispatched to the Site to recover freestanding





fluids, of which approximately 52.0 bbls of produced water were recovered from within the lined containment. XTO reported the release to the NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) on October 14, 2019 and was subsequently assigned Incident Number NRM1931858285 and Remediation Permit (RP) Number 2RP-5697.

#### Incident Number NCE2002742193

On November 13, 2019, a circulating line from an oil tank to the gun barrel tank developed a leak due to corrosion, resulting in the release of 2.41 bbls of crude oil and 9.62 bbls of produced water onto the caliche well pad around the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids, of which approximately 2.0 bbls of crude oil and 8.0 bbls of produced water were recovered. XTO reported the release to the NMOCD on a Release Notification and Form C-141 on November 26, 2019 and was subsequently assigned Incident Number NCE2002742193.

#### **CLOSURE CRITERIA**

As detailed in the approved Remediation Work Plan and based on 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 receptors are identified on Figure 1.

#### **REMEDIATION WORK PLAN IMPLEMENTATION**

This Closure and Deferral report only includes a summary of the completed delineation activities outlined in the approved Remediation Work Plan. All previous remediation activities, soil sample analytical results, and site characterization can be referenced in the original report.

#### Incident Number NCE2002742193

On April 22, 2021, WSP utilized a Core Drill to install four coreholes (CH01 through CH04) at the Site to provide additional lateral delineation outside the lined tank battery containment, as outlined in the approved Remediation Work Plan. Due to the location of the release, a Hot Work Permit was necessary to conduct investigative motor or electric powered drilling methods within



35 feet of any hydrocarbon sources. In coordination with XTO, an XTO safety representative was retained to conduct air monitoring as part of the permit process for investigative core drilling activities. The coreholes were advanced to a depth of approximately 4 feet bgs. Two soil samples were collected from each corehole: the soil interval with the highest field screening result (0 to 2.5 feet bgs) and the terminus of the core hole (2.5 feet to 4 feet bgs). Soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for each corehole were recorded on a lithologic/soil sampling log which are included in Attachment 1. Photographic documentation from core drilling activities is included in Attachment 2. The corehole locations are presented on Figure 2.

As a condition of the Remediation Work Plan approval, NMOCD requested further sampling of floor sample FS05 to a depth greater than 1-foot bgs to ensure deeper impacted soil was not left in place. On May 4, 2021, WSP personnel returned to the Site to conduct additional sampling in the area of floor sample FS05 to confirm that no residual impacts remained below 1-foot bgs. WSP collected a 5-point composite soil sample (FS05) via hand auger from a depth of 1.5 feet bgs from the original FS05 location. The FS05@1.5' soil sample location is presented on Figure 2.

The soil samples were placed directly into a pre-cleaned glass jar, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C), under strict chain-of-custody (COC) procedures, to Eurofins Xenco LLC. (Eurofins) in Midland, Texas, for analysis of BTEX following United States EPA Method 8021B; TPH 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 for all corehole delineation soil samples and the FS05@1.5' confirmation soil sample. The laboratory analytical results are summarized on the attached Table 1. The complete laboratory analytical reports for Incident Numbers NCE2002742193 and NRM1931858285 (2RP-5697) are included as Attachment 3.

Laboratory analytical results from coreholes CH01 through CH04 provide the additional lateral delineation of impacted soil for deferral as outlined in the approved Remediation Work Plan. The deferral area is shown on Figure 3. Laboratory analytical results for soil sample FS05@1.5' confirmed that impacted soil does not extend deeper than 1-foot bgs at the original FS05 location, which fulfills NMOCD's condition of approval.





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**Incident Number NRM1931858285 (2RP-5697)**

On April 22, 2021, WSP utilized a Core Drill to install one corehole (CH05) within the release extent south of the lined containment to further confirm the absence of impacted soil, as outlined in the approved Remediation Work Plan. Two soil samples were collected from corehole CH05: the soil interval with the highest field screening result (0 to 2.5 feet bgs) and the terminus of the core hole (2.5 feet to 4 feet bgs). The soil samples were field screened, collected, handled, and analyzed as described above. Field screening results and observations for each corehole were recorded on a lithologic/soil sampling log which are included in Attachment 1. The CH05 corehole location is presented on Figure 4.

Laboratory analytical results for the delineation soil samples from corehole CH05 indicate benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and confirm the absence of impacted soil south of the lined containment. The laboratory analytical results are summarized on the attached Table 1. The complete laboratory analytical reports for Incident Number NRM1931858285 (2RP-5697) are included as Attachment 3.

**CLOSURE REQUEST****Incident Number NRM1931858285 (2RP-5697)**

Per the approved Remediation Work Plan, WSP conducted core drilling activities to further confirm the absence of impacts associated with the subject release. Laboratory analytical results for corehole CH05 indicate compliance with the Closure Criteria south of the lined containment. Remediation of impacted soils associated with the subject release was successfully achieved. All impacted soil was removed from the release areas until laboratory analytical results confirmed compliance with Closure Criteria. This included excavation of approximately 37 cubic yards of soil as detailed in the Remediation Work Plan. Based on the additional laboratory analytical results for the delineation soil samples from corehole CH05 as described in this report, no further remediation is warranted. XTO requests Closure for Incident Number NRM1931858285 (2RP-5697).

**DEFERRAL REQUEST****Incident Number NCE2002742193**

Per the approved Remediation Work Plan, WSP conducted core drilling activities (CH01 through CH04) onsite to confirm additional lateral delineation of the subject release. Additional sampling below 1-foot bgs at FS05 was also performed to fulfill the condition issued by the NMOCD. Laboratory analytical results for CH01 through CH04 indicate compliance with the horizontal



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lateral delineation requirements; additional sample collection at FS05 concluded that impacts do not extend beyond 1-foot bgs.

As documented in the Remediation Work Plan, remediation of impacted soils associated with the subject release was successfully achieved to the extent possible, which included an excavation of approximately 85 cubic yards of soil and utilizing a bio remedial agent to address residual hydrocarbon impacts. Further excavation of impacted soil was limited by the presence of active production equipment, pipelines, and electrical sources. XTO safety policy was enforced where impacted soil was identified within 2 feet of active production equipment or pipelines. Based on current delineation and excavation soil sample laboratory analytical results, vertical extent of impacted soil does not exceed 1.5 feet bgs on the east side of the lined tank battery containment and 3 feet bgs on the south side of the lined tank battery containment. As a result, approximately 40 cubic yards of impacted soil are estimated to be left in place. The deferral area is shown on Figure 3.

XTO requests to complete remediation during any major future well pad construction/alteration or final plugging and abandonment, whichever occurs first. WSP and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. Based on the additional data collected as described in this report, impacts have been fully delineated, and no further soil removal can occur safely at this time. XTO requests Deferral for Incident Number NCE2002742193.

XTO and WSP have completed the remediation activities outlined in the approved Remediation Work Plan for Incident Numbers NRM1931858285 (2RP-5697) and NCE2002742193 and fulfilled the condition for approval given by the NMOCD for Incident Number NCE2002742193. If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Kind regards,

A handwritten signature in cursive script that reads 'Anna Byers'.

Anna Byers  
Consultant, Geologist

A handwritten signature in cursive script that reads 'Ashley L. Ager'.

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



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cc: Kyle Littrell, XTO  
Bureau of Land Management

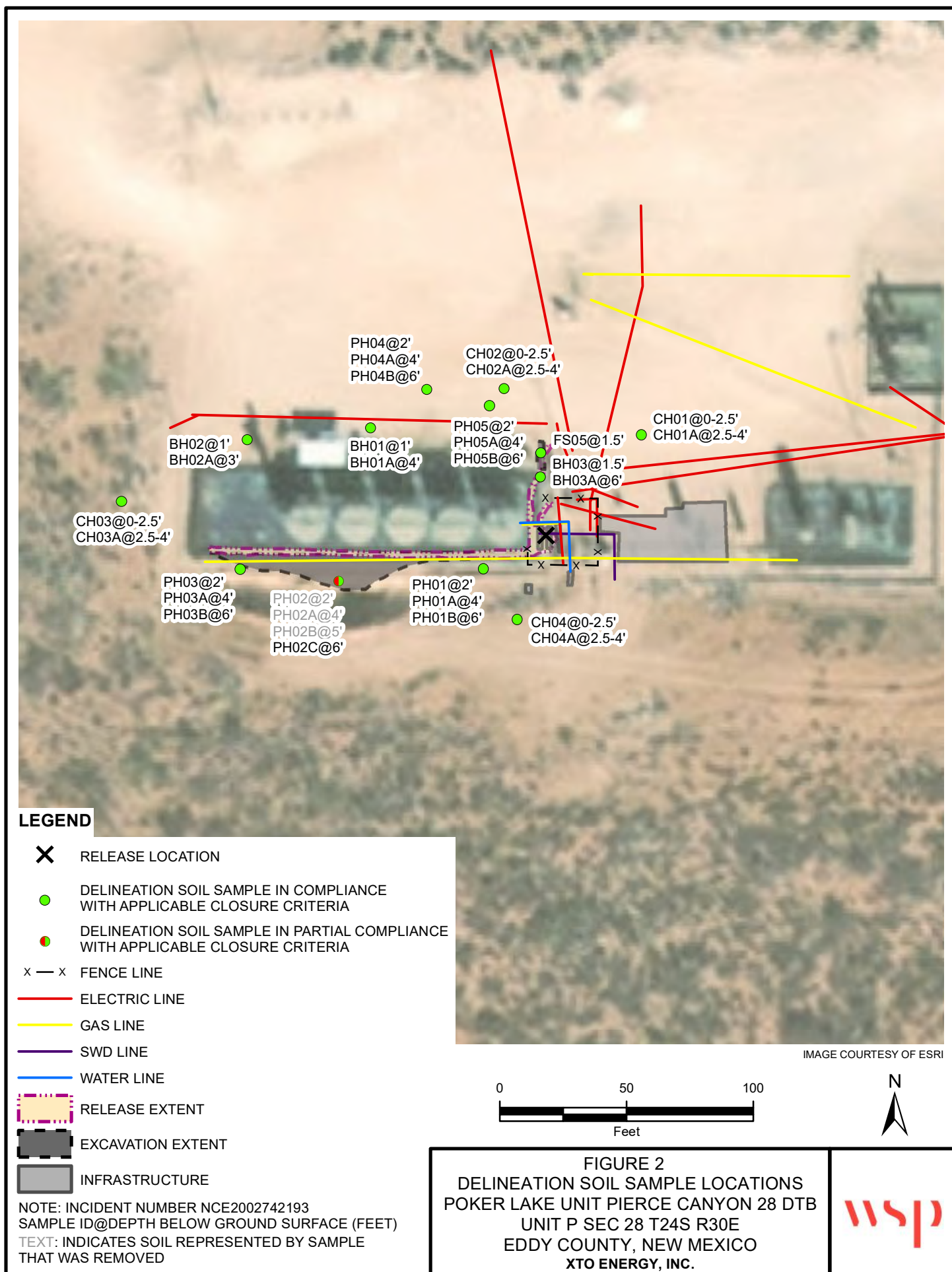
Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations - NCE2002742193
Figure 3	Deferral Area - NCE2002742193
Figure 4	Delineation Soil Sample Locations - NRM1931858285 (2RP-5697)
Table 1	Soil Analytical Results
Attachment 1	Lithologic/Sampling Logs
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Reports - NCE2002742193 and NRM1931858285 (2RP-5697)

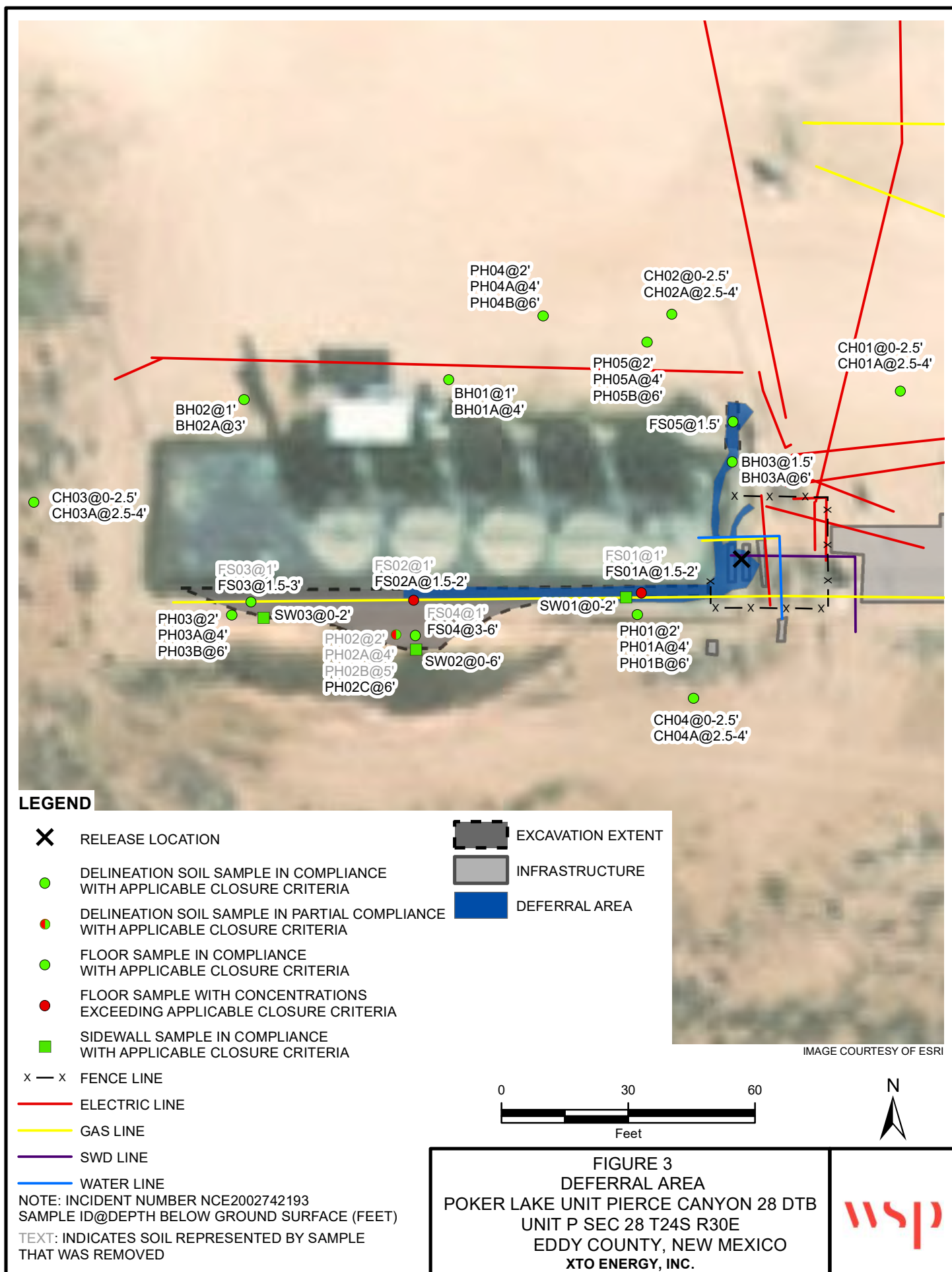
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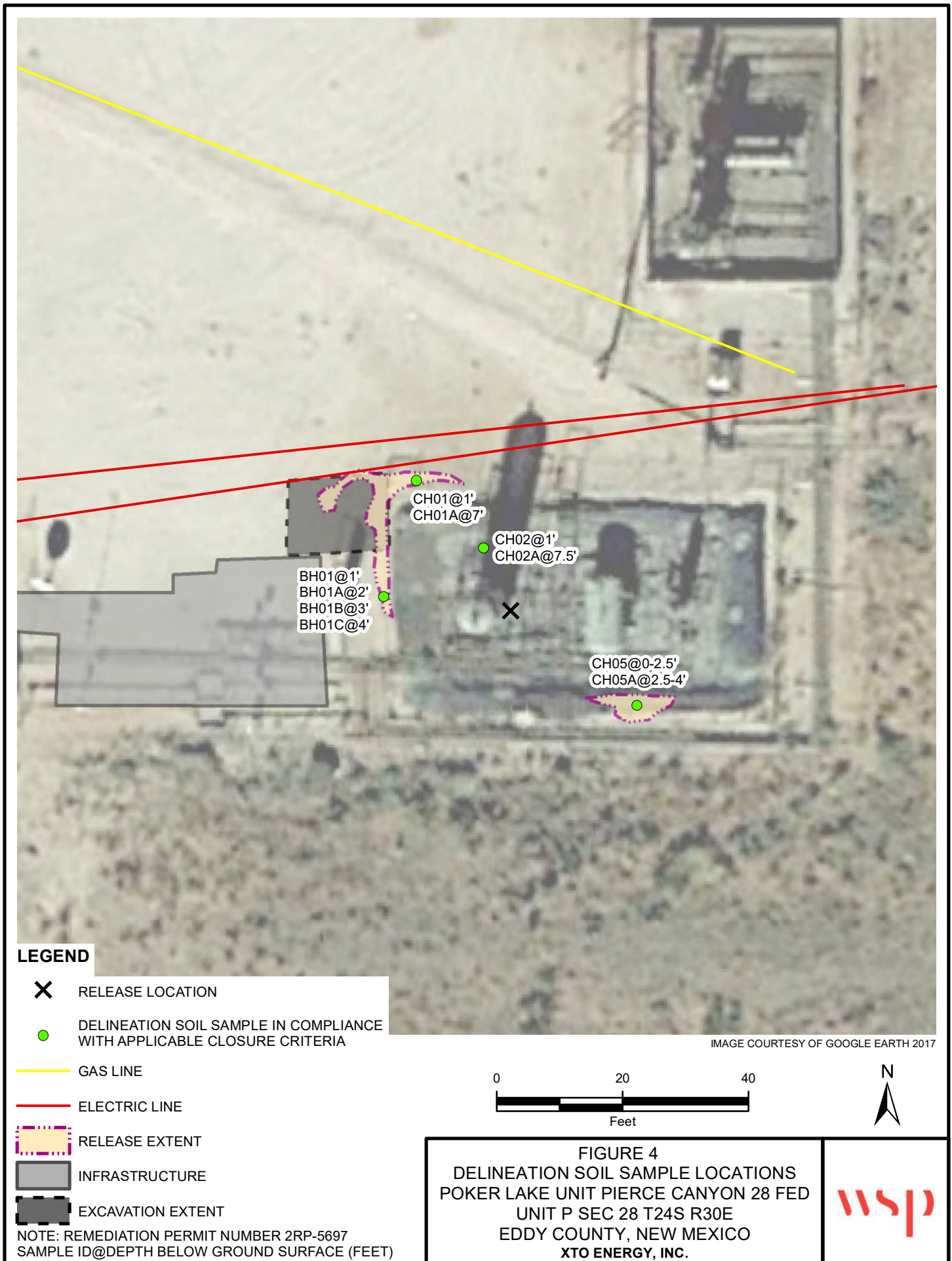












TABLES

Table 1

Soil Analytical Results  
Poker Lake Unit Pierce Canyon 28  
Incident Numbers NCE2002742193 and NRM1931858285 (2RP-5697)  
XTO Energy, Inc.  
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
Delineation Samples (NCE2002742193)										
CH01	04/22/2021	0 - 2.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	18.0
CH01A	04/22/2021	2.5 - 4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	23.8
CH02	04/22/2021	0 - 2.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	25.8
CH02A	04/22/2021	2.5 - 4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	8.20
CH03	04/22/2021	0 - 2.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	400
CH03A	04/22/2021	2.5 - 4	0.00201	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	465
CH04	04/22/2021	0 - 2.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	520
CH04A	04/22/2021	2.5 - 4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	246
FS05	05/04/2021	1.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	343
Delineation Samples (NRM1931858285 (2RP-5697))										
CH05	04/22/2021	0 - 2.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	237
CH05A	04/22/2021	2.5 - 4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	53.4

**Notes:**

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - oil range organics

NMOCD - New Mexico Oil Conservation Division


NMAC - New Mexico Administrative Code

&lt; - 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


ATTACHMENT 1: LITHOLOGIC/SOIL SAMPLING LOG


 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		Name: CH01	Date: 4/22/2021					
		Site Name: PLU PC 28 Battery						
		Incident Number: NCE2002742193						
		WSP Job Number: TE012919250						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>		Logged By WM, TC	Method: Core Drill					
Lat/Long: 32.182279, -103.880234		Field Screening: HACH Chloride Test Strips, PID	Hole Diameter: 2"					
		Total Depth (TD): 4'						
Comments: 40% Correction factor included in Chloride concentrations. "M" Moisture Content - Moist								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	Caliche, poor to moderate consolidation, some sand, tan/brown
M	<156	0	N	CH01	0-2.5	1		
						2	SW-SM	Sand (c.), well graded, some silt, brown/red
M	<156	0.1	N	CH01A	2.5-4	3		
						4		TD @ 4' bgs
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
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						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		



 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		Name: CH02		Date: 4/22/2021				
		Site Name: PLU PC 28 Battery						
		Incident Number: NCE2002742193						
		WSP Job Number: TE012919250						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long: 32.182321, -103.880384		Field Screening: HACH Chloride Test Strips, PID		Hole Diameter: 2"				
				Total Depth (TD): 4'				
Comments: 40% Correction factor included in Chloride concentrations. "M" Moisture Content - Moist								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0	CCHE	Caliche, poor to moderate consolidation, some sand, tan/brown
M	156	0	N	CH02	0-2.5	1		
						2	SW-SM	Sand (c.), well graded, some silt, brown/red
M	<156	0.1	N	CH02A	2.5-4	3		
						4		TD @ 4' bgs
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220						Name: CH03		Date: 4/22/2021	
						Site Name: PLU PC 28 Battery			
						Incident Number: NCE2002742193			
						WSP Job Number: TE012919250			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>						Logged By WM, TC		Method: Core Drill	
Lat/Long: 32.182208, -103.880897			Field Screening: HACH Chloride Test Strips, PID			Hole Diameter: 2"		Total Depth (TD): 4'	
Comments: 40% Correction factor included in Chloride concentrations. "M" Moisture Content - Moist									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	
M	156	0	N	CH03	0-2.5	1 2	SW-SM	Sand (c.), well graded, some silt, brown/red	
M	<156	0.1	N	CH03A	2.5-4	3 4	CCHE	Caliche, poor consolidation, sandy, some silt, tan/brown	
						5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		TD @ 4' bgs	

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		Name:		Date:				
		CH04		4/22/2021				
		Site Name: PLU PC 28 Battery						
		Incident Number: NCE2002742193						
WSP Job Number: TE012919250								
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long:		Field Screening:		Hole Diameter:				
32.182079, -103.880393		HACH Chloride Test Strips, PID		2"				
Total Depth (TD): 4'								
Comments: 40% Correction factor included in Chloride concentrations. "M" Moisture Content - Moist								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	<156	0	N	CH04	0-2.5	1 2	SW-SM	Sand (c.), well graded, some silt, brown/red
M	<156	0	N	CH04A	2.5-4	3 4	CCHE	Caliche, poor consolidation, sandy, some silt, tan/brown
						5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		TD @ 4' bgs


 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		Name:		Date:				
		CH05		4/22/2021				
		Site Name: PLU PC 28 Battery						
		Incident Number: NRM1931858285						
WSP Job Number: TE0129192281								
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long: 32.182139, -103.879967		Field Screening: HACH Chloride Test Strips, PID		Hole Diameter: 2"				
				Total Depth (TD): 4'				
Comments: 40% Correction factor included in Chloride concentrations. "M" Moisture Content - Moist								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
M	<156	0	N	CH05	0-2.5	1 2	SW-SM	Sand (c.), well graded, some silt, brown/red
M	<156	0	N	CH05A	2.5-4	3 4	CCHE	Caliche, poor consolidation, sandy, some silt, tan/brown
						5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		TD @ 4' bgs

ATTACHMENT 2: PHOTOGRAPHIC LOG

**PHOTOGRAPHIC LOG**

<b>XTO Energy, INC.</b>	<b>PLU Pierce Canyon 28 Eddy County, New Mexico</b>	<b>TE012919250 &amp; TE012919281</b>
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<b>Photo No.</b>	<b>Date</b>	
1	April 22, 2021	
Southern view of CH02 location (NCE2002742193)		 A photograph showing a worker in a yellow jumpsuit and white hard hat standing in a desert environment. In the background, there are large industrial storage tanks and a metal structure. A blue fuel tank and a red fire extinguisher are visible in the foreground.

<b>Photo No.</b>	<b>Date</b>	
2	December 10, 2019	
FS05 Sample Area (NCE2002742193)		 A photograph showing several electrical control boxes and meters mounted on metal poles in a desert environment. A yellow safety fence is visible in the foreground.



ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-562-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC 28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
4/29/2021 8:59:17 PM

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

#### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Laboratory Job ID: 890-562-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

# Case Narrative

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

Job ID: 890-562-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative  
890-562-1

Receipt

The samples were received on 4/23/2021 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH01 (890-562-1) and CH01 A (890-562-2).

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

Client Sample ID: CH01

Lab Sample ID: 890-562-1

Date Collected: 04/22/21 09:44

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 0 - 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 15:34	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 15:34	1
1,4-Difluorobenzene (Surr)	113		70 - 130	04/26/21 08:44	04/26/21 15:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 02:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 02:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 02:29	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 02:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	04/26/21 13:23	04/27/21 02:29	1
o-Terphenyl	118		70 - 130	04/26/21 13:23	04/27/21 02:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.0		5.02	mg/Kg			04/29/21 15:18	1

Client Sample ID: CH01 A

Lab Sample ID: 890-562-2

Date Collected: 04/22/21 10:00

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 17:57	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 17:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/26/21 08:44	04/26/21 17:57	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/26/21 08:44	04/26/21 17:57	1

Eurofins Xenco, Carlsbad



## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

Client Sample ID: CH01 A

Lab Sample ID: 890-562-2

Date Collected: 04/22/21 10:00

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1 *+	49.9	mg/Kg		04/27/21 10:20	04/28/21 20:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/27/21 10:20	04/28/21 20:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/27/21 10:20	04/28/21 20:07	1
Total TPH	<49.9	U	49.9	mg/Kg		04/27/21 10:20	04/28/21 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	04/27/21 10:20	04/28/21 20:07	1
o-Terphenyl	100		70 - 130	04/27/21 10:20	04/28/21 20:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.8		5.01	mg/Kg			04/29/21 15:34	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

## 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)
890-562-1	CH01	106	113
890-562-2	CH01 A	102	109
LCS 880-2314/1-A	Lab Control Sample	94	111
LCSD 880-2314/2-A	Lab Control Sample Dup	95	107
MB 880-2314/5-A	Method Blank	106	85
<b>Surrogate Legend</b>			
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)
890-562-1	CH01	118	118
890-562-2	CH01 A	107	100
LCS 880-2326/2-A	Lab Control Sample	105	104
LCS 880-2377/2-A	Lab Control Sample	130	113
LCSD 880-2326/3-A	Lab Control Sample Dup	111	105
LCSD 880-2377/3-A	Lab Control Sample Dup	110	100
MB 880-2326/1-A	Method Blank	106	110
MB 880-2377/1-A	Method Blank	114	108
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2314/5-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2314

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/26/21 08:44	04/26/21 12:07	1

Lab Sample ID: LCS 880-2314/1-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2314/2-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-2326/1-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/26/21 13:23	04/26/21 18:03	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/26/21 18:03	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2326/2-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2326

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1143		mg/Kg		114		70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1024		mg/Kg		102		70 - 130		

Lab Sample ID: LCSD 880-2326/3-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2326

Top Data: 2025											
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
			Added	Result	Qualifier				Limits	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1224		mg/Kg		122	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130	1	20
Bottom Data: 2025											
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	111		70 - 130								
o-Terphenyl	105		70 - 130								

Lab Sample ID: MB 880-2377/1-A

Matrix: Solid

Analysis Batch: 2425

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2377

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/27/21 10:20	04/28/21 10:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/27/21 10:20	04/28/21 10:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/27/21 10:20	04/28/21 10:35	1
Total TPH	<50.0	U	50.0	mg/Kg		04/27/21 10:20	04/28/21 10:35	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac		
%Recovery	Qualifier							
1-Chlorooctane	114		70 - 130	04/27/21 10:20	04/28/21 10:35	1		
o-Terphenyl	108		70 - 130	04/27/21 10:20	04/28/21 10:35	1		

Lab Sample ID: LCS 880-2377/2-A

Matrix: Solid

Analysis Batch: 2425

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1476	*+	mg/Kg		148	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1231		mg/Kg		123	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2377/2-A

Matrix: Solid

Analysis Batch: 2425

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2377

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

Lab Sample ID: LCSD 880-2377/3-A

Matrix: Solid

Analysis Batch: 2425

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2377

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1178	*1	mg/Kg		118	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	1000	1020		mg/Kg		102	70 - 130	19	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	100		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2479/1-A

Matrix: Solid

Analysis Batch: 2498

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/29/21 13:24	1

Lab Sample ID: LCS 880-2479/2-A

Matrix: Solid

Analysis Batch: 2498

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-2479/3-A

Matrix: Solid

Analysis Batch: 2498

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	247.0		mg/Kg		99	90 - 110	1	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Total/NA	Solid	5035	
890-562-2	CH01 A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 2315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Total/NA	Solid	8021B	2314
890-562-2	CH01 A	Total/NA	Solid	8021B	2314
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314

## GC Semi VOA

## Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Total/NA	Solid	8015B NM	2326
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015B NM	2326
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2326
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2326

## Prep Batch: 2326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Total/NA	Solid	8015NM Prep	
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Prep Batch: 2377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-2	CH01 A	Total/NA	Solid	8015NM Prep	
MB 880-2377/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2377/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2377/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 2425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-2	CH01 A	Total/NA	Solid	8015B NM	2377
MB 880-2377/1-A	Method Blank	Total/NA	Solid	8015B NM	2377
LCS 880-2377/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2377
LCSD 880-2377/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2377

## HPLC/IC

## Leach Batch: 2479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Soluble	Solid	DI Leach	
890-562-2	CH01 A	Soluble	Solid	DI Leach	
MB 880-2479/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2479/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Eurofins Xenco, Carlsbad



## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

## HPLC/IC (Continued)

## Leach Batch: 2479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-2479/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 2498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-562-1	CH01	Soluble	Solid	300.0	2479
890-562-2	CH01 A	Soluble	Solid	300.0	2479
MB 880-2479/1-A	Method Blank	Soluble	Solid	300.0	2479
LCS 880-2479/2-A	Lab Control Sample	Soluble	Solid	300.0	2479
LCSD 880-2479/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2479

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

Client Sample ID: CH01

Lab Sample ID: 890-562-1

Date Collected: 04/22/21 09:44

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 15:34	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 02:29	AJ	XM
Soluble	Leach	DI Leach			2479	04/29/21 10:46	SC	XM
Soluble	Analysis	300.0		1	2498	04/29/21 15:18	SC	XM

Client Sample ID: CH01 A

Lab Sample ID: 890-562-2

Date Collected: 04/22/21 10:00

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 17:57	KL	XM
Total/NA	Prep	8015NM Prep			2377	04/27/21 10:20	DM	XM
Total/NA	Analysis	8015B NM		1	2425	04/28/21 20:07	AJ	XM
Soluble	Leach	DI Leach			2479	04/29/21 10:46	SC	XM
Soluble	Analysis	300.0		1	2498	04/29/21 15:34	SC	XM

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

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 PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

## Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-562-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-562-1	CH01	Solid	04/22/21 09:44	04/23/21 10:07	0 - 2.5
890-562-2	CH01 A	Solid	04/22/21 10:00	04/23/21 10:07	2.5 - 4

1

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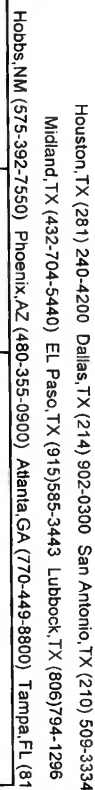
10

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## Chain of Custody

**Work Order No:**


Work Order Comments				
Program: UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> Rowfields	<input type="checkbox"/> RC	<input type="checkbox"/> Spurfund
State of Project:				
Reporting: Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables: EDO	<input type="checkbox"/>	ADAPT	<input type="checkbox"/>	Other:

Project Name:	PLU PC 28 Battery	Turn Around
Project Number:	TE012919281	Routine <input checked="" type="checkbox"/>
P.O. Number:	Eddy	Rush:
Sampler's Name:	William Mather	Due Date:

<b>SAMPLE RECEIPT</b>	Temp Blank:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Well Ice:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Temperature (°C):	3.6/3.7	Thermometer ID				
Received In tact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	27111-007			
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No	N/A	Total Containers:		

Number of Containers	
(PA 8015)	
(EPA 0=8021)	
(EPA 300.0)	

ANALYSIS REQUEST



890-562 Chain of Custody

Work Order Notes
AFE: EW.2020.03366 EXP.01 Cost center 1081071001 API 30-015-36830 Incident ID: NCE2002742193 NRM1931858285
TAT starts the day received by the lab, if received by 4:30pm

[illegible]








Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Si U V Zn  
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U  
 163312451174701774

1631 / 2451 / 7470 / 7474 : 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 \$76.00 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.

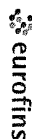
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. 		4-23-21 1007			
2. 					
3. 					
4. 					
5. 					
6. 					

Revised Date 05/14/18 Rev. 2018



1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax: 575-988-3199

## Chain of Custody Record



## Environment Testing America

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-562-1

SDG Number: TE012919281

Login Number: 562

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-562-1

SDG Number: TE012919281

Login Number: 562

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 04/26/21 09:10 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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-563-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC 28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
4/29/2021 9:01:42 PM

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

#### LINKS

Review your project  
results through

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

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

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Laboratory Job ID: 890-563-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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



## Case Narrative

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

**Job ID: 890-563-1**

**Laboratory: Eurofins Xenco, Carlsbad**

### Narrative

#### Job Narrative 890-563-1

#### Receipt

The samples were received on 4/23/2021 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

#### Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: CH02 (890-563-1) and CH02 A (890-563-2).

#### GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: CH02 (890-563-1). 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 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 PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

Client Sample ID: CH02

Lab Sample ID: 890-563-1

Date Collected: 04/22/21 10:23

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 0 - 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 18:18	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		04/26/21 08:44	04/26/21 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	04/26/21 08:44	04/26/21 18:18	1
1,4-Difluorobenzene (Surr)	110		70 - 130	04/26/21 08:44	04/26/21 18:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:47	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	04/26/21 13:23	04/27/21 01:47	1
o-Terphenyl	103		70 - 130	04/26/21 13:23	04/27/21 01:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.8		4.98	mg/Kg			04/29/21 15:39	1

Client Sample ID: CH02 A

Lab Sample ID: 890-563-2

Date Collected: 04/22/21 10:38

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:38	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	04/26/21 08:44	04/26/21 18:38	1
1,4-Difluorobenzene (Surr)	115		70 - 130	04/26/21 08:44	04/26/21 18:38	1

Eurofins Xenco, Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

Client Sample ID: CH02 A

Lab Sample ID: 890-563-2

Date Collected: 04/22/21 10:38

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 02:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 02:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 02:08	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	04/26/21 13:23	04/27/21 02:08	1
o-Terphenyl	107		70 - 130	04/26/21 13:23	04/27/21 02:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.20		4.99	mg/Kg			04/29/21 15:44	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

## 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)
890-563-1	CH02	126	110
890-563-2	CH02 A	96	115
LCS 880-2314/1-A	Lab Control Sample	94	111
LCSD 880-2314/2-A	Lab Control Sample Dup	95	107
MB 880-2314/5-A	Method Blank	106	85
<b>Surrogate Legend</b>			
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)
890-563-1	CH02	102	103
890-563-2	CH02 A	105	107
LCS 880-2326/2-A	Lab Control Sample	105	104
LCSD 880-2326/3-A	Lab Control Sample Dup	111	105
MB 880-2326/1-A	Method Blank	106	110
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2314/5-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2314

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/26/21 08:44	04/26/21 12:07	1

Lab Sample ID: LCS 880-2314/1-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2314/2-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-2326/1-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/26/21 13:23	04/26/21 18:03	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/26/21 18:03	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2326/2-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2326

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1143		mg/Kg		114		70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1024		mg/Kg		102		70 - 130		

Lab Sample ID: LCSD 880-2326/3-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2326

Top Data											
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
			Added	Result	Qualifier				Limits		Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1224		mg/Kg		122	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130	1	20
Bottom Data											
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	111		70 - 130								
o-Terphenyl	105		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2479/1-A

Matrix: Solid

Analysis Batch: 2498

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/29/21 13:24	1

Lab Sample ID: LCS 880-2479/2-A

Matrix: Solid

Analysis Batch: 2498

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-2479/3-A

Matrix: Solid

Analysis Batch: 2498

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	247.0		mg/Kg		99	90 - 110	1	20

Eurofins Xenco, Carlsbad



## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Total/NA	Solid	5035	
890-563-2	CH02 A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 2315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Total/NA	Solid	8021B	2314
890-563-2	CH02 A	Total/NA	Solid	8021B	2314
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314

## GC Semi VOA

## Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Total/NA	Solid	8015B NM	2326
890-563-2	CH02 A	Total/NA	Solid	8015B NM	2326
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015B NM	2326
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2326
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2326

## Prep Batch: 2326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Total/NA	Solid	8015NM Prep	
890-563-2	CH02 A	Total/NA	Solid	8015NM Prep	
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 2479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Soluble	Solid	DI Leach	
890-563-2	CH02 A	Soluble	Solid	DI Leach	
MB 880-2479/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2479/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2479/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 2498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-563-1	CH02	Soluble	Solid	300.0	2479
890-563-2	CH02 A	Soluble	Solid	300.0	2479
MB 880-2479/1-A	Method Blank	Soluble	Solid	300.0	2479
LCS 880-2479/2-A	Lab Control Sample	Soluble	Solid	300.0	2479
LCSD 880-2479/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2479

Eurofins Xenco, Carlsbad

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

Client Sample ID: CH02

Lab Sample ID: 890-563-1

Date Collected: 04/22/21 10:23

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 18:18	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 01:47	AJ	XM
Soluble	Leach	DI Leach			2479	04/29/21 10:46	SC	XM
Soluble	Analysis	300.0		1	2498	04/29/21 15:39	SC	XM

Client Sample ID: CH02 A

Lab Sample ID: 890-563-2

Date Collected: 04/22/21 10:38

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 18:38	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 02:08	AJ	XM
Soluble	Leach	DI Leach			2479	04/29/21 10:46	SC	XM
Soluble	Analysis	300.0		1	2498	04/29/21 15:44	SC	XM

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

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 PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-563-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-563-1	CH02	Solid	04/22/21 10:23	04/23/21 10:07	0 - 2.5
890-563-2	CH02 A	Solid	04/22/21 10:38	04/23/21 10:07	2.5 - 4

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



Houston, TX (281) 240-4200 Dallas, TX (214) 902-0330 San Antonio, TX (210) 509-3334  
Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296  
Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 833-3333  
Hobbs, NM (575) 392-7550

Work Order No: \_\_\_\_\_

Page 1 of 1

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## Chain of Custody

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, dan.moir@wsp.com

Work Order Comments	
<b>Program:</b> UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Growfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>	
<b>State of Project:</b>	
<b>Reporting:</b> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
<b>Deliverables:</b> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>	

Project Name:	PLU PC 28 Battery	Turn Around	ANALYSIS REQUEST				Work Order Notes
Project Number:	TE012919281	Routine					AFE: EW 2020 03365 EXP 01
P.O. Number:	Eddy	Rush:					Cost center 1081071001
Sampler's Name:	William Mather	Due Date:					API 30-015-36830


SAMPLE RECEIPT		Temp Blank:	Yes	No	Well Ice:	Yes	No
Temperature (°C):	3-16/3-4	Thermometer ID					
Received Intact:	<input checked="" type="radio"/> Yes <input type="radio"/> No	2111-007					
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	-0.2					
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/>	Total Containers:					

Number of Containers

EPA 8015)

EPA 0=8021)

de (EPA 300.0)



890-563 Chain of Custody

Incident ID: NCE 2002/42190

NRM1931858285

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

[illegible]

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


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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	4-23-10			
2					
3					
4					
5					
6					

Download Date: 05/14/18 09:11 PM

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

## Chain of Custody Record



eurofins

## Environment Testing America

[illegible]



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-563-1

SDG Number: TE012919281

Login Number: 563

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-563-1

SDG Number: TE012919281

Login Number: 563

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 04/26/21 09:10 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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-564-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC 28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
4/29/2021 2:57:43 PM

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

#### LINKS

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results through

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

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

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Laboratory Job ID: 890-564-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

Case Narrative

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

Job ID: 890-564-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative	
	Job Narrative 890-564-1

Receipt

The samples were received on 4/23/2021 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

Client Sample ID: CH03

Lab Sample ID: 890-564-1

Date Collected: 04/22/21 10:59

Matrix: Solid

Date Received: 04/23/21 10:07

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:59	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 18:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/26/21 08:44	04/26/21 18:59	1
1,4-Difluorobenzene (Surr)	114		70 - 130	04/26/21 08:44	04/26/21 18:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:06	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	04/26/21 13:23	04/27/21 01:06	1
o-Terphenyl	99		70 - 130	04/26/21 13:23	04/27/21 01:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	400		4.98	mg/Kg			04/26/21 15:14	1

Client Sample ID: CH03 A

Lab Sample ID: 890-564-2

Date Collected: 04/22/21 12:02

Matrix: Solid

Date Received: 04/23/21 10:07

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00201		0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:20	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	04/26/21 08:44	04/26/21 19:20	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/26/21 08:44	04/26/21 19:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:26	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

Client Sample ID: CH03 A

Lab Sample ID: 890-564-2

Date Collected: 04/22/21 12:02

Matrix: Solid

Date Received: 04/23/21 10:07

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:26	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 01:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	04/26/21 13:23	04/27/21 01:26	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/27/21 01:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	465		5.00	mg/Kg			04/28/21 10:31	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

## 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)
890-564-1	CH03	97	114
890-564-2	CH03 A	100	105
LCS 880-2314/1-A	Lab Control Sample	94	111
LCSD 880-2314/2-A	Lab Control Sample Dup	95	107
MB 880-2314/5-A	Method Blank	106	85
<b>Surrogate Legend</b>			
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)
890-564-1	CH03	100	99
890-564-2	CH03 A	108	110
LCS 880-2326/2-A	Lab Control Sample	105	104
LCSD 880-2326/3-A	Lab Control Sample Dup	111	105
MB 880-2326/1-A	Method Blank	106	110
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2314/5-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2314

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/26/21 08:44	04/26/21 12:07	1

Lab Sample ID: LCS 880-2314/1-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2314/2-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-2326/1-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/26/21 13:23	04/26/21 18:03	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/26/21 18:03	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2326/2-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2326

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1143		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Lab Sample ID: LCSD 880-2326/3-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2326

			Spike	LCSD	LCSD				%Rec.			RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1224		mg/Kg		122	70 - 130	7	20	
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130	1	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	111		70 - 130									
o-Terphenyl	105		70 - 130									

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2317/1-A

Matrix: Solid

Analysis Batch: 2343

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/26/21 13:47	1

Lab Sample ID: LCS 880-2317/2-A

Matrix: Solid

Analysis Batch: 2343

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	252.3		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-2317/3-A

Matrix: Solid

Analysis Batch: 2343

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	252.4		mg/Kg		101	90 - 110	0	20

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

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

Lab Sample ID: 890-564-1 MS

Matrix: Solid

Analysis Batch: 2343

Client Sample ID: CH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	400		249	643.6		mg/Kg		98	90 - 110

Lab Sample ID: 890-564-1 MSD

Matrix: Solid

Analysis Batch: 2343

Client Sample ID: CH03

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	400		249	642.5		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-2339/1-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/28/21 10:15	1

Lab Sample ID: LCS 880-2339/2-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	258.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-2339/3-A

Matrix: Solid

Analysis Batch: 2406

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	257.2		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-564-2 MS

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: CH03 A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	465		250	719.0		mg/Kg		102	90 - 110

Lab Sample ID: 890-564-2 MSD

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: CH03 A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	465		250	738.8		mg/Kg		109	90 - 110	3	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Total/NA	Solid	5035	
890-564-2	CH03 A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 2315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Total/NA	Solid	8021B	2314
890-564-2	CH03 A	Total/NA	Solid	8021B	2314
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314

## GC Semi VOA

## Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Total/NA	Solid	8015B NM	2326
890-564-2	CH03 A	Total/NA	Solid	8015B NM	2326
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015B NM	2326
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2326
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2326

## Prep Batch: 2326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Total/NA	Solid	8015NM Prep	
890-564-2	CH03 A	Total/NA	Solid	8015NM Prep	
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 2317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Soluble	Solid	DI Leach	
MB 880-2317/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2317/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2317/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-564-1 MS	CH03	Soluble	Solid	DI Leach	
890-564-1 MSD	CH03	Soluble	Solid	DI Leach	

## Leach Batch: 2339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-2	CH03 A	Soluble	Solid	DI Leach	
MB 880-2339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-564-2 MS	CH03 A	Soluble	Solid	DI Leach	
890-564-2 MSD	CH03 A	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

## HPLC/IC

## Analysis Batch: 2343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-1	CH03	Soluble	Solid	300.0	2317
MB 880-2317/1-A	Method Blank	Soluble	Solid	300.0	2317
LCS 880-2317/2-A	Lab Control Sample	Soluble	Solid	300.0	2317
LCSD 880-2317/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2317
890-564-1 MS	CH03	Soluble	Solid	300.0	2317
890-564-1 MSD	CH03	Soluble	Solid	300.0	2317

## Analysis Batch: 2406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-564-2	CH03 A	Soluble	Solid	300.0	2339
MB 880-2339/1-A	Method Blank	Soluble	Solid	300.0	2339
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	300.0	2339
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2339
890-564-2 MS	CH03 A	Soluble	Solid	300.0	2339
890-564-2 MSD	CH03 A	Soluble	Solid	300.0	2339



## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

Client Sample ID: CH03

Lab Sample ID: 890-564-1

Date Collected: 04/22/21 10:59

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 18:59	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 01:06	AJ	XM
Soluble	Leach	DI Leach			2317	04/26/21 09:41	SC	XM
Soluble	Analysis	300.0		1	2343	04/26/21 15:14	SC	XM

Client Sample ID: CH03 A

Lab Sample ID: 890-564-2

Date Collected: 04/22/21 12:02

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 19:20	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 01:26	AJ	XM
Soluble	Leach	DI Leach			2339	04/26/21 15:48	SC	XM
Soluble	Analysis	300.0		1	2406	04/28/21 10:31	CH	XM

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

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 PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-564-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-564-1	CH03	Solid	04/22/21 10:59	04/23/21 10:07	
890-564-2	CH03 A	Solid	04/22/21 12:02	04/23/21 10:07	

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Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1295  
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 \_\_\_\_\_ of \_\_\_\_\_

Chain of Custody

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, dan.moir@wsp.com

Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Groundfields <input type="checkbox"/> RC <input type="checkbox"/> Deepfund	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>

Project Name:	PLU PC 28 Battery	Turn Around	
Project Number:	TE012919281	Routine	
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	
<b>SAMPLE RECEIPT</b>			
Temperature (°C):	3.4 / 3.4	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Received intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Thermometer ID	2711007
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:	-0.2
Total Containers:			
<b>ANALYSIS REQUEST</b>			
890-564 Chain of Custody			
			
<b>Work Order Notes</b>			
AFE: EW-2020-03365-EXP-01 Cost center 1081071001 API 30-015-36830 Incident ID: NCE2002742193, NRM1931858285			
TAT starts the day received by the lab, if received by 4:30pm			
<b>Sample Comments</b>			
Discrete			
Discrete			

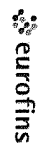
Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn  
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U 1631 / 245.1 / 7470 / 7471 : Hg

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/23/21 1007			

1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



## Environment Testing America

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-564-1

SDG Number: TE012919281

Login Number: 564

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-564-1

SDG Number: TE012919281

Login Number: 564

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 04/26/21 09:11 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.	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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-565-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC 28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
4/29/2021 2:59:03 PM

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

#### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Laboratory Job ID: 890-565-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

Case Narrative

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

Job ID: 890-565-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative	
Job Narrative	
890-565-1	

Receipt

The samples were received on 4/23/2021 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

Client Sample ID: CH04

Lab Sample ID: 890-565-1

Date Collected: 04/22/21 12:38

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 0 - 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:40	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		04/26/21 08:44	04/26/21 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/26/21 08:44	04/26/21 19:40	1
1,4-Difluorobenzene (Surr)	114		70 - 130	04/26/21 08:44	04/26/21 19:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:24	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	04/26/21 13:23	04/27/21 00:24	1
o-Terphenyl	117		70 - 130	04/26/21 13:23	04/27/21 00:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	520		5.02	mg/Kg			04/28/21 10:55	1

Client Sample ID: CH04 A

Lab Sample ID: 890-565-2

Date Collected: 04/22/21 12:43

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 20:01	1
Total BTEX	<0.00402	U	0.00402	mg/Kg		04/26/21 08:44	04/26/21 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	04/26/21 08:44	04/26/21 20:01	1
1,4-Difluorobenzene (Surr)	123		70 - 130	04/26/21 08:44	04/26/21 20:01	1

Eurofins Xenco, Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

Client Sample ID: CH04 A

Lab Sample ID: 890-565-2

Date Collected: 04/22/21 12:43

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:45	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/27/21 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	04/26/21 13:23	04/27/21 00:45	1
o-Terphenyl	106		70 - 130	04/26/21 13:23	04/27/21 00:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	246		5.00	mg/Kg			04/28/21 11:01	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

## 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)
890-565-1	CH04	104	114
890-565-2	CH04 A	101	123
LCS 880-2314/1-A	Lab Control Sample	94	111
LCSD 880-2314/2-A	Lab Control Sample Dup	95	107
MB 880-2314/5-A	Method Blank	106	85
<b>Surrogate Legend</b>			
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)
890-565-1	CH04	116	117
890-565-2	CH04 A	104	106
LCS 880-2326/2-A	Lab Control Sample	105	104
LCSD 880-2326/3-A	Lab Control Sample Dup	111	105
MB 880-2326/1-A	Method Blank	106	110
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			



## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2314/5-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2314

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/26/21 08:44	04/26/21 12:07	1

Lab Sample ID: LCS 880-2314/1-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2314/2-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-2326/1-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/26/21 13:23	04/26/21 18:03	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/26/21 18:03	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2326/2-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2326

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1143		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Lab Sample ID: LCSD 880-2326/3-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2326

Top Data: 2025											
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
			Added	Result	Qualifier				Limits		Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1224		mg/Kg		122	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130	1	20
Bottom Data: 2025											
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	111		70 - 130								
o-Terphenyl	105		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2339/1-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/28/21 10:15	1

Lab Sample ID: LCS 880-2339/2-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	258.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-2339/3-A

Matrix: Solid

Analysis Batch: 2406

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	257.2		mg/Kg		103	90 - 110	1	20

Eurofins Xenco, Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Total/NA	Solid	5035	
890-565-2	CH04 A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 2315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Total/NA	Solid	8021B	2314
890-565-2	CH04 A	Total/NA	Solid	8021B	2314
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314

## GC Semi VOA

## Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Total/NA	Solid	8015B NM	2326
890-565-2	CH04 A	Total/NA	Solid	8015B NM	2326
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015B NM	2326
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2326
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2326

## Prep Batch: 2326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Total/NA	Solid	8015NM Prep	
890-565-2	CH04 A	Total/NA	Solid	8015NM Prep	
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 2339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Soluble	Solid	DI Leach	
890-565-2	CH04 A	Soluble	Solid	DI Leach	
MB 880-2339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 2406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-565-1	CH04	Soluble	Solid	300.0	2339
890-565-2	CH04 A	Soluble	Solid	300.0	2339
MB 880-2339/1-A	Method Blank	Soluble	Solid	300.0	2339
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	300.0	2339
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2339

Eurofins Xenco, Carlsbad

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

Client Sample ID: CH04

Lab Sample ID: 890-565-1

Date Collected: 04/22/21 12:38

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 19:40	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 00:24	AJ	XM
Soluble	Leach	DI Leach			2339	04/26/21 15:48	SC	XM
Soluble	Analysis	300.0		1	2406	04/28/21 10:55	CH	XM

Client Sample ID: CH04 A

Lab Sample ID: 890-565-2

Date Collected: 04/22/21 12:43

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 20:01	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 00:45	AJ	XM
Soluble	Leach	DI Leach			2339	04/26/21 15:48	SC	XM
Soluble	Analysis	300.0		1	2406	04/28/21 11:01	CH	XM

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

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 PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-565-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-565-1	CH04	Solid	04/22/21 12:38	04/23/21 10:07	0 - 2.5
890-565-2	CH04 A	Solid	04/22/21 12:43	04/23/21 10:07	2.5 - 4

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



Houston, TX (281) 240-4200 Dallas, TX (214) 902-0030 San Antonio, TX (210) 509-3334  
Midland TX (432-704-5440) El Paso, TX (915)585-3443 Lubbock, TX (806)794-1296  
Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813) 961-1111  
Hobbs,NM (575-392-7550)

Work Order No: \_\_\_\_\_

Page 1 of 1

[www.xenico.com](http://www.xenico.com)

## Chain of Custody

Project Manager:		Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:		WSP USA Inc., Permian office	Company Name:	XTO Energy
Address:		3300 North A Street	Address:	
City, State ZIP:		Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.malher@wsp.com, dan.moir@wsp.com	

<div> <div>Work Order Comments</div> <div> <div> <div>Program: UST/PST</div> <div><input type="checkbox"/> RP</div> <div><input type="checkbox"/> Growfields</div> <div><input type="checkbox"/> RC</div> <div><input type="checkbox"/> Superfund</div> </div> <div> <div>State of Project:</div> <div> <div>Reporting Level II</div> <div><input type="checkbox"/> Level III</div> <div><input type="checkbox"/> ST/UST</div> <div><input type="checkbox"/> RP</div> <div><input type="checkbox"/> Level IV</div> </div> </div> </div> </div> <div> <div>Deliverables: EDD</div> <div><input type="checkbox"/> ADAPT</div> <div><input type="checkbox"/> Other:</div> </div>				
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[illegible][illegible]

**Total** **200.7 / 6010**    **200.8 / 6020:**

*Circle Method(s) and Metal(s) to be analyzed*

8RCRA    13PPM    Texas 11    Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn  
TCIP / SPLP 6010: 8RCRA    Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

4634-1245-417470-17474-Hg

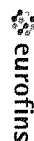
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility 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
<i>[Signature]</i>	<i>[Signature]</i>	4-23-21 1807			

Revised Date 05/11/18 Rev. 2018



## Chain of Custody Record

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-565-1

SDG Number: TE012919281

Login Number: 565

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-565-1

SDG Number: TE012919281

Login Number: 565

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 04/26/21 09:12 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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-566-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC 28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
4/29/2021 3:01:01 PM

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

#### LINKS

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results through

**TotalAccess**

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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Laboratory Job ID: 890-566-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

**Case Narrative**

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

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**Job ID: 890-566-1**

---

**Laboratory: Eurofins Xenco, Carlsbad****Narrative**

---

**Job Narrative**  
**890-566-1**

**Receipt**

The samples were received on 4/23/2021 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

**GC VOA**

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

**GC Semi VOA**

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

**HPLC/IC**

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

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

Client Sample ID: CH05

Lab Sample ID: 890-566-1

Date Collected: 04/22/21 13:17

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 0 - 2.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 20:21	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		04/26/21 08:44	04/26/21 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/26/21 08:44	04/26/21 20:21	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/26/21 08:44	04/26/21 20:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/26/21 23:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/26/21 23:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/26/21 23:42	1
Total TPH	<49.9	U	49.9	mg/Kg		04/26/21 13:23	04/26/21 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	04/26/21 13:23	04/26/21 23:42	1
o-Terphenyl	107		70 - 130	04/26/21 13:23	04/26/21 23:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	237		4.95	mg/Kg			04/28/21 11:31	1

Client Sample ID: CH05 A

Lab Sample ID: 890-566-2

Date Collected: 04/22/21 13:43

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 20:42	1
Total BTEX	<0.00404	U	0.00404	mg/Kg		04/26/21 08:44	04/26/21 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	04/26/21 08:44	04/26/21 20:42	1
1,4-Difluorobenzene (Surr)	105		70 - 130	04/26/21 08:44	04/26/21 20:42	1

Eurofins Xenco, Carlsbad



## Client Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

Client Sample ID: CH05 A

Lab Sample ID: 890-566-2

Date Collected: 04/22/21 13:43

Matrix: Solid

Date Received: 04/23/21 10:07

Sample Depth: 2.5 - 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 00:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 00:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 00:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/27/21 00:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	04/26/21 13:23	04/27/21 00:03	1
o-Terphenyl	105		70 - 130	04/26/21 13:23	04/27/21 00:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.4		4.97	mg/Kg			04/28/21 11:36	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

## 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)
890-566-1	CH05	97	109
890-566-2	CH05 A	96	105
LCS 880-2314/1-A	Lab Control Sample	94	111
LCSD 880-2314/2-A	Lab Control Sample Dup	95	107
MB 880-2314/5-A	Method Blank	106	85
<b>Surrogate Legend</b>			
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)
890-566-1	CH05	105	107
890-566-2	CH05 A	101	105
LCS 880-2326/2-A	Lab Control Sample	105	104
LCSD 880-2326/3-A	Lab Control Sample Dup	111	105
MB 880-2326/1-A	Method Blank	106	110
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2314/5-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2314

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		04/26/21 08:44	04/26/21 12:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/26/21 08:44	04/26/21 12:07	1
1,4-Difluorobenzene (Surr)	85		70 - 130	04/26/21 08:44	04/26/21 12:07	1

Lab Sample ID: LCS 880-2314/1-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-2314/2-A

Matrix: Solid

Analysis Batch: 2315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2314

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-2326/1-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2326

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1
Total TPH	<50.0	U	50.0	mg/Kg		04/26/21 13:23	04/26/21 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/26/21 13:23	04/26/21 18:03	1
o-Terphenyl	110		70 - 130	04/26/21 13:23	04/26/21 18:03	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2326/2-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2326

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
			Added	Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1143		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130		

Lab Sample ID: LCSD 880-2326/3-A

Matrix: Solid

Analysis Batch: 2306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2326

			Spike	LCSD	LCSD				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1224		mg/Kg		122	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1033		mg/Kg		103	70 - 130	1	20
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	111		70 - 130								
o-Terphenyl	105		70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2339/1-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/28/21 10:15	1

Lab Sample ID: LCS 880-2339/2-A

Matrix: Solid

Analysis Batch: 2406

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	258.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-2339/3-A

Matrix: Solid

Analysis Batch: 2406

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	257.2		mg/Kg		103	90 - 110	1	20

Eurofins Xenco, Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Total/NA	Solid	5035	
890-566-2	CH05 A	Total/NA	Solid	5035	
MB 880-2314/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 2315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Total/NA	Solid	8021B	2314
890-566-2	CH05 A	Total/NA	Solid	8021B	2314
MB 880-2314/5-A	Method Blank	Total/NA	Solid	8021B	2314
LCS 880-2314/1-A	Lab Control Sample	Total/NA	Solid	8021B	2314
LCSD 880-2314/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2314

## GC Semi VOA

## Analysis Batch: 2306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Total/NA	Solid	8015B NM	2326
890-566-2	CH05 A	Total/NA	Solid	8015B NM	2326
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015B NM	2326
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2326
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2326

## Prep Batch: 2326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Total/NA	Solid	8015NM Prep	
890-566-2	CH05 A	Total/NA	Solid	8015NM Prep	
MB 880-2326/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2326/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2326/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 2339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Soluble	Solid	DI Leach	
890-566-2	CH05 A	Soluble	Solid	DI Leach	
MB 880-2339/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 2406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-566-1	CH05	Soluble	Solid	300.0	2339
890-566-2	CH05 A	Soluble	Solid	300.0	2339
MB 880-2339/1-A	Method Blank	Soluble	Solid	300.0	2339
LCS 880-2339/2-A	Lab Control Sample	Soluble	Solid	300.0	2339
LCSD 880-2339/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2339

Eurofins Xenco, Carlsbad

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

Client Sample ID: CH05

Lab Sample ID: 890-566-1

Date Collected: 04/22/21 13:17

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 20:21	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/26/21 23:42	AJ	XM
Soluble	Leach	DI Leach			2339	04/26/21 15:48	SC	XM
Soluble	Analysis	300.0		1	2406	04/28/21 11:31	CH	XM

Client Sample ID: CH05 A

Lab Sample ID: 890-566-2

Date Collected: 04/22/21 13:43

Matrix: Solid

Date Received: 04/23/21 10:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2314	04/26/21 08:44	KL	XM
Total/NA	Analysis	8021B		1	2315	04/26/21 20:42	KL	XM
Total/NA	Prep	8015NM Prep			2326	04/26/21 13:23	DM	XM
Total/NA	Analysis	8015B NM		1	2306	04/27/21 00:03	AJ	XM
Soluble	Leach	DI Leach			2339	04/26/21 15:48	SC	XM
Soluble	Analysis	300.0		1	2406	04/28/21 11:36	CH	XM

## Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

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 PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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



Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC 28 Battery

Job ID: 890-566-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-566-1	CH05	Solid	04/22/21 13:17	04/23/21 10:07	0 - 2.5
890-566-2	CH05 A	Solid	04/22/21 13:43	04/23/21 10:07	2.5 - 4

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



## Chain of Custody

Work Order No: \_\_\_\_\_

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

www.xenco.com

Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP USA Inc. Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.matter@wsp.com, dan.moir@wsp.com

Program: <input checked="" type="checkbox"/> UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund	
State of Project:	
Reporting Level: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: <input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	PLU PC 28 Battery	Turn Around	
Project Number:	TE012919281	Routine	<input checked="" type="checkbox"/>
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

<b>SAMPLE RECEIPT</b>	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Temperature (°C):	3.6/8.4	Thermometer ID	27M-003
	Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2
	Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Total Containers:	
	Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		



890-566 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST	Work Order Notes
CH05	S	4/22/2021	13:17	0-2.5'	1	X	X	X		AFE: EW/2020.03365, EXP.01 Cost center 1081071001 API 30-015-36830 Incident ID: NCE2002742193, NRM1931858285
CH05A	S	4/22/2021	13:43	2.5-4'	1	X	X	X		TAT starts the day received by the lab, if received by 4:30pm
										Sample Comments
										Discrete
										Discrete

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	4-23-21 1007			

1  
2  
3  
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8  
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14

## Chain of Custody Record



1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax: 575-988-3199

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-566-1

SDG Number: TE012919281

Login Number: 566

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-566-1

SDG Number: TE012919281

Login Number: 566

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 04/26/21 09:14 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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-628-1

Laboratory Sample Delivery Group: TE012919281

Client Project/Site: PLU PC28 Battery

**For:**

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

Attn: Dan Moir

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

Authorized for release by:  
5/7/2021 3:23:32 PM

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

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

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



Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Laboratory Job ID: 890-628-1  
SDG: TE012919281

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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



## Case Narrative

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

**Job ID: 890-628-1**

**Laboratory: Eurofins Xenco, Carlsbad**

### Narrative

#### Job Narrative 890-628-1

#### Receipt

The sample was received on 5/5/2021 10:08 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

#### Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS05 (890-628-1).

#### 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 PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

Client Sample ID: FS05

Lab Sample ID: 890-628-1

Date Collected: 05/04/21 09:20

Matrix: Solid

Date Received: 05/05/21 10:08

Sample Depth: - 1.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/06/21 12:50	05/06/21 23:20	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		05/06/21 12:50	05/06/21 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/06/21 12:50	05/06/21 23:20	1
1,4-Difluorobenzene (Surr)	108		70 - 130	05/06/21 12:50	05/06/21 23:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/07/21 05:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/07/21 05:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/07/21 05:35	1
Total TPH	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/07/21 05:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/06/21 11:32	05/07/21 05:35	1
o-Terphenyl	97		70 - 130	05/06/21 11:32	05/07/21 05:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	343		4.99	mg/Kg			05/06/21 15:12	1

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## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

## 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)
890-628-1	FS05	94	108
890-628-1 MS	FS05	105	106
890-628-1 MSD	FS05	105	103
LCS 880-2779/1-A	Lab Control Sample	98	111
LCSD 880-2779/2-A	Lab Control Sample Dup	94	106
MB 880-2707/5-A	Method Blank	106	98
MB 880-2779/5-A	Method Blank	110	102
<b>Surrogate Legend</b>			
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)
890-628-1	FS05	91	97
LCS 880-2771/2-A	Lab Control Sample	105	105
LCSD 880-2771/3-A	Lab Control Sample Dup	105	104
MB 880-2771/1-A	Method Blank	96	105
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2707/5-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2707

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/05/21 11:00	05/06/21 11:55	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/05/21 11:00	05/06/21 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/05/21 11:00	05/06/21 11:55	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/05/21 11:00	05/06/21 11:55	1

Lab Sample ID: MB 880-2779/5-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2779

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/06/21 12:50	05/06/21 22:58	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		05/06/21 12:50	05/06/21 22:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	05/06/21 12:50	05/06/21 22:58	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/06/21 12:50	05/06/21 22:58	1

Lab Sample ID: LCS 880-2779/1-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08429		mg/Kg		84	70 - 130
Toluene	0.100	0.09405		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.08942		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09021		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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

Lab Sample ID: LCSD 880-2779/2-A

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2779

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.08400		mg/Kg		84	70 - 130	0	35
Toluene	0.100	0.09012		mg/Kg		90	70 - 130	4	35
Ethylbenzene	0.100	0.08602		mg/Kg		86	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1758		mg/Kg		88	70 - 130	3	35
o-Xylene	0.100	0.08685		mg/Kg		87	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-628-1 MS

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: FS05

Prep Type: Total/NA

Prep Batch: 2779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07521		mg/Kg		74	70 - 130		
Toluene	<0.00199	U	0.100	0.08582		mg/Kg		84	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.08206		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1646		mg/Kg		82	70 - 130		
o-Xylene	<0.00199	U	0.100	0.08449		mg/Kg		84	70 - 130		

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

Lab Sample ID: 890-628-1 MSD

Matrix: Solid

Analysis Batch: 2757

Client Sample ID: FS05

Prep Type: Total/NA

Prep Batch: 2779

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.07741		mg/Kg		76	70 - 130	3	35
Toluene	<0.00199	U	0.0996	0.08768		mg/Kg		87	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.0996	0.08250		mg/Kg		83	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1706		mg/Kg		86	70 - 130	4	35
o-Xylene	<0.00199	U	0.0996	0.08493		mg/Kg		85	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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

Lab Sample ID: MB 880-2771/1-A

Matrix: Solid

Analysis Batch: 2795

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 2771

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		05/06/21 11:32	05/06/21 21:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/06/21 21:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/06/21 21:36	1
Total TPH	<50.0	U	50.0	mg/Kg		05/06/21 11:32	05/06/21 21:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	05/06/21 11:32	05/06/21 21:36	1
o-Terphenyl	105		70 - 130	05/06/21 11:32	05/06/21 21:36	1

Lab Sample ID: LCS 880-2771/2-A

Matrix: Solid

Analysis Batch: 2795

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 2771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	830.9		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1091		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-2771/3-A

Matrix: Solid

Analysis Batch: 2795

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 2771

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	866.9		mg/Kg		87	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1079		mg/Kg		108	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	104		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-2778/1-A

Matrix: Solid

Analysis Batch: 2785

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			05/06/21 14:31	1

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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

Lab Sample ID: LCS 880-2778/2-A

Matrix: Solid

Analysis Batch: 2785

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	245.1		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-2778/3-A

Matrix: Solid

Analysis Batch: 2785

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	245.2		mg/Kg		98	90 - 110	0	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

## GC VOA

## Prep Batch: 2707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-2707/5-A	Method Blank	Total/NA	Solid	5035	

## Analysis Batch: 2757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Total/NA	Solid	8021B	2779
MB 880-2707/5-A	Method Blank	Total/NA	Solid	8021B	2707
MB 880-2779/5-A	Method Blank	Total/NA	Solid	8021B	2779
LCS 880-2779/1-A	Lab Control Sample	Total/NA	Solid	8021B	2779
LCSD 880-2779/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	2779
890-628-1 MS	FS05	Total/NA	Solid	8021B	2779
890-628-1 MSD	FS05	Total/NA	Solid	8021B	2779

## Prep Batch: 2779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Total/NA	Solid	5035	
MB 880-2779/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-2779/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-2779/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-628-1 MS	FS05	Total/NA	Solid	5035	
890-628-1 MSD	FS05	Total/NA	Solid	5035	

## GC Semi VOA

## Prep Batch: 2771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Total/NA	Solid	8015NM Prep	
MB 880-2771/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-2771/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-2771/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 2795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Total/NA	Solid	8015B NM	2771
MB 880-2771/1-A	Method Blank	Total/NA	Solid	8015B NM	2771
LCS 880-2771/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	2771
LCSD 880-2771/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	2771

## HPLC/IC

## Leach Batch: 2778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Soluble	Solid	DI Leach	
MB 880-2778/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-2778/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-2778/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 2785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-628-1	FS05	Soluble	Solid	300.0	2778
MB 880-2778/1-A	Method Blank	Soluble	Solid	300.0	2778
LCS 880-2778/2-A	Lab Control Sample	Soluble	Solid	300.0	2778
LCSD 880-2778/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	2778

Eurofins Xenco, Carlsbad



Lab Chronicle

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

Client Sample ID: FS05  
Date Collected: 05/04/21 09:20  
Date Received: 05/05/21 10:08

Lab Sample ID: 890-628-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2779	05/06/21 12:50	KL	XM
Total/NA	Analysis	8021B		1	2757	05/06/21 23:20	KL	XM
Total/NA	Prep	8015NM Prep			2771	05/06/21 11:32	DM	XM
Total/NA	Analysis	8015B NM		1	2795	05/07/21 05:35	AJ	XM
Soluble	Leach	DI Leach			2778	05/06/21 11:46	CH	XM
Soluble	Analysis	300.0		1	2785	05/06/21 15:12	SC	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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 PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

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

**Protocol References:**

ASTM = ASTM International

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

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

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: PLU PC28 Battery

Job ID: 890-628-1  
SDG: TE012919281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-628-1	FS05	Solid	05/04/21 09:20	05/05/21 10:08	- 1.5

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



Environment Testing  
Xenco

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

## Chain of Custody

**Work Order No.:**

www.xenco.com Page 1 of 1

Project Manager:	JOSEPH HERNANDEZ	Bill to: (if different)	KYLE LITTELL
Company Name:	WSP USA	Company Name:	XTO ENERGY
Address:	3800 North A Street	Address:	3104 E. GREENE ST
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(817) 442-2327	Email:	anna.ky@wsp.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	PLU PC 28 Battery	Turn Around		ANALYSIS REQUEST	<div> <div>Preservative Codes</div> <div> None: NO  DI Water: H<sub>2</sub>O  MeOH: Me  HCL: HC  HNO<sub>3</sub>: HN  NaOH: Na  H<sub>3</sub>PO<sub>4</sub>: HP  NaHSO<sub>4</sub>: NABIS  Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>: NaSO<sub>3</sub>  Zn Acetate+NaOH: Zn  NaOH+Ascorbic Acid: SASC </div> </div>	
Project Number:	TEK12919281	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush				
Project Location:	Eddy County	Due Date:	3/14/14			
Sampler's Name:	Anna Byers	TAT starts the day received by the lab, if received by 4:30pm				
PO #:	NCE34022421913					
<b>SAMPLE RECEIPT</b>		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Samples Received In/act:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	21714.007			
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	3.2			
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	3.0			
Total Containers:		Corrected Temperature:				
Parameters				<div> <div>(EPA 8215 mod)</div> <div>(EPA 8216)</div> <div>(330.0)</div> </div>		
<div> <div>890-628 Chain of Custody</div> <div> </div> </div>						

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BIE	Chlor	Sample Comments
FSQS	S	5/11/21	0920	1.5'	Comp	1	X	X	X	AFE: EW 2400 93305 EXP 01 Cost Centre: 1981021001

	Total	200.7 / 6010	200.8 / 6020:	
Cycle Method(s) and Metal(s) to be analyzed	TcP/TSeP-6010; 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631/245.1 / 7470 / 7471	
	8RCRA	Al Sb As Ba Be B Cd Ca Cr Co Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Ti Sn U V Zn		

Notice: Signature of this document is relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xeno. A minimum charge of \$55.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

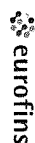
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>James Byers</i>	<i>Michael</i>	5/5/2021 08:13	2 <i>Michael</i>	<i>Lee Goff</i>	5.5.21 100
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020

## Eurofins Xenco, Carlsbad

1089 N Canal St.  
Carlsbad NM 88220  
Phone 575-988-3199 Fax 575-988-3199

## Chain of Custody Record



Environment Testing  
America

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-628-1

SDG Number: TE012919281

Login Number: 628

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-628-1

SDG Number: TE012919281

Login Number: 628

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Midland

List Creation: 05/06/21 11:19 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 30976

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  30976
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/12/2021