

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	NAPP2116739947
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.10221 Longitude -103.78969
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	PLU 28 BS 901H	Site Type	Wellpad
Date Release Discovered	6/4/2021	API#	(if applicable)

Unit Letter	Section	Township	Range	County
E	28	25S	31E	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)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) 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 checked="" type="checkbox"/> Other (describe) Frac Fluid	Volume/Weight Released (provide units) 7.00 BBLS	Volume/Weight Recovered (provide units) 6.5 BBLS

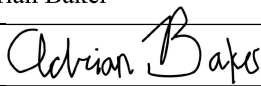
Cause of Release: An inlet valve on a frac pump failed, releasing fluid both into containment and onto the ground. A third-party contractor has been retained for remediation activities.

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

Initial Response

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

<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>Adrian Baker</u>	Title: <u>SSHE Coordinator</u>
Signature: <u></u>	Date: <u>6/16/2021</u>
email: <u>adrian.baker@exxonmobil.com</u>	Telephone: <u>432.236.3808</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>6/21/2021</u>

Location:	PLU 28 Big Sinks 901H	
Spill Date:	6/4/2021	
Area 1		
Approximate Area =	28.07	cu.ft
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Frac fluid=	5.00	bbls
Area 2		
Approximate Area =	1483.00	sq. ft.
Average Saturation (or depth) of spill =	0.75	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Frac fluid =	2.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Frac fluid =	7.00	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.00	bbls
Total Frac fluid =	6.50	bbls

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

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

CONDITIONS

Action 32318

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 32318
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	6/21/2021

Incident ID	NAPP2116739947
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<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 not 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.

Oil Conservation Division

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

Printed Name: Adrian Baker Title: Environmental Coordinator
Signature: *Adrian Baker* Date: 11/18/2021
email: Adrain.Baker@exxonmobil.com Telephone: (432)-263-3808

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2116739947
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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: Adrian Baker Title: Environmental Coordinator


Signature:  Date: 11/18/2021

email: Adrian.Baker@exxonmobil.com Telephone: 432-263-3808

OCD Only

Received by: Chad Hensley Date: 12/21/2021

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: 12/21/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced



WSP USA

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

November 17, 2021

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

**RE: Closure Request
PLU 28 BS 901H
Incident Number NAPP2116739947
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Poker Lake Unit (PLU), Big Sinks (BS), 901H (Site) in Unit E, Section 28, Township 25 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of frac fluid at the Site. Based on field observations, site assessment activities, and soil sample analytical results, XTO is submitting this Closure Request, and requesting no further action (NFA) for Incident Number NAPP2116739947.

RELEASE BACKGROUND

On June 4, 2021, an inlet valve on a hydraulic fracturing pump failed, causing fluid to release both into the temporary lined containment and onto the surface of the well pad. Approximately 7.00 barrels (bbls) of frac fluid were released. A hydrovac was deployed to the Site and recovered 6.5 bbls of standing fluids. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 16, 2021. The release was assigned Incident Number NAPP2116739947.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During March 2021, WSP installed a soil boring (C-4500) within 0.5 miles of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-4500 was drilled to a depth of 110 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The location of the borehole is approximately 1,390 feet east of the site and is depicted on Figure 1. The borehole



was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 0.8 miles southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On July 14, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141, visual observations, and information provided by on-site XTO personnel. The temporary lined containment was removed at the time of the Site visit. The release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. Further site assessment and remediation efforts were postponed due to ongoing drilling operations near the release, which resulted in activity restrictions at the Site due to safety concerns.

On October 6, 2021, once drilling operations were complete, WSP personnel returned to the Site to complete assessment activities. Three preliminary assessment soil samples (SS01 through SS01) were collected within the release extent from a depth of approximately 0.5 feet bgs to assess for the presence or absence of soil impacts at the ground surface. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated



photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The preliminary soil sample locations were mapped utilizing a GPS unit and are depicted on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics, TPH-diesel range organics, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS03 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. To further evaluate for the presence or absence of impacted soil, additional vertical delineation activities were scheduled.

DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

On October 14, 2021, WSP personnel returned to the Site to oversee additional vertical delineation activities. Three potholes (PH01 through PH03) were advanced using a track-mounted backhoe to a depth of approximately 2 feet bgs at the SS01 through SS03 preliminary soil sample locations. Delineation soil samples were collected from the potholes at depths of approximately 1-foot and 2 feet bgs to confirm the absence of impacted soil. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The delineation soil sample locations were mapped using a GPS unit and are depicted on Figure 3. The delineation soil samples were collected, handled, and analyzed as described above at Eurofins in Carlsbad, New Mexico. Photographic documentation was conducted during the Site visit and a photographic log is included in Attachment 3.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH03 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the release of frac fluid. Laboratory analytical results for the soil samples collected within the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO,



District II
Page 4

TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, the release was vertically delineated to below the most stringent Closure Criteria.

Based on initial response efforts, soil sample laboratory analytical results compliant with the Closure Criteria, and confirmed depth to groundwater greater than 100 feet bgs, no impacted soil was identified, and no excavation was required as a result of the frac fluid release. As such, XTO respectfully requests NFA for Incident Number NAPP2116739947.

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

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads 'Kalei Jennings'.

Kalei Jennings
Associate Consultant

A handwritten signature in black ink that reads 'Ashley L. Ager'.

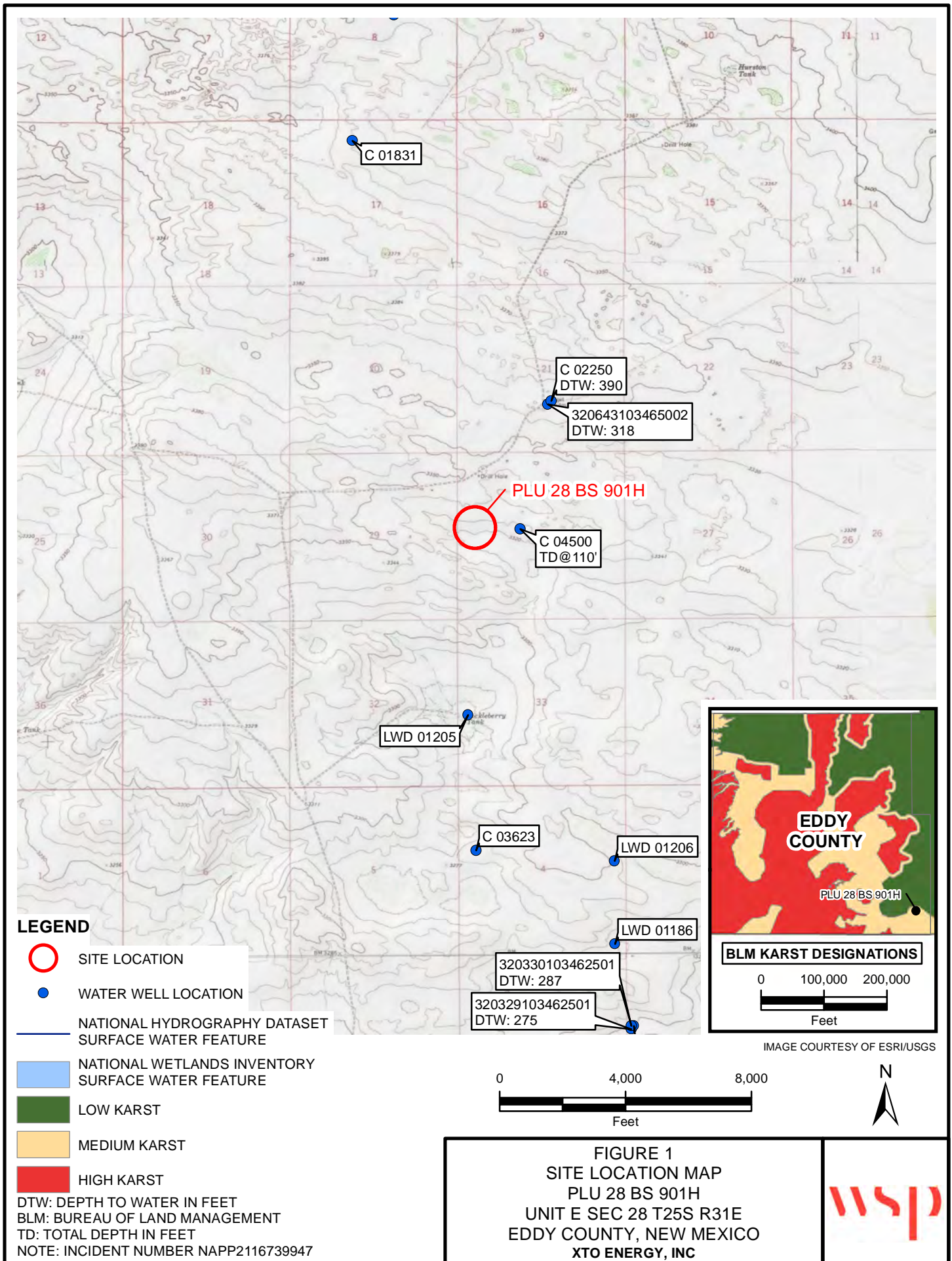
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES



**LEGEND**



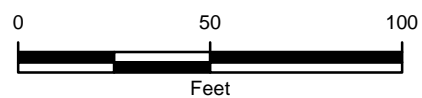
-  PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
-  RELEASE EXTENT

IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2116739947
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

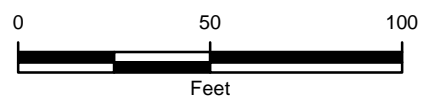
FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
PLU 28 BS 901H
UNIT E SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



**LEGEND**

- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2116739947
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 3
 DELINEATION SOIL SAMPLE LOCATIONS
 PLU 28 BS 901H
 UNIT E SEC 28 T25S R31E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



P:\XTO Energy\GIS\MXD\31403236.022.0129_PLU 28 BS 901H\31403236.022_FIG03_DELINEATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
 PLU 28 BS 901H
 Incident Number NAPP2116739947
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Soil Samples										
SS01	10/06/2021	0.5	<0.00200	<0.00399	342	<50.0	127	469	469	397
SS02	10/06/2021	0.5	<0.00200	<0.00400	154	<49.8	85.8	240	240	60.1
SS03	10/06/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	22.6
Delineation Soil Samples										
PH01	10/14/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	113
PH01A	10/14/2021	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	24.7
PH02	10/14/2021	1	<0.00199	<0.00398	102	<49.9	<49.9	102	102	599
PH02A	10/14/2021	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	96.7
PH03	10/14/2021	1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	127
PH03A	10/14/2021	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	29.3

Notes:

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

< - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard

ATTACHMENT 1: WELL RECORD AND LOG



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

03/10/2021

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

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-1860 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-1860 Pod1.

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

Sincerely,

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

Lucas Middleton

Enclosures: as noted above

REC-07-0003-2021-PO-51



PLUGGING RECORD



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

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4500- POD1

Well owner: XTO ENERGY (Kyle Littrell)

Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland

State: Texas

Zip code: 79707

II. WELL PLUGGING INFORMATION:

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

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23

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

4) Date well plugging began: 04/27/2021 Date well plugging concluded: 04/27/2021

5) GPS Well Location: Latitude: 32 deg, 6 min, 6.96 sec
Longitude: 103 deg, 47 min, 6.75 sec, WGS 84

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

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

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

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

USE OF 11/5/2021 10:20:15 AM

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

III. SIGNATURE:

Jack Atkins

05/05/2021

Signature of Well Driller

Date _____

Released to Imaging: 12/21/2021 11:55:56 AM






2021-05-05_C-4500_Plugging Record-forsign

Final Audit Report

2021-05-05

Created:	2021-05-05
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAABAK9L5xmxdw4gebAaYJQqFC_WD1hBxmhv

"2021-05-05_C-4500_Plugging Record-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2021-05-05 - 8:58:09 PM GMT- IP address: 69.21.248.123
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WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4500			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 6	SECONDS 6.96 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	47	6.75 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NW Sec. 28 T25S R31E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 03/24/2021	DRILLING ENDED 03/24/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 110		±6.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	

FOR OSE INTERNAL USE

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

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

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	1	1	Caliche, no odor, no stain, tan, light-brown	Y ✓ N	
	1	3	2	Sand, no odor, no stain, m-f, well sorted, brown, trace silt, low consolidation	Y ✓ N	
	3	7	4	Sandy clay, no odor, no stain, m-f, brown, well sorted, low plasticity, cohesive	Y ✓ N	
	7	23	16	Caliche, tan, light brown sand, m-f grained, poorly sorted, low consolidation	Y ✓ N	
	23	110	87	sand, brown, no odor, no stain, fine grained, well sorted, low consolidation	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: PLU 28 BS 126H, Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING: <div style="display: flex; justify-content: space-between;"> <div>  SIGNATURE OF DRILLER / PRINT SIGNEE NAME </div> <div> Jackie D. Atkins DATE </div> </div>					

FOR OSE INTERNAL USE

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

FILE NO.

POD NO.

TRN NO.

LOCATION

WELL TAG ID NO.

PAGE 2 OF 2

2021-05-05_C-4500_OSE_Well Record and Log_plu-forsign

Final Audit Report

2021-05-05

Created:	2021-05-05
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA_LWDwbNSqlSjjUwKTERilqyesTFMr2Q

"2021-05-05_C-4500_OSE_Well Record and Log_plu-forsign" History



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Adobe Sign

 <div style="text-align: center;"> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>		BH or PH Name: PH01		Date: 10/14/2021				
		Site Name: PLU 28 BS 901H						
		RP or Incident Number: NAPP2116739947						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.10221, -103.78969			Field Screening: Hach chloride strips, PID		Logged By: LDV Method: Backhoe Hole Diameter: N/A Total Depth: 2			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA; same as above								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	627.2	0	N	PH01	1'	1	CCHE	CALICHE, OFF WHITE-TAN, POORLY CONSOLIDATED, DRY SOME CALICHE GRAVEL, NO ODOR
M	456.8	0.0	N	PH01A	2'	2	SP-SC	SAND, DARK BROWN, POORLY GRADED WITH SOME LEAN CLAY, LOW COHESSION, SOME CALICHE GRAVEL, NO ODOR
TD @ 2 ft bgs								

 <div> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>		BH or PH Name: PH02		Date: 10/14/2021				
		Site Name: PLU 28 BS 901H						
		RP or Incident Number: NAPP2116739947						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.10221, -103.78969			Field Screening: Hach chloride strips, PID		Logged By: LDV Method: Backhoe Hole Diameter: N/A Total Depth: 2			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA; same as above								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	627.2	0	N	PH02	1'	1	CCHE	CALICHE, TAN-LIGHT BROWN, POORLY CONSOLIDATED, SOME CALICHE GRAVEL, NO ODOR
D	263.2	0.0	N	PH02A	2'	2	CCHE	SAA
TD @ 2 ft bgs								

 <div> WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220 </div>		BH or PH Name: PH03		Date: 10/14/2021				
		Site Name: PLU 28 BS 901H						
		RP or Incident Number: NAPP2116739947						
		WSP Job Number: 31403236.022.0129						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.10221, -103.78969			Field Screening: Hach chloride strips, PID		Logged By: LDV Method: Backhoe Hole Diameter: N/A Total Depth: 2			
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA; same as above								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	224.0	0	N	PH03	1'	1	CCHE	CALICHE, OFF WHITE-TAN, POORLY CONSOLIDATED, SOME SILY, LOW PLASTICITY, SOMEWHAT COHESIVE, NO ODOR
D	456.0	0.0	N	PH03A	2'	2	SP-SC	SAND, DARK BROWN, FINE GRAINED WITH SOME LEAN CLAY, LOW COHESION, SOME CALICHE GRAVEL, NO ODOR
TD @ 2 ft bgs								

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG		
XTO Energy, INC.	PLU 28 BS 901H Eddy County, New Mexico	NAPP2116739947


Photo No.	Date	
1	July 14, 2021	
Photo taken during initial site visit of surface staining.		 A wide-angle photograph of a large, flat, light-brown dirt field under a clear blue sky. In the background, several tall utility poles with power lines are visible. A dark-colored pickup truck is parked on the right side of the field.

Photo No.	Date	
2	July 14, 2021	
Photo taken during initial site visit of surface staining.		 A close-up photograph of the dirt field, showing significant surface staining and discoloration. The ground is uneven, with patches of darker brown and tan soil. In the background, some construction equipment is visible.



PHOTOGRAPHIC LOG		
XTO Energy, INC.	PLU 28 BS 901H Eddy County, New Mexico	NAPP2116739947



Photo No.	Date	
3	October 14, 2021	
Photo of delineation activities taking place at pothole PH01.		 A photograph showing a deep, rectangular pothole in a dirt road. The pothole is filled with loose soil and some small rocks. A shadow of the person taking the photo is visible in the bottom left corner.

Photo No.	Date	
4	October 14, 2021	
Photo taken after delineation activities were concluded and potholes had been backfilled.		 A photograph showing a dirt road with several potholes that have been backfilled. In the background, there is an industrial facility with large white storage tanks and various pipes and valves. The sky is clear and blue.

ATTACHMENT 4: 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: 890-1372-1

Laboratory Sample Delivery Group: 31403236.022.0129

Client Project/Site: PLU 28 BS 901H

For:

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

Attn: Kalei Jennings

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

Authorized for release by:
10/12/2021 3:38:17 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Laboratory Job ID: 890-1372-1
SDG: 31403236.022.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Job ID: 890-1372-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative	
	Job Narrative 890-1372-1

Receipt

The samples were received on 10/6/2021 12:54 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.8°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

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 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1372-1

Date Collected: 10/06/21 11:32

Matrix: Solid

Date Received: 10/06/21 12:54

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 14:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 14:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 14:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/11/21 08:05	10/11/21 14:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 14:54	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/11/21 08:05	10/11/21 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	10/11/21 08:05	10/11/21 14:54	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/11/21 08:05	10/11/21 14:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/11/21 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	469		50.0	mg/Kg			10/11/21 10:15	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		10/09/21 13:16	10/11/21 14:46	1
Diesel Range Organics (Over C10-C28)	342		50.0	mg/Kg		10/09/21 13:16	10/11/21 14:46	1
Oil Range Organics (Over C28-C36)	127		50.0	mg/Kg		10/09/21 13:16	10/11/21 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	10/09/21 13:16	10/11/21 14:46	1
o-Terphenyl	98		70 - 130	10/09/21 13:16	10/11/21 14:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	397		4.97	mg/Kg			10/08/21 00:05	1

Client Sample ID: SS02

Lab Sample ID: 890-1372-2

Date Collected: 10/06/21 11:35

Matrix: Solid

Date Received: 10/06/21 12:54

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 16:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 16:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 16:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 08:05	10/11/21 16:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 16:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 08:05	10/11/21 16:17	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Client Sample ID: SS02

Lab Sample ID: 890-1372-2

Date Collected: 10/06/21 11:35

Matrix: Solid

Date Received: 10/06/21 12:54

Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/11/21 08:05	10/11/21 16:17	1
1,4-Difluorobenzene (Surr)	83		70 - 130	10/11/21 08:05	10/11/21 16:17	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/11/21 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	240		49.8	mg/Kg			10/11/21 10:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/09/21 13:16	10/11/21 15:08	1
Diesel Range Organics (Over C10-C28)	154		49.8	mg/Kg		10/09/21 13:16	10/11/21 15:08	1
Oil Range Organics (Over C28-C36)	85.8		49.8	mg/Kg		10/09/21 13:16	10/11/21 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	10/09/21 13:16	10/11/21 15:08	1
o-Terphenyl	117		70 - 130	10/09/21 13:16	10/11/21 15:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.1		5.00	mg/Kg			10/08/21 00:12	1

Client Sample ID: SS03

Lab Sample ID: 890-1372-3

Date Collected: 10/06/21 11:37

Matrix: Solid

Date Received: 10/06/21 12:54

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/11/21 08:05	10/11/21 16:37	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/11/21 08:05	10/11/21 16:37	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/11/21 08:05	10/11/21 16:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/11/21 08:05	10/11/21 16:37	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/11/21 08:05	10/11/21 16:37	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/11/21 08:05	10/11/21 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130	10/11/21 08:05	10/11/21 16:37	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130	10/11/21 08:05	10/11/21 16:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/11/21 10:24	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Client Sample ID: SS03

Lab Sample ID: 890-1372-3

Date Collected: 10/06/21 11:37

Matrix: Solid

Date Received: 10/06/21 12:54

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/11/21 10:15	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		10/09/21 13:16	10/11/21 15:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/09/21 13:16	10/11/21 15:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/09/21 13:16	10/11/21 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	10/09/21 13:16	10/11/21 15:29	1
o-Terphenyl	107		70 - 130	10/09/21 13:16	10/11/21 15:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.6		4.99	mg/Kg			10/08/21 00:19	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-6934-A-2-E MS	Matrix Spike	114	87
880-6934-A-2-F MSD	Matrix Spike Duplicate	114	83
890-1372-1	SS01	126	81
890-1372-2	SS02	127	83
890-1372-3	SS03	136 S1+	69 S1-
LCS 880-9182/1-A	Lab Control Sample	117	87
LCSD 880-9182/2-A	Lab Control Sample Dup	112	85
MB 880-8831/5-A	Method Blank	110	84
MB 880-9182/5-A	Method Blank	112	78
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1353-A-1-J MS	Matrix Spike	99	100
890-1353-A-1-K MSD	Matrix Spike Duplicate	93	93
890-1372-1	SS01	95	98
890-1372-2	SS02	108	117
890-1372-3	SS03	101	107
LCS 880-9164/2-A	Lab Control Sample	91	88
LCSD 880-9164/3-A	Lab Control Sample Dup	83	81
MB 880-9164/1-A	Method Blank	102	119
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-8831/5-A

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 8831

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:46	10/11/21 00:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/21 13:46	10/11/21 00:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/21 13:46	10/11/21 00:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/21 13:46	10/11/21 00:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	10/04/21 13:46	10/11/21 00:15	1
1,4-Difluorobenzene (Surr)	84		70 - 130	10/04/21 13:46	10/11/21 00:15	1

Lab Sample ID: MB 880-9182/5-A

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9182

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 11:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/11/21 08:05	10/11/21 11:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/21 08:05	10/11/21 11:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/11/21 08:05	10/11/21 11:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	10/11/21 08:05	10/11/21 11:08	1
1,4-Difluorobenzene (Surr)	78		70 - 130	10/11/21 08:05	10/11/21 11:08	1

Lab Sample ID: LCS 880-9182/1-A

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09072		mg/Kg		91	70 - 130
Toluene	0.100	0.09034		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09282		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1976		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09927		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: LCSD 880-9182/2-A

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9182

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08352		mg/Kg		84	70 - 130	8	35

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

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

Lab Sample ID: LCSD 880-9182/2-A

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9182

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.08453		mg/Kg		85	70 - 130	7	35
Ethylbenzene	0.100	0.08717		mg/Kg		87	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1845		mg/Kg		92	70 - 130	7	35
o-Xylene	0.100	0.09318		mg/Kg		93	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 880-6934-A-2-E MS

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.100	0.09225		mg/Kg		92	70 - 130
Toluene	<0.00200	U	0.100	0.09375		mg/Kg		94	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.09649		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2049		mg/Kg		102	70 - 130
o-Xylene	<0.00200	U	0.100	0.1035		mg/Kg		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: 880-6934-A-2-F MSD

Matrix: Solid

Analysis Batch: 9112

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.09120		mg/Kg		92	70 - 130	1	35
Toluene	<0.00200	U	0.0990	0.09376		mg/Kg		95	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0990	0.09765		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.198	0.2068		mg/Kg		104	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.1052		mg/Kg		106	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

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

Lab Sample ID: MB 880-9164/1-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9164

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		10/09/21 13:16	10/11/21 10:51	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

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

Lab Sample ID: MB 880-9164/1-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9164

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/09/21 13:16	10/11/21 10:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/09/21 13:16	10/11/21 10:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/09/21 13:16	10/11/21 10:51	1
o-Terphenyl	119		70 - 130			10/09/21 13:16	10/11/21 10:51	1

Lab Sample ID: LCS 880-9164/2-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 9164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1167		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	1000	878.9		mg/Kg		88	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	91		70 - 130				
o-Terphenyl	88		70 - 130				

Lab Sample ID: LCSD 880-9164/3-A

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 9164

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1075		mg/Kg		108	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	865.7		mg/Kg		87	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	83		70 - 130						
o-Terphenyl	81		70 - 130						

Lab Sample ID: 890-1353-A-1-J MS

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 9164

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1170		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	915.8		mg/Kg		90	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	100		70 - 130						

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

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

Lab Sample ID: 890-1353-A-1-K MSD

Matrix: Solid

Analysis Batch: 9176

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 9164

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1210		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.0		mg/Kg		84	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	93		70 - 130								
o-Terphenyl	93		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9072/1-A

Matrix: Solid

Analysis Batch: 9099

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			10/07/21 21:13	1

Lab Sample ID: LCS 880-9072/2-A

Matrix: Solid

Analysis Batch: 9099

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.7		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-9072/3-A

Matrix: Solid

Analysis Batch: 9099

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	255.6		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-6950-A-1-D MS

Matrix: Solid

Analysis Batch: 9099

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1980		1240	3305		mg/Kg		107	90 - 110

Lab Sample ID: 880-6950-A-1-E MSD

Matrix: Solid

Analysis Batch: 9099

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1980		1240	3308		mg/Kg		107	90 - 110	0	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

GC VOA

Prep Batch: 8831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-8831/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 9112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	8021B	9182
890-1372-2	SS02	Total/NA	Solid	8021B	9182
890-1372-3	SS03	Total/NA	Solid	8021B	9182
MB 880-8831/5-A	Method Blank	Total/NA	Solid	8021B	8831
MB 880-9182/5-A	Method Blank	Total/NA	Solid	8021B	9182
LCS 880-9182/1-A	Lab Control Sample	Total/NA	Solid	8021B	9182
LCSD 880-9182/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	9182
880-6934-A-2-E MS	Matrix Spike	Total/NA	Solid	8021B	9182
880-6934-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	9182

Analysis Batch: 9139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	Total BTEX	
890-1372-2	SS02	Total/NA	Solid	Total BTEX	
890-1372-3	SS03	Total/NA	Solid	Total BTEX	

Prep Batch: 9182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	5035	
890-1372-2	SS02	Total/NA	Solid	5035	
890-1372-3	SS03	Total/NA	Solid	5035	
MB 880-9182/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-9182/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-9182/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-6934-A-2-E MS	Matrix Spike	Total/NA	Solid	5035	
880-6934-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 9164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	8015NM Prep	
890-1372-2	SS02	Total/NA	Solid	8015NM Prep	
890-1372-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-9164/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-9164/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-9164/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1353-A-1-J MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-1353-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 9176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	8015B NM	9164
890-1372-2	SS02	Total/NA	Solid	8015B NM	9164
890-1372-3	SS03	Total/NA	Solid	8015B NM	9164
MB 880-9164/1-A	Method Blank	Total/NA	Solid	8015B NM	9164
LCS 880-9164/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	9164

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QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

GC Semi VOA (Continued)

Analysis Batch: 9176 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-9164/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	9164
890-1353-A-1-J MS	Matrix Spike	Total/NA	Solid	8015B NM	9164
890-1353-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	9164

Analysis Batch: 9189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Total/NA	Solid	8015 NM	
890-1372-2	SS02	Total/NA	Solid	8015 NM	
890-1372-3	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 9072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Soluble	Solid	DI Leach	
890-1372-2	SS02	Soluble	Solid	DI Leach	
890-1372-3	SS03	Soluble	Solid	DI Leach	
MB 880-9072/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9072/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9072/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-6950-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-6950-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 9099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1372-1	SS01	Soluble	Solid	300.0	9072
890-1372-2	SS02	Soluble	Solid	300.0	9072
890-1372-3	SS03	Soluble	Solid	300.0	9072
MB 880-9072/1-A	Method Blank	Soluble	Solid	300.0	9072
LCS 880-9072/2-A	Lab Control Sample	Soluble	Solid	300.0	9072
LCSD 880-9072/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9072
880-6950-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	9072
880-6950-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9072

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Client Sample ID: SS01

Lab Sample ID: 890-1372-1

Date Collected: 10/06/21 11:32

Matrix: Solid

Date Received: 10/06/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	9112	10/11/21 14:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9164	10/09/21 13:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9176	10/11/21 14:46	AJ	XEN MID
Soluble	Leach	DI Leach			9072	10/07/21 15:04	CH	XEN MID
Soluble	Analysis	300.0		1	9099	10/08/21 00:05	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1372-2

Date Collected: 10/06/21 11:35

Matrix: Solid

Date Received: 10/06/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	9112	10/11/21 16:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9164	10/09/21 13:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9176	10/11/21 15:08	AJ	XEN MID
Soluble	Leach	DI Leach			9072	10/07/21 15:04	CH	XEN MID
Soluble	Analysis	300.0		1	9099	10/08/21 00:12	CH	XEN MID

Client Sample ID: SS03

Lab Sample ID: 890-1372-3

Date Collected: 10/06/21 11:37

Matrix: Solid

Date Received: 10/06/21 12:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9182	10/11/21 08:05	KL	XEN MID
Total/NA	Analysis	8021B		1	9112	10/11/21 16:37	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	9139	10/11/21 10:24	KL	XEN MID
Total/NA	Analysis	8015 NM		1	9189	10/11/21 10:15	AJ	XEN MID
Total/NA	Prep	8015NM Prep			9164	10/09/21 13:16	DM	XEN MID
Total/NA	Analysis	8015B NM		1	9176	10/11/21 15:29	AJ	XEN MID
Soluble	Leach	DI Leach			9072	10/07/21 15:04	CH	XEN MID
Soluble	Analysis	300.0		1	9099	10/08/21 00:19	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1372-1
SDG: 31403236.022.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1372-1	SS01	Solid	10/06/21 11:32	10/06/21 12:54	0.5
890-1372-2	SS02	Solid	10/06/21 11:35	10/06/21 12:54	0.5
890-1372-3	SS03	Solid	10/06/21 11:37	10/06/21 12:54	0.5

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- 11
- 12
- 13
- 14



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
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-392-7550)
Jobbs, NM (575-392-7550)

Chain of Custody

Work Order No.:

Project Manager:	Kalei Jennings	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO
Address:	3300 North A Street Bldg 1, Unit 222	Address:	3104 E Green Street
City, State ZIP:	Midland, Texas 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	817-683-2503	Email:	kalei.jennings@wsp.com, payton.benner@wsp.com

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

Project Name:	PLU 28 BS 901H	Turn Around	ANALYSIS REQUEST						Work Order Notes
Project Number:	31403236.022.0129	Routine <input type="checkbox"/>							CC:1667221001
P.O. Number:		Rush: <i>3 day</i>							API: 30-015-47807
Sampler's Name:	Payton Benner	Due Date:							NAPP2116739947


SAMPLE RECEIPT			
Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Wet Ice:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Temperature (°C):	3.0 / 2.8 Thermometer ID		
Received Intact:	<input checked="" type="radio"/> Yes <input type="radio"/> No 10M-007		
Cooler Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/> N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes <input type="radio"/> No <input checked="" type="radio"/> N/A	Total Containers:	

Number of Containers

PA 8015)

EPA 0=8021)

le (EPA 300.0)



890-1372 Chain of Custody

TAT starts the day received by the lab. If received by 4:30pm

[illegible]

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>P. Bannier</i>	<i>Lee Gelf</i>	110-6-21 1254	2		
3			4		
5			6		

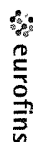
Eurofins Xenco, Carlsbad

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: 890-1372-1

SDG Number: 31403236.022.0129

Login Number: 1372

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1372-1

SDG Number: 31403236.022.0129

Login Number: 1372

List Number: 2

Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland

List Creation: 10/07/21 11:17 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	2.1 / 2.6
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: 890-1436-1

Laboratory SDG: 31403236.022.0129 Task 02.02

Client Project/Site: PLU 28 BS 901H

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:
10/22/2021 4:17:51 PM

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

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

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

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Laboratory Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*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 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Job ID: 890-1436-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-1436-1****Receipt**

The samples were received on 10/14/2021 3:43 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-10082 and analytical batch 880-10086 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-10073 and analytical batch 880-10053 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28)

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 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH01

Lab Sample ID: 890-1436-1

Date Collected: 10/14/21 11:55

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:30	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:30	1
Ethylbenzene	<0.00199	U F1	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:30	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		10/21/21 13:00	10/22/21 07:30	1
o-Xylene	<0.00199	U F1	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:30	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		10/21/21 13:00	10/22/21 07:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	10/21/21 13:00	10/22/21 07:30	1
1,4-Difluorobenzene (Surr)	104		70 - 130	10/21/21 13:00	10/22/21 07:30	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/21/21 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/20/21 13:58	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		10/21/21 09:49	10/21/21 14:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		10/21/21 09:49	10/21/21 14:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:49	10/21/21 14:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	10/21/21 09:49	10/21/21 14:42	1
o-Terphenyl	116		70 - 130	10/21/21 09:49	10/21/21 14:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		5.01	mg/Kg			10/22/21 08:53	1

Client Sample ID: PH01A

Lab Sample ID: 890-1436-2

Date Collected: 10/14/21 11:58

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:51	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:51	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/21/21 13:00	10/22/21 07:51	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 07:51	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/21/21 13:00	10/22/21 07:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	10/21/21 13:00	10/22/21 07:51	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH01A

Lab Sample ID: 890-1436-2

Date Collected: 10/14/21 11:58

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	10/21/21 13:00	10/22/21 07:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/21/21 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/20/21 13:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/21/21 09:49	10/21/21 15:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8	mg/Kg		10/21/21 09:49	10/21/21 15:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/21/21 09:49	10/21/21 15:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/21/21 09:49	10/21/21 15:01	1
o-Terphenyl	110		70 - 130			10/21/21 09:49	10/21/21 15:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.7		4.95	mg/Kg			10/22/21 09:00	1

Client Sample ID: PH02

Lab Sample ID: 890-1436-3

Date Collected: 10/14/21 12:18

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 08:11	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 08:11	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 08:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/21/21 13:00	10/22/21 08:11	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/21/21 13:00	10/22/21 08:11	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/21/21 13:00	10/22/21 08:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/21/21 13:00	10/22/21 08:11	1
1,4-Difluorobenzene (Surr)	108		70 - 130	10/21/21 13:00	10/22/21 08:11	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/21/21 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102		49.9	mg/Kg			10/20/21 13:58	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH02

Lab Sample ID: 890-1436-3

Date Collected: 10/14/21 12:18

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/21/21 09:49	10/21/21 15:21	1
Diesel Range Organics (Over C10-C28)	102	*1	49.9	mg/Kg		10/21/21 09:49	10/21/21 15:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:49	10/21/21 15:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/21/21 09:49	10/21/21 15:21	1
o-Terphenyl	105		70 - 130			10/21/21 09:49	10/21/21 15:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	599		5.04	mg/Kg			10/22/21 09:22	1

Client Sample ID: PH02A

Lab Sample ID: 890-1436-4

Date Collected: 10/14/21 12:21

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/21/21 13:00	10/22/21 08:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			10/21/21 13:00	10/22/21 08:32	1
1,4-Difluorobenzene (Surr)	110		70 - 130			10/21/21 13:00	10/22/21 08:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/21/21 17:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/20/21 13:58	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		10/21/21 09:49	10/21/21 15:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		10/21/21 09:49	10/21/21 15:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/21 09:49	10/21/21 15:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/21/21 09:49	10/21/21 15:41	1
o-Terphenyl	102		70 - 130			10/21/21 09:49	10/21/21 15:41	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH02A

Lab Sample ID: 890-1436-4

Date Collected: 10/14/21 12:21

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.7		4.99	mg/Kg			10/22/21 09:29	1

Client Sample ID: PH03

Lab Sample ID: 890-1436-5

Date Collected: 10/14/21 12:35

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/21 13:00	10/22/21 08:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			10/21/21 13:00	10/22/21 08:53	1
1,4-Difluorobenzene (Surr)	104		70 - 130			10/21/21 13:00	10/22/21 08:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			10/22/21 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/20/21 13:58	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		10/21/21 09:49	10/21/21 16:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		10/21/21 09:49	10/21/21 16:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:49	10/21/21 16:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			10/21/21 09:49	10/21/21 16:00	1
o-Terphenyl	107		70 - 130			10/21/21 09:49	10/21/21 16:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		4.97	mg/Kg			10/22/21 09:36	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH03A

Lab Sample ID: 890-1436-6

Date Collected: 10/14/21 12:38

Matrix: Solid

Date Received: 10/14/21 15:43

Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/21/21 13:00	10/22/21 09:14	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/21/21 13:00	10/22/21 09:14	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/21/21 13:00	10/22/21 09:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/21/21 13:00	10/22/21 09:14	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/21/21 13:00	10/22/21 09:14	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/21/21 13:00	10/22/21 09:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	10/21/21 13:00	10/22/21 09:14	1
1,4-Difluorobenzene (Surr)	115		70 - 130	10/21/21 13:00	10/22/21 09:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/22/21 12:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/20/21 13:58	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		10/21/21 09:49	10/21/21 16:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		10/21/21 09:49	10/21/21 16:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:49	10/21/21 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	10/21/21 09:49	10/21/21 16:20	1
o-Terphenyl	111		70 - 130	10/21/21 09:49	10/21/21 16:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.3		5.05	mg/Kg			10/22/21 09:43	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1436-1	PH01	93	104
890-1436-1 MS	PH01	94	92
890-1436-1 MSD	PH01	95	92
890-1436-2	PH01A	97	109
890-1436-3	PH02	98	108
890-1436-4	PH02A	94	110
890-1436-5	PH03	102	104
890-1436-6	PH03A	104	115
LCS 880-10082/1-A	Lab Control Sample	102	96
LCSD 880-10082/2-A	Lab Control Sample Dup	102	97
MB 880-10082/5-A	Method Blank	111	98
MB 880-9954/5-A	Method Blank	118	103
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-7346-A-1-F MS	Matrix Spike	127	124
880-7346-A-1-G MSD	Matrix Spike Duplicate	123	125
890-1436-1	PH01	105	116
890-1436-2	PH01A	103	110
890-1436-3	PH02	98	105
890-1436-4	PH02A	98	102
890-1436-5	PH03	101	107
890-1436-6	PH03A	107	111
LCS 880-10073/2-A	Lab Control Sample	88	83
LCSD 880-10073/3-A	Lab Control Sample Dup	98	94
MB 880-10073/1-A	Method Blank	103	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-10082/5-A

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10082

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 07:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 07:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 07:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/21/21 13:00	10/22/21 07:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/21/21 13:00	10/22/21 07:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/21/21 13:00	10/22/21 07:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	10/21/21 13:00	10/22/21 07:08	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/21/21 13:00	10/22/21 07:08	1

Lab Sample ID: LCS 880-10082/1-A

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08621		mg/Kg		86	70 - 130
Toluene	0.100	0.08303		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08803		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1716		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08940		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-10082/2-A

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08243		mg/Kg		82	70 - 130	4	35
Toluene	0.100	0.08181		mg/Kg		82	70 - 130	1	35
Ethylbenzene	0.100	0.08657		mg/Kg		87	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1690		mg/Kg		84	70 - 130	2	35
o-Xylene	0.100	0.08784		mg/Kg		88	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-1436-1 MS

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 10082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F1	0.0998	0.06756	F1	mg/Kg		68	70 - 130
Toluene	<0.00199	U F1	0.0998	0.06433	F1	mg/Kg		64	70 - 130

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

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

Lab Sample ID: 890-1436-1 MS

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 10082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U F1	0.0998	0.06496	F1	mg/Kg		65	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1187	F1	mg/Kg		59	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.06443	F1	mg/Kg		65	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-1436-1 MSD

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: PH01

Prep Type: Total/NA

Prep Batch: 10082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.06708	F1	mg/Kg		67	70 - 130	1	35
Toluene	<0.00199	U F1	0.100	0.06296	F1	mg/Kg		63	70 - 130	2	35
Ethylbenzene	<0.00199	U F1	0.100	0.06462	F1	mg/Kg		65	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1185	F1	mg/Kg		59	70 - 130	0	35
o-Xylene	<0.00199	U F1	0.100	0.06433	F1	mg/Kg		64	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: MB 880-9954/5-A

Matrix: Solid

Analysis Batch: 10086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 9954

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/20/21 10:54	10/21/21 20:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/20/21 10:54	10/21/21 20:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/20/21 10:54	10/21/21 20:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/20/21 10:54	10/21/21 20:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/20/21 10:54	10/21/21 20:12	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/20/21 10:54	10/21/21 20:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	10/20/21 10:54	10/21/21 20:12	1
1,4-Difluorobenzene (Surr)	103		70 - 130	10/20/21 10:54	10/21/21 20:12	1

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

Lab Sample ID: MB 880-10073/1-A

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10073

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		10/21/21 09:49	10/21/21 11:42	1

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

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

Lab Sample ID: MB 880-10073/1-A

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 10073

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/21 09:49	10/21/21 11:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/21 09:49	10/21/21 11:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/21/21 09:49	10/21/21 11:42	1
o-Terphenyl	108		70 - 130			10/21/21 09:49	10/21/21 11:42	1

Lab Sample ID: LCS 880-10073/2-A

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 10073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	801.8		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	816.3		mg/Kg		82	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	88		70 - 130				
o-Terphenyl	83		70 - 130				

Lab Sample ID: LCSD 880-10073/3-A

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 10073

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	983.9		mg/Kg		98	70 - 130	20	20
Diesel Range Organics (Over C10-C28)	1000	1020	*1	mg/Kg		102	70 - 130	22	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	98		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: 880-7346-A-1-F MS

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 10073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	1082		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1190	*1	996	2214		mg/Kg		103	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	127		70 - 130						
o-Terphenyl	124		70 - 130						

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QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

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

Lab Sample ID: 880-7346-A-1-G MSD

Matrix: Solid

Analysis Batch: 10053

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 10073

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1061		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1190	*1	998	2245		mg/Kg		106	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	123		70 - 130								
o-Terphenyl	125		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-9775/1-A

Matrix: Solid

Analysis Batch: 10150

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			10/22/21 07:56	1

Lab Sample ID: LCS 880-9775/2-A

Matrix: Solid

Analysis Batch: 10150

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	259.4		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-9775/3-A

Matrix: Solid

Analysis Batch: 10150

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	262.6		mg/Kg		105	90 - 110	1	20

Lab Sample ID: 890-1435-A-24-B MS

Matrix: Solid

Analysis Batch: 10150

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	87.6		248	347.6		mg/Kg		105	90 - 110

Lab Sample ID: 890-1435-A-24-C MSD

Matrix: Solid

Analysis Batch: 10150

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	87.6		248	350.3		mg/Kg		106	90 - 110	1	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

GC VOA

Prep Batch: 9954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-9954/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 10082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	5035	
890-1436-2	PH01A	Total/NA	Solid	5035	
890-1436-3	PH02	Total/NA	Solid	5035	
890-1436-4	PH02A	Total/NA	Solid	5035	
890-1436-5	PH03	Total/NA	Solid	5035	
890-1436-6	PH03A	Total/NA	Solid	5035	
MB 880-10082/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-10082/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-10082/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1436-1 MS	PH01	Total/NA	Solid	5035	
890-1436-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 10086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	8021B	10082
890-1436-2	PH01A	Total/NA	Solid	8021B	10082
890-1436-3	PH02	Total/NA	Solid	8021B	10082
890-1436-4	PH02A	Total/NA	Solid	8021B	10082
890-1436-5	PH03	Total/NA	Solid	8021B	10082
890-1436-6	PH03A	Total/NA	Solid	8021B	10082
MB 880-10082/5-A	Method Blank	Total/NA	Solid	8021B	10082
MB 880-9954/5-A	Method Blank	Total/NA	Solid	8021B	9954
LCS 880-10082/1-A	Lab Control Sample	Total/NA	Solid	8021B	10082
LCSD 880-10082/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	10082
890-1436-1 MS	PH01	Total/NA	Solid	8021B	10082
890-1436-1 MSD	PH01	Total/NA	Solid	8021B	10082

Analysis Batch: 10147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	Total BTEX	
890-1436-2	PH01A	Total/NA	Solid	Total BTEX	
890-1436-3	PH02	Total/NA	Solid	Total BTEX	
890-1436-4	PH02A	Total/NA	Solid	Total BTEX	
890-1436-5	PH03	Total/NA	Solid	Total BTEX	
890-1436-6	PH03A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 10003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	8015 NM	
890-1436-2	PH01A	Total/NA	Solid	8015 NM	
890-1436-3	PH02	Total/NA	Solid	8015 NM	
890-1436-4	PH02A	Total/NA	Solid	8015 NM	
890-1436-5	PH03	Total/NA	Solid	8015 NM	
890-1436-6	PH03A	Total/NA	Solid	8015 NM	

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

GC Semi VOA

Analysis Batch: 10053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	8015B NM	10073
890-1436-2	PH01A	Total/NA	Solid	8015B NM	10073
890-1436-3	PH02	Total/NA	Solid	8015B NM	10073
890-1436-4	PH02A	Total/NA	Solid	8015B NM	10073
890-1436-5	PH03	Total/NA	Solid	8015B NM	10073
890-1436-6	PH03A	Total/NA	Solid	8015B NM	10073
MB 880-10073/1-A	Method Blank	Total/NA	Solid	8015B NM	10073
LCS 880-10073/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	10073
LCSD 880-10073/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	10073
880-7346-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	10073
880-7346-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	10073

Prep Batch: 10073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Total/NA	Solid	8015NM Prep	
890-1436-2	PH01A	Total/NA	Solid	8015NM Prep	
890-1436-3	PH02	Total/NA	Solid	8015NM Prep	
890-1436-4	PH02A	Total/NA	Solid	8015NM Prep	
890-1436-5	PH03	Total/NA	Solid	8015NM Prep	
890-1436-6	PH03A	Total/NA	Solid	8015NM Prep	
MB 880-10073/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-10073/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-10073/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-7346-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-7346-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 9775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Soluble	Solid	DI Leach	
890-1436-2	PH01A	Soluble	Solid	DI Leach	
890-1436-3	PH02	Soluble	Solid	DI Leach	
890-1436-4	PH02A	Soluble	Solid	DI Leach	
890-1436-5	PH03	Soluble	Solid	DI Leach	
890-1436-6	PH03A	Soluble	Solid	DI Leach	
MB 880-9775/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-9775/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-9775/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1435-A-24-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1435-A-24-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 10150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1436-1	PH01	Soluble	Solid	300.0	9775
890-1436-2	PH01A	Soluble	Solid	300.0	9775
890-1436-3	PH02	Soluble	Solid	300.0	9775
890-1436-4	PH02A	Soluble	Solid	300.0	9775
890-1436-5	PH03	Soluble	Solid	300.0	9775
890-1436-6	PH03A	Soluble	Solid	300.0	9775
MB 880-9775/1-A	Method Blank	Soluble	Solid	300.0	9775

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

HPLC/IC (Continued)

Analysis Batch: 10150 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-9775/2-A	Lab Control Sample	Soluble	Solid	300.0	9775
LCSD 880-9775/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	9775
890-1435-A-24-B MS	Matrix Spike	Soluble	Solid	300.0	9775
890-1435-A-24-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	9775

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH01

Lab Sample ID: 890-1436-1

Date Collected: 10/14/21 11:55

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 07:30	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/21/21 17:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 14:42	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 08:53	CH	XEN MID

Client Sample ID: PH01A

Lab Sample ID: 890-1436-2

Date Collected: 10/14/21 11:58

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 07:51	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/21/21 17:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 15:01	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 09:00	CH	XEN MID

Client Sample ID: PH02

Lab Sample ID: 890-1436-3

Date Collected: 10/14/21 12:18

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 08:11	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/21/21 17:04	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 15:21	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 09:22	CH	XEN MID

Client Sample ID: PH02A

Lab Sample ID: 890-1436-4

Date Collected: 10/14/21 12:21

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 08:32	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/21/21 17:04	AJ	XEN MID

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Client Sample ID: PH02A

Lab Sample ID: 890-1436-4

Date Collected: 10/14/21 12:21

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 15:41	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 09:29	CH	XEN MID

Client Sample ID: PH03

Lab Sample ID: 890-1436-5

Date Collected: 10/14/21 12:35

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 08:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/22/21 12:42	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 16:00	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 09:36	CH	XEN MID

Client Sample ID: PH03A

Lab Sample ID: 890-1436-6

Date Collected: 10/14/21 12:38

Matrix: Solid

Date Received: 10/14/21 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10082	10/21/21 13:00	KL	XEN MID
Total/NA	Analysis	8021B		1	10086	10/22/21 09:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	10147	10/22/21 12:42	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	10003	10/20/21 13:58	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10073	10/21/21 09:49	AM	XEN MID
Total/NA	Analysis	8015B NM		1	10053	10/21/21 16:20	AJ	XEN MID
Soluble	Leach	DI Leach			9775	10/18/21 14:38	CA	XEN MID
Soluble	Analysis	300.0		1	10150	10/22/21 09:43	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 901H

Job ID: 890-1436-1
SDG: 31403236.022.0129 Task 02.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1436-1	PH01	Solid	10/14/21 11:55	10/14/21 15:43	1
890-1436-2	PH01A	Solid	10/14/21 11:58	10/14/21 15:43	2
890-1436-3	PH02	Solid	10/14/21 12:18	10/14/21 15:43	1
890-1436-4	PH02A	Solid	10/14/21 12:21	10/14/21 15:43	2
890-1436-5	PH03	Solid	10/14/21 12:35	10/14/21 15:43	1
890-1436-6	PH03A	Solid	10/14/21 12:38	10/14/21 15:43	2



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 (505-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littlell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; kalei.jennings@wsp.com

ANALYSIS REQUEST

Work Order Notes

Project Name:	PLU 28 BS 901H	Turn Around	<input checked="" type="checkbox"/>
Project Number:	31403236.022.0129 Task 02.02	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT	Temp Blank:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Temperature (°C):	12/11.0	Thermometer ID				
Received Inact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Correction Factor:			
Cooler Custody Seals:	Yes	No	Total Containers:			
Sample Custody Seals:	Yes	No	-0.2			

Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)
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890-1436 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0-8021)	Chloride (EPA 300.0)	Sample Comments
PH01	S	10/14/2021	1155	1'	1	X	X	X	
PH01A	S	10/14/2021	1158	2'	1	X	X	X	
PH02	S	10/14/2021	1218	1'	1	X	X	X	
PH02A	S	10/14/2021	1221	2'	1	X	X	X	
PH03	S	10/14/2021	1235	1'	1	X	X	X	
PH03A	S	10/14/2021	1238	2'	1	X	X	X	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/14/21 3:43			

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**

Client Information (Sub Contract Lab)				Sampler	Lab PM	Carrier Tracking No(s)	COC No									
Client Contact:		Company:		Phone	E-Mail	State of Origin	Page									
Shipping/Receiving		Company:		Accreditations Required (See note)		New Mexico	Page 1 of 1									
Eurofins Xenco		Address		NELAP - Louisiana, NELAP - Texas		Job #										
1211 W Florida Ave		City		Due Date Requested		890-465-1										
10/20/2021		State Zip:		TAT Requested (days)		890-465-1										
TX 79701		PO #		Analysis Requested		Preservation Codes										
432-704-5440(Tel)		WFO #		Field Filtered Sample (Yes or No)		A HCL										
Project Name:		Project #:		Perform MS/MSD (Yes or No)		B NaOH										
PLU 28 BS 901H		89000004		8016MOD_NM/8016NM_S_Prep (MOD) Full TPH		C Zn Acetate										
Site		SSOW#		8015MOD_Calc		D Nitric Acid										
				300_ORGFM_28D/DI_LEACH Chloride		E NaHSO4										
				8021B/6035FP_Calc (MOD) BTEX		F MeOH										
				Total_BTEX_GCV		G Amethiol										
						H Ascorbic Acid										
						I Ice										
						J DI Water										
						K EDTA										
						L EDA										
						M Hexane										
						N None										
						O AsNaO2										
						P Na2OAS										
						Q Na2SO3										
						R Na2S2O3										
						S H2SO4										
						T TSP Dodecaldehyde										
						U Acetone										
						V MCAA										
						W pH 4.5										
						Z other (specify)										
						Other										
Sample Identification - Client ID (Lab ID)				Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=oil, B=biomass, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/6035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
PH01 (890-1436-1)				10/14/21	11 55	Mountain	Solid	X	X	X	X	X	X	1		
PH01A (890-1436-2)				10/14/21	11 58	Mountain	Solid	X	X	X	X	X	X	1		
PH02 (890-1436-3)				10/14/21	12 18	Mountain	Solid	X	X	X	X	X	X	1		
PH02A (890-1436-4)				10/14/21	12 21	Mountain	Solid	X	X	X	X	X	X	1		
PH03 (890-1436-5)				10/14/21	12 35	Mountain	Solid	X	X	X	X	X	X	1		
PH03A (890-1436-6)				10/14/21	12 38	Mountain	Solid	X	X	X	X	X	X	1		

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

Possible Hazard Identification

Unconfirmed

Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2

Empty Kit Relinquished by

Relinquished by *N. Kramer* Date/Time *10/15/21* Company

Relinquished by Date/Time Company

Relinquished by Date/Time Company

Custody Seals Intact. Custody Seal No

Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements

Method of Shipment:

Date/Time *10/10/21* Company

Date/Time *10/9/21* Company

Date/Time Company

Cooler Temperature(s) °C and Other Remarks.

65/10/10

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1436-1

SDG Number: 31403236.022.0129 Task 02.02

Login Number: 1436

List Source: Eurofins Xenco, Carlsbad

List Number: 1

Creator: Olivas, Nathaniel

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1436-1

SDG Number: 31403236.022.0129 Task 02.02

Login Number: 1436

List Source: Eurofins Xenco, Midland

List Number: 2

List Creation: 10/18/21 08:10 AM

Creator: Kramer, Jessica

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	0.5/0.6
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").	N/A	

ATTACHMENT 5: [ADD TITLE]

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 63206

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 63206
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	12/21/2021