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	NAPP2113833620
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 32.20808 Longitude -103.85322
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU 23 Delaware B	Site Type SWD
Date Release Discovered 5/09/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
C	23	24S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 40	Volume Recovered (bbls) 40
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: A steel nipple ruptured on the pump tank, releasing fluids into impermeable containment. All fluids were recovered and returned to process. A 48-hour liner inspection notice was sent to NMOCD District 2. Liner was inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2113833620
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Garrett Green to Mike Bratcher'; 'Victoria Venegas'; 'Rob Hamlet'; 'emily.hernandez@state.nm.us'; 'camorgan@blm.gov'; 'blm_nm_cfo_spill@blm.gov' on Monday, May 10, 2021 11:24 AM via email.	

Initial Response

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

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

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

NA

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

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

Printed Name: Kyle Littrell
Title: Environmental Manager

Signature:
Date: 5-18-21

email: kyle.littrell@exxonmobil.com
Telephone: 432-221-7331

OCD Only

Received by:
Date:

Location:	**PLU 23 Delaware B SWD**	
Spill Date:	**5/9/2021**	
Area 1		
Approximate Area =	224.58	cu.ft
VOLUME OF LEAK		
Total Produced Water =	40.00	bbls
TOTAL VOLUME OF LEAK		
Total Produced Water =	**40.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**40.00**	**bbls**

Incident ID	NAPP2113833620
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2113833620
District RP	
Facility ID	
Application ID	

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/07/2021

email: Adrian.baker@exxonmobil.com Telephone: (432)-236-3808

OCD Only

Received by: Date:

Incident ID	NAPP2113833620
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/07/2021

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Incident ID	NAPP2113833620
District RP	
Facility ID	
Application ID	

Closure

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

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☒ Description of remediation activities

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Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 08/07/2021

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

OCD Only

Received by: Robert Hamlet Date: 10/1/2021

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

Closure Approved by: Robert Hamlet Date: 10/1/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

August 07, 2021

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

Re: Closure Request
PLU 23 Delaware B
Incident Number NAPP2113833620
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 PLU 23 Delaware B (Site) located in Unit C, Section 23, Township 24 South, Range 30 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 the release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NAPP2113833620.

RELEASE BACKGROUND

On May 9, 2021, a steel nipple on a pump tank ruptured, resulting in the release of approximately 40 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; all 40 bbls of the released produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO submitted a Release Notification Form C-141 (Form C-141) on May 18, 2021. The release was assigned Incident Number NAPP2113833620.

SITE CHARACTERIZATION

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

321203103511801, located approximately 0.5 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 423 feet bgs and a total depth of 474 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1 and referenced well records are provided in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is a palustrine wetland, located approximately 535 feet east-southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES

On June 17, 2021, WSP personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel advanced one borehole (BH01) via hand-auger at the location of the tear in the liner identified during the liner integrity inspection. Refusal with the hand auger was encountered at a depth of approximately 2 feet bgs. Two soil samples were collected from borehole BH01 at depths of approximately 0.5 feet and 2 feet bgs. Soil from the borehole was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log which is included as Attachment 2. The borehole was backfilled with the soil removed and XTO repaired the tear in the liner. The borehole delineation soil sample location is depicted on Figure 2. Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.

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

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples BH01 and BH01A, collected at depths of approximately 0.5 feet and 2 feet bgs, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, sample BH01A collected at 2 feet bgs provides vertical delineation to the strictest Table 1 Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 4.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, WSP personnel advanced one borehole (BH01) at the location of the tear in the liner to assess for the presence or absence of soil impacts resulting from the May 9, 2021 produced water release within lined containment. Two delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet and 2 feet bgs. Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, field screening of soil from the borehole indicated no elevated volatile aromatic hydrocarbons or chloride concentrations beneath the tear in the liner. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria directly below the tear in the liner, XTO respectfully requests NFA for Incident Number NAPP2113833620.

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

Sincerely,

WSP USA Inc.

Kaleb Henry
Assistant Consultant, Geologist

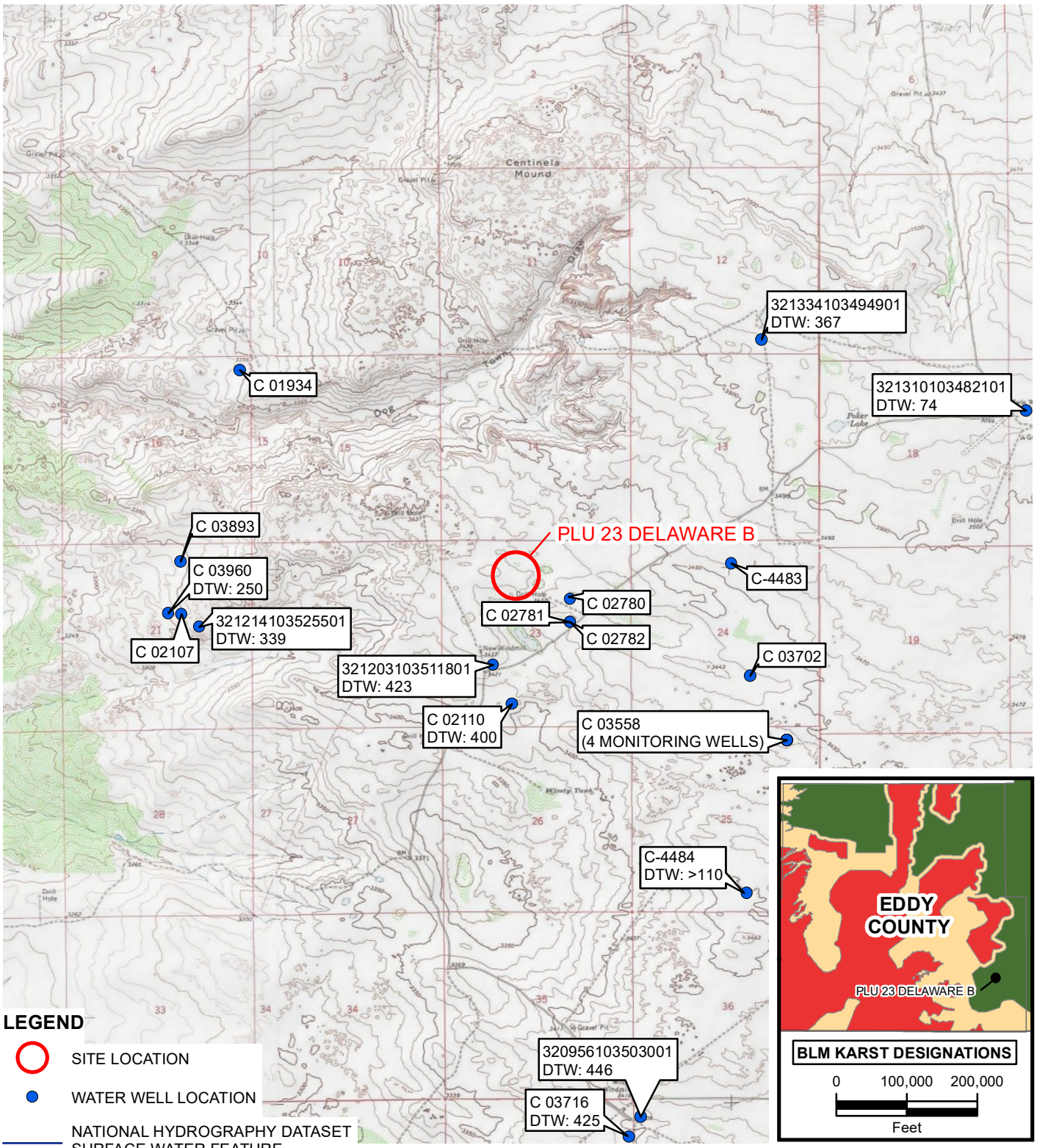
Ashley L. Ager, P.G.
Managing Director, Geologist

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

Attachments:

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

FIGURES



LEGEND

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

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NAPP2113833620

FIGURE 1
SITE LOCATION MAP
PLU 23 DELAWARE B
UNIT C SEC 23 T24S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\31403236.016.0129_PLU 23 DELAWARE B\31403236.016_FIG01_SL_RECEPTOR_2021.mxd

LEGEND

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

LINED CONTAINTMENT

B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NAPP2113833620

0 100 200
Feet

N

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

C:\Users\USHS682642\OneDrive - WSP O365\GIS\Rebecca\31403236.016.0129_PLU 23 DELAWARE B\31403236.016_FIG02_DELINEATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
PLU 23 Delaware B
Incident Number NAPP2113833620
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Samples										
BH01	06/17/2021	0.5	<0.00198	<0.00397	<50.0	79.5	<50.0	79.5	79.5	754
BH01A	06/17/2021	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	111

ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - motor oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated
* - indicates sample was collected in area to be reclaimed after remediation is complete;
closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

ATTACHMENT 1: REFERENCED WELL RECORDS

Click to hideNews Bulletins

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

USGS 321203103511801 24S.30E.23.3124143

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

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

AVAILABLE DATA:

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

OPERATION:

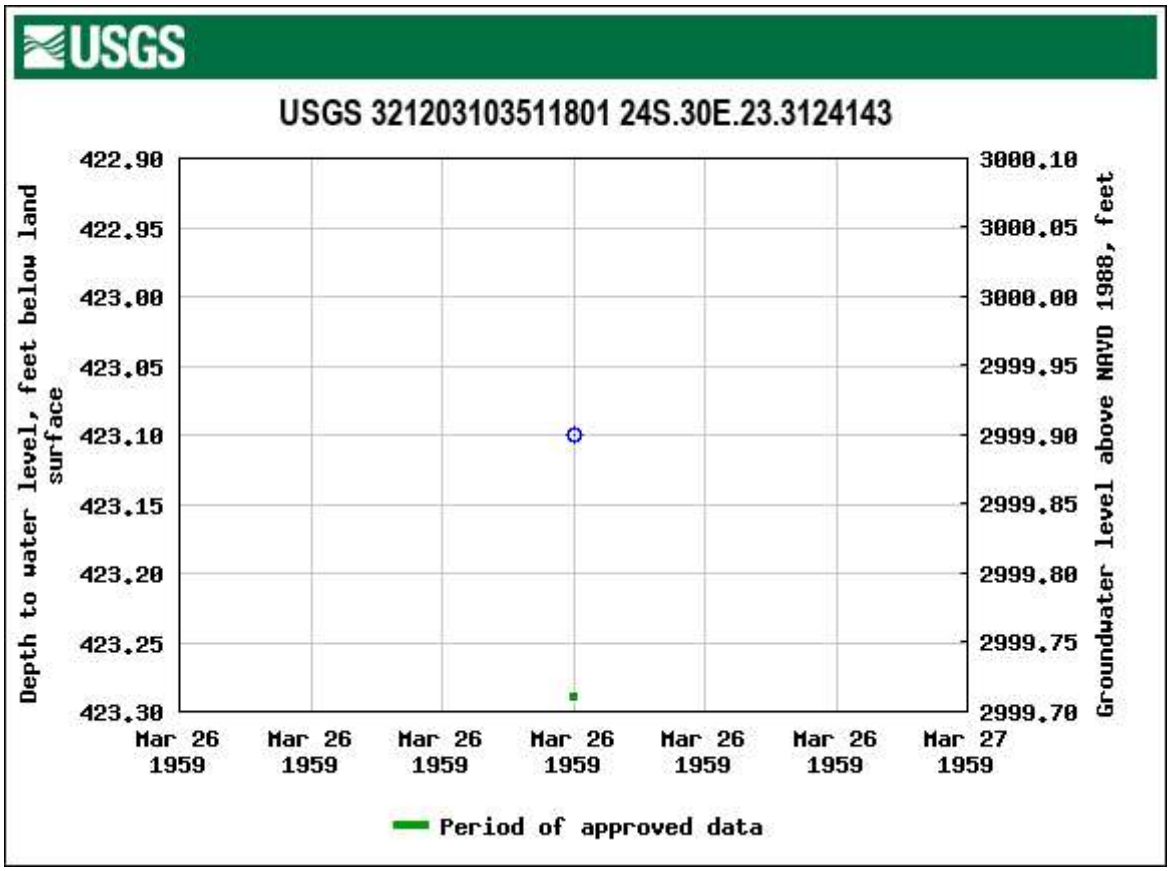
Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

---

Subscribe for system changes
News

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

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2021-06-07 13:39:17 EDT
0.27 0.26 sdww02


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

New Mexico Office of the State Engineer

Point of Diversion Summary

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

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

***UTM location was derived from PLSS - see Help**

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 6/17/2021
Site Name: PLU 23 BS Delaware B	
RP or Incident Number: NAPP2113833620	
LTE Job Number: 31403236.016.0129	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JH / Method: Hand Auger
Lat/Long:	Field Screening: Chloride, PID / Hole Diameter: 3" / Total Depth: 2'
Comments:	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	774	0.4	N	BH01	0.5'	0	SW	SAND w/ gravel, red-brown, no stain, no odor
dry	184	0.6	N			1		
dry	212	0.4	N	BH01A	2'	2		
								Total Depth: 2 feet bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

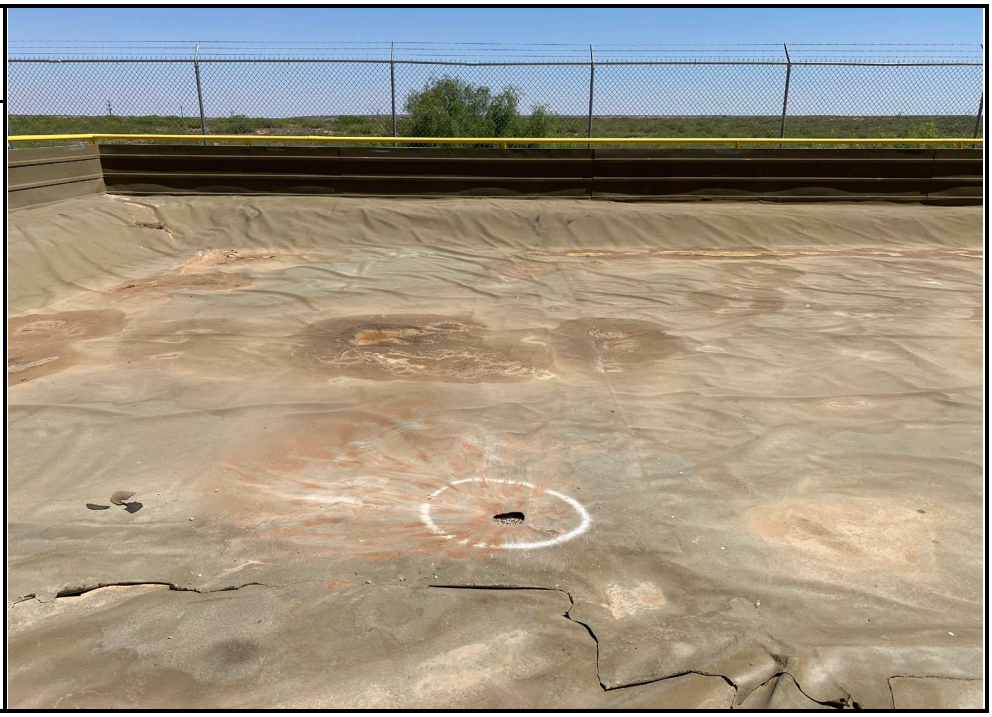
PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU 23 Delaware B Eddy County, New Mexico	31403236.016.0129

Photo No.	Date
1	June 17, 2021

West facing view of delineation soil sampling location.

Photo No.	Date
2	June 17, 2021

North facing view of delineation soil sampling location following backfilling procedures.



ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

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ANALYTICAL REPORT

Job Number: 890-822-1

SDG Number: 31403236.016.0129

Job Description: PLU 23 Delaware B

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
6/23/2021 7:44 PM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
06/23/2021

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

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

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

Client Sample Result Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Lab Sample ID:	890-822-1	890-822-2
Client Sample ID:	BH01	BH01A
Depth:	0.5	0.2
Matrix:	Solid	Solid
Date Collected:	06/17/2021 09:35	06/17/2021 10:42

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	06/18/2021 11:07		06/18/2021 11:07	
	Analyzed:	06/19/2021 10:44		06/19/2021 11:05	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00198 U	0.00198	<0.00200 U	0.00200
Toluene		<0.00198 U	0.00198	<0.00200 U	0.00200
Ethylbenzene		<0.00198 U	0.00198	<0.00200 U	0.00200
m-Xylene & p-Xylene		<0.00397 U	0.00397	<0.00400 U	0.00400
o-Xylene		<0.00198 U	0.00198	<0.00200 U	0.00200
Xylenes, Total		<0.00397 U	0.00397	<0.00400 U	0.00400
Total BTEX		<0.00397 U	0.00397	<0.00400 U	0.00400

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

	Prepared:	06/18/2021 11:30		06/18/2021 11:30	
	Analyzed:	06/19/2021 18:28		06/19/2021 18:42	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		**79.5**	50.0	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	<50.0 U	50.0
OIl Range Organics (Over C28-C36)		<50.0 U	50.0	<50.0 U	50.0
Total TPH		**79.5**	50.0	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:				
	Analyzed:	06/22/2021 13:17		06/22/2021 13:22	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL
Chloride		**754**	4.96	**111**	4.99

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-822-1
Laboratory Sample Delivery Group: 31403236.016.0129
Client Project/Site: PLU 23 Delaware B

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

Attn: Dan Moir

Authorized for release by:
6/23/2021 7:44:08 PM

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

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

Laboratory Job ID: 890-822-1
SDG: 31403236.016.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-822-1
Project/Site: PLU 23 Delaware B SDG: 31403236.016.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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 23 Delaware B

Job ID: 890-822-1
SDG: 31403236.016.0129

Job ID: 890-822-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-822-1

Comments
No additional comments.

Receipt
The samples were received on 6/17/2021 1:30 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 was 8.0º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-822-1) and BH01A (890-822-2).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-838-A-34-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

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

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

Client Sample Results

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Client Sample ID: BH01

Lab Sample ID: 890-822-1
Matrix: Solid
Date Collected: 06/17/21 09:35
Date Received: 06/17/21 13:30
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/18/21 11:07	06/19/21 10:44	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		06/18/21 11:07	06/19/21 10:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*06/18/21 11:07*	*06/19/21 10:44*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/18/21 11:07*	*06/19/21 10:44*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**79.5**		50.0		mg/Kg		06/18/21 11:30	06/19/21 18:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:28	1
Total TPH	**79.5**		50.0		mg/Kg		06/18/21 11:30	06/19/21 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*06/18/21 11:30*	*06/19/21 18:28*	*1*
o-Terphenyl	*96*		*70 - 130*	*06/18/21 11:30*	*06/19/21 18:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**754**		4.96		mg/Kg			06/22/21 13:17	1

Client Sample ID: BH01A

Lab Sample ID: 890-822-2
Matrix: Solid
Date Collected: 06/17/21 10:42
Date Received: 06/17/21 13:30
Sample Depth: - 0.2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 11:05	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/18/21 11:07*	*06/19/21 11:05*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/18/21 11:07*	*06/19/21 11:05*	*1*

Client Sample Results

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Client Sample ID: BH01A

Date Collected: 06/17/21 10:42
Date Received: 06/17/21 13:30
Sample Depth: - 0.2

Lab Sample ID: 890-822-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:42	1
Total TPH	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*06/18/21 11:30*	*06/19/21 18:42*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/18/21 11:30*	*06/19/21 18:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		4.99		mg/Kg			06/22/21 13:22	1

Surrogate Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-822-1	BH01	110	101										
890-822-2	BH01A	118	100										
LCS 880-4294/1-A	Lab Control Sample	108	91										
LCSD 880-4294/2-A	Lab Control Sample Dup	105	97										
MB 880-4292/5-A	Method Blank	111	94										
MB 880-4294/5-A	Method Blank	111	94										

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-822-1	BH01	116	96										
890-822-2	BH01A	132 S1+	114										
LCS 880-4299/2-A	Lab Control Sample	134 S1+	132 S1+										
LCSD 880-4299/3-A	Lab Control Sample Dup	140 S1+	151 S1+										
MB 880-4299/1-A	Method Blank	143 S1+	157 S1+										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4292/5-A
Matrix: Solid
Analysis Batch: 4309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4292

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/18/21 11:02	06/18/21 17:42	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/18/21 11:02	06/18/21 17:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*06/18/21 11:02*	*06/18/21 17:42*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/18/21 11:02*	*06/18/21 17:42*	*1*

Lab Sample ID: MB 880-4294/5-A
Matrix: Solid
Analysis Batch: 4309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4294

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 05:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/18/21 11:07	06/19/21 05:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*06/18/21 11:07*	*06/19/21 05:17*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/18/21 11:07*	*06/19/21 05:17*	*1*

Lab Sample ID: LCS 880-4294/1-A
Matrix: Solid
Analysis Batch: 4309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4294

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09729		mg/Kg		97	70 - 130		
Toluene			0.100	0.1236		mg/Kg		124	70 - 130		
Ethylbenzene			0.100	0.1256		mg/Kg		126	70 - 130		
m-Xylene & p-Xylene			0.200	0.2586		mg/Kg		129	70 - 130		
o-Xylene			0.100	0.1293		mg/Kg		129	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

QC Sample Results

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

Job ID: 890-822-1
SDG: 31403236.016.0129

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

Lab Sample ID: LCSD 880-4294/2-A
Matrix: Solid
Analysis Batch: 4309

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4294

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1067		mg/Kg		107	70 - 130	9	35
Toluene			0.100	0.1194		mg/Kg		119	70 - 130	4	35
Ethylbenzene			0.100	0.1198		mg/Kg		120	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2473		mg/Kg		124	70 - 130	4	35
o-Xylene			0.100	0.1239		mg/Kg		124	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-4299/1-A
Matrix: Solid
Analysis Batch: 4336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4299

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 12:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 12:17	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 12:17	1
Total TPH	<50.0	U	50.0		mg/Kg		06/18/21 11:30	06/19/21 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*06/18/21 11:30*	*06/19/21 12:17*	*1*
o-Terphenyl	*157*	*S1+*	*70 - 130*	*06/18/21 11:30*	*06/19/21 12:17*	*1*

Lab Sample ID: LCS 880-4299/2-A
Matrix: Solid
Analysis Batch: 4336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4299

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1081		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)			1000	965.7		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*134*	*S1+*	*70 - 130*
o-Terphenyl	*132*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-4299/3-A
Matrix: Solid
Analysis Batch: 4336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4299

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1230		mg/Kg		123	70 - 130	13	20

Eurofins Xenco, Carlsbad

QC Sample Results

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

Job ID: 890-822-1
SDG: 31403236.016.0129

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

Lab Sample ID: LCSD 880-4299/3-A
Matrix: Solid
Analysis Batch: 4336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4299

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1030		mg/Kg		103	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*140*	*S1+*	*70 - 130*
o-Terphenyl	*151*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4293/1-A
Matrix: Solid
Analysis Batch: 4438

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/22/21 11:59	1

Lab Sample ID: LCS 880-4293/2-A
Matrix: Solid
Analysis Batch: 4438

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	229.3		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-4293/3-A
Matrix: Solid
Analysis Batch: 4438

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	229.7		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-822-2 MS
Matrix: Solid
Analysis Batch: 4438

Client Sample ID: BH01A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	111		250	343.3		mg/Kg		93	90 - 110		

Lab Sample ID: 890-822-2 MSD
Matrix: Solid
Analysis Batch: 4438

Client Sample ID: BH01A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	111		250	343.7		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-822-1
Project/Site: PLU 23 Delaware B SDG: 31403236.016.0129

GC VOA

Prep Batch: 4292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4292/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 4294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Total/NA	Solid	5035	
890-822-2	BH01A	Total/NA	Solid	5035	
MB 880-4294/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4294/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4294/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Total/NA	Solid	8021B	4294
890-822-2	BH01A	Total/NA	Solid	8021B	4294
MB 880-4292/5-A	Method Blank	Total/NA	Solid	8021B	4292
MB 880-4294/5-A	Method Blank	Total/NA	Solid	8021B	4294
LCS 880-4294/1-A	Lab Control Sample	Total/NA	Solid	8021B	4294
LCSD 880-4294/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4294

GC Semi VOA

Prep Batch: 4299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Total/NA	Solid	8015NM Prep	
890-822-2	BH01A	Total/NA	Solid	8015NM Prep	
MB 880-4299/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4299/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4299/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Total/NA	Solid	8015B NM	4299
890-822-2	BH01A	Total/NA	Solid	8015B NM	4299
MB 880-4299/1-A	Method Blank	Total/NA	Solid	8015B NM	4299
LCS 880-4299/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4299
LCSD 880-4299/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4299

HPLC/IC

Leach Batch: 4293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Soluble	Solid	DI Leach	
890-822-2	BH01A	Soluble	Solid	DI Leach	
MB 880-4293/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4293/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4293/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-822-2 MS	BH01A	Soluble	Solid	DI Leach	
890-822-2 MSD	BH01A	Soluble	Solid	DI Leach	

Analysis Batch: 4438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-1	BH01	Soluble	Solid	300.0	4293

QC Association Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

HPLC/IC (Continued)

Analysis Batch: 4438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-822-2	BH01A	Soluble	Solid	300.0	4293
MB 880-4293/1-A	Method Blank	Soluble	Solid	300.0	4293
LCS 880-4293/2-A	Lab Control Sample	Soluble	Solid	300.0	4293
LCSD 880-4293/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4293
890-822-2 MS	BH01A	Soluble	Solid	300.0	4293
890-822-2 MSD	BH01A	Soluble	Solid	300.0	4293

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-822-1
Project/Site: PLU 23 Delaware B SDG: 31403236.016.0129

Client Sample ID: BH01 Lab Sample ID: 890-822-1

Date Collected: 06/17/21 09:35 **Matrix: Solid**
Date Received: 06/17/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4294	06/18/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	4309	06/19/21 10:44	KL	XEN MID
Total/NA	Prep	8015NM Prep			4299	06/18/21 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4336	06/19/21 18:28	AJ	XEN MID
Soluble	Leach	DI Leach			4293	06/18/21 11:04	SC	XEN MID
Soluble	Analysis	300.0		1	4438	06/22/21 13:17	CH	XEN MID

Client Sample ID: BH01A Lab Sample ID: 890-822-2

Date Collected: 06/17/21 10:42 **Matrix: Solid**
Date Received: 06/17/21 13:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4294	06/18/21 11:07	KL	XEN MID
Total/NA	Analysis	8021B		1	4309	06/19/21 11:05	KL	XEN MID
Total/NA	Prep	8015NM Prep			4299	06/18/21 11:30	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4336	06/19/21 18:42	AJ	XEN MID
Soluble	Leach	DI Leach			4293	06/18/21 11:04	SC	XEN MID
Soluble	Analysis	300.0		1	4438	06/22/21 13:22	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 890-822-1
SDG: 31403236.016.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-822-1	BH01	Solid	06/17/21 09:35	06/17/21 13:30	- 0.5
890-822-2	BH01A	Solid	06/17/21 10:42	06/17/21 13:30	- 0.2

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

Houston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334
Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296
Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)
www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	522 W. Mermod St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(432) 236-3849	Email:	Jeremy.Hill@wsp.com, Dan.Moir@wsp.com

Work Order Comments

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

Project Name:	PLU 23 Delaware B	Turn Around	
Project Number:	31403236.016.0134	Routine	☑
P.O. Number:	Spill data 5/9/21	Rush:	
Sampler's Name:	Jeremy Hill	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	5.2 / 5.0	Thermometer ID	TWM-007	
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
BH01	S	6-17-21	0935	0.5'	1	X	X	X
BH01A	S	↓	1042	2.0'	↓	↓	↓	↓

890-822 Chain of Custody

Work Order Notes

CC
166767100 1
Inc #
NAPP2113833630

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

Sample Comments

digest ↓

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6.17.21 1330	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-268 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-822-1
Address: 1211 W Florida Ave,	Due Date Requested: 6/23/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 23 Release B	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8016NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BH01 (890-822-1)	6/17/21	09 35 Mountain		Solid			X	X	X	1	
BH01A (890-822-2)	6/17/21	10 42 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by: Clee Cuff 6/17/21	Date/Time:	Company	Received by:	Date/Time: 6-18-21 11:30am	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Bottle Order Information

Bottle Order
Bottle Order #
Request From Client 6/17/2021
Date Order Posted
Order Status Ready To Process
Prepared By
Deliver By Date: ***6/17/2021 11:59:00PM***
Lab Project Number

Order Completion Information

Creator Cloe Clifton
Filled by
Sent Date
Sent Via
Tracking #

6/23/2021

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative Comment

Relinquished By	Company	Date	Time	Received By	Company	Seal # / Seal # / Seal #
Cloe Clifton	6.17.21					
Relinquished By	Company	Date	Time	Received By	Company	Seal # / Seal # / Seal #

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-822-1
SDG Number: 31403236.016.0129

Login Number: 822
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: 890-822-1
SDG Number: 31403236.016.0129

Login Number: 822
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/18/21 11:34 AM

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

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

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

CONDITIONS

Action 39022

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 39022
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2113833620 PLU 23 DELAWARE B SWD, thank you. This closure is approved.	10/1/2021