State of New Mexico
Oil Conservation Division

Incident ID	NAPP2205649749
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: 05/12/2022

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

OCD Only

Received by: Robert Hamlet Date: 6/21/2022

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: 6/21/2022

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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	NAPP2205649749
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Adrian Baker	Contact Telephone 432-236-3808
Contact email adrian.baker@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.60772 Longitude -103.89009
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Big Eddy Unit DI 4	Site Type Tank Battery
Date Release Discovered 02/11/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
B	05	20S	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)

☒ Crude Oil	Volume Released (bbls) 0.48	Volume Recovered (bbls) 0.00
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release HP flare line burped out residual fluids, which ignited and self-extinguished on the ground. A third-party contractor has been retained for remediation purposes.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2205649749
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release that results in a fire or is the result of a fire.

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, and Robert Hamlet on Friday, February 11, 2022 4:57 PM via email.

Initial Response

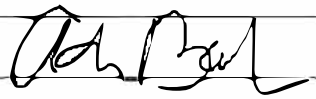
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

- ☒ 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: Adrian Baker
Title: SSHE Coordinator
Signature: 
Date: 2/25/22
email: adrian.baker@exxonmobil.com
Telephone: 432-236-3808

OCD Only

Received by: Ramona Marcus
Date: 3/1/2022

NAPP2205649749

Location:	**Big Eddy Unit DI 4 Tank Battery**	
Spill Date:	**2/11/2022**	
Area 1		
Approximate Area =	2164.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.48	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.48**	**bbls**
Total Produced Water =	**0.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**0.00**	**bbls**

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2205649749
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.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2205649749
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: 05/12/2022

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2205649749
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: 05/12/2022

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: _____

ENSOLUM

May 12, 2022

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

Re: Closure Request
Big Eddy Unit DI 4
Incident Numbers NAPP2203453168 and NAPP2205649749
Eddy County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this Closure Request to document site assessment and soil sampling activities performed at the Big Eddy Unit DI 4 (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a small crude oil flare fire at the Site. Based on the site assessment activities and analytical results from the soil sampling event, XTO is submitting this Closure Request, requesting closure for Incident Numbers NAPP2203453168 and NAPP2205649749.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 05, Township 20 South, Range 31 East, in Eddy County, New Mexico (32.60772° N, 103.89009°W) and is associated with oil and gas exploration and production operations on Federal Land leased by the Bureau of Land Management.

Incident Number NAPP2203453168

On January 21, 2022, freezing weather caused equipment to malfunction, sending approximately 0.36 barrels (bbls) of crude oil out of the flare, which ignited and extinguished on the ground. There were no fluids to recover. XTO reported the release via email to the New Mexico Oil Conservation Division (NMOCD) on January 21, 2022 and submitted a Release Notification Form C-141 (Form C-141) on February 3, 2022. The release was assigned Incident Number NAPP2203453168.

Incident Number NAPP2205649749

On February 11, 2022, following the initial release, the high-pressure flare line released approximately 0.48 bbls of crude oil out of the flare, which ignited and extinguished on the ground. There were no fluids to recover. XTO reported the release via email to the NMOCD on February 11, 2022 and submitted a Form C-141 on February 25, 2022. The release was assigned Incident Number NAPP2205649749.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized 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). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

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 New Mexico Office of the State Engineer (NMOSE) well CP 00722, located approximately 1.1 miles northeast of the Site. The groundwater well has a reported depth to groundwater of 140 feet bgs and a total depth of 220 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 1,012 feet northwest 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.

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 DELINEATION ACTIVITIES

On March 24, 2022, site assessment activities were conducted to evaluate the release extents based on information provided on the Form C-141 and visual observations. The release extents from both flare fires overlapped and were evaluated concurrently. Eight preliminary soil samples (SS01 through SS08) were collected within and around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of the release. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results indicated no impacts to soil; however, surficial soil stained by the fire was scraped and removed from the Site.

Following the scrape, delineation potholes PH01 through PH04 were advanced within the release extent at the locations of preliminary soil samples SS05 through SS08, respectively. The potholes were advanced using a track-mounted backhoe to a depth of 2 feet bgs. Discrete soil samples were collected from each pothole and field screened for VOCs utilizing a calibrated PID and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the potholes were logged on soil and lithologic sampling logs which are included in Appendix B. The release extent and preliminary and delineation soil sample locations were mapped utilizing a handheld Global Positioning System

(GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site assessment and a photographic log is included in Appendix C.

The preliminary soil samples and delineation soil samples collected at 1-foot bgs 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.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 through SS08 and delineation soil samples PH01A through PH04A indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Site assessment activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the January 21, 2022, and February 11, 2022, crude oil flare fires. Laboratory analytical results for the soil samples, collected within and around the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. XTO removed the surficial soil stained by the fires at the Site and based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. XTO respectfully requests closure for Incident Numbers NAPP2203453168 and NAPP2205649749.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC

Kelly Lowery, GIT
Staff Geologist

Aimee Cole
Senior Managing Scientist

cc: Adrian Baker, XTO
Bureau of Land Management

Appendices:

Figure 1 Site Receptor Map
Figure 2 Delineation Soil Sample Locations
Table 1 Soil Sample Analytical Results

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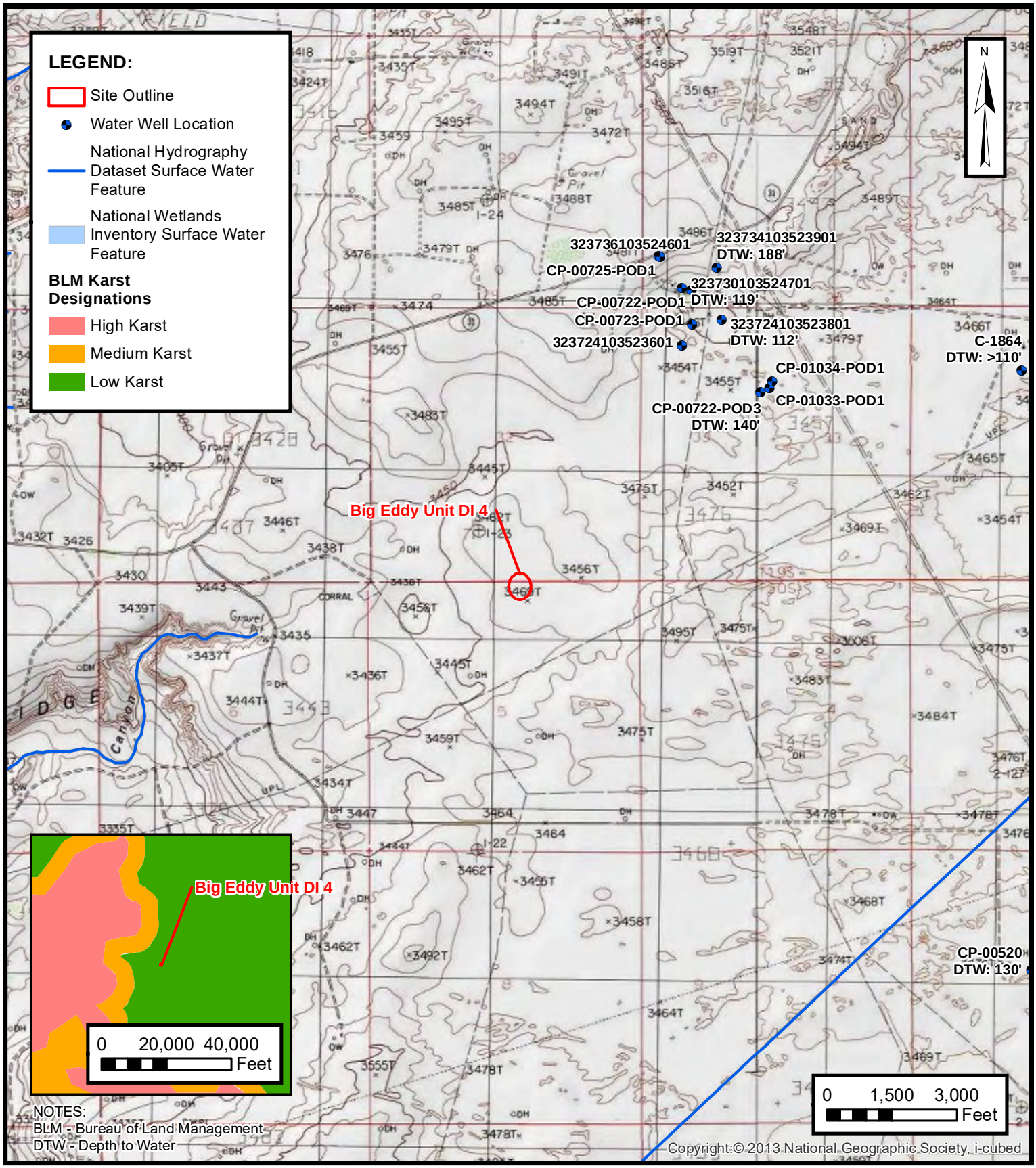
FIGURES

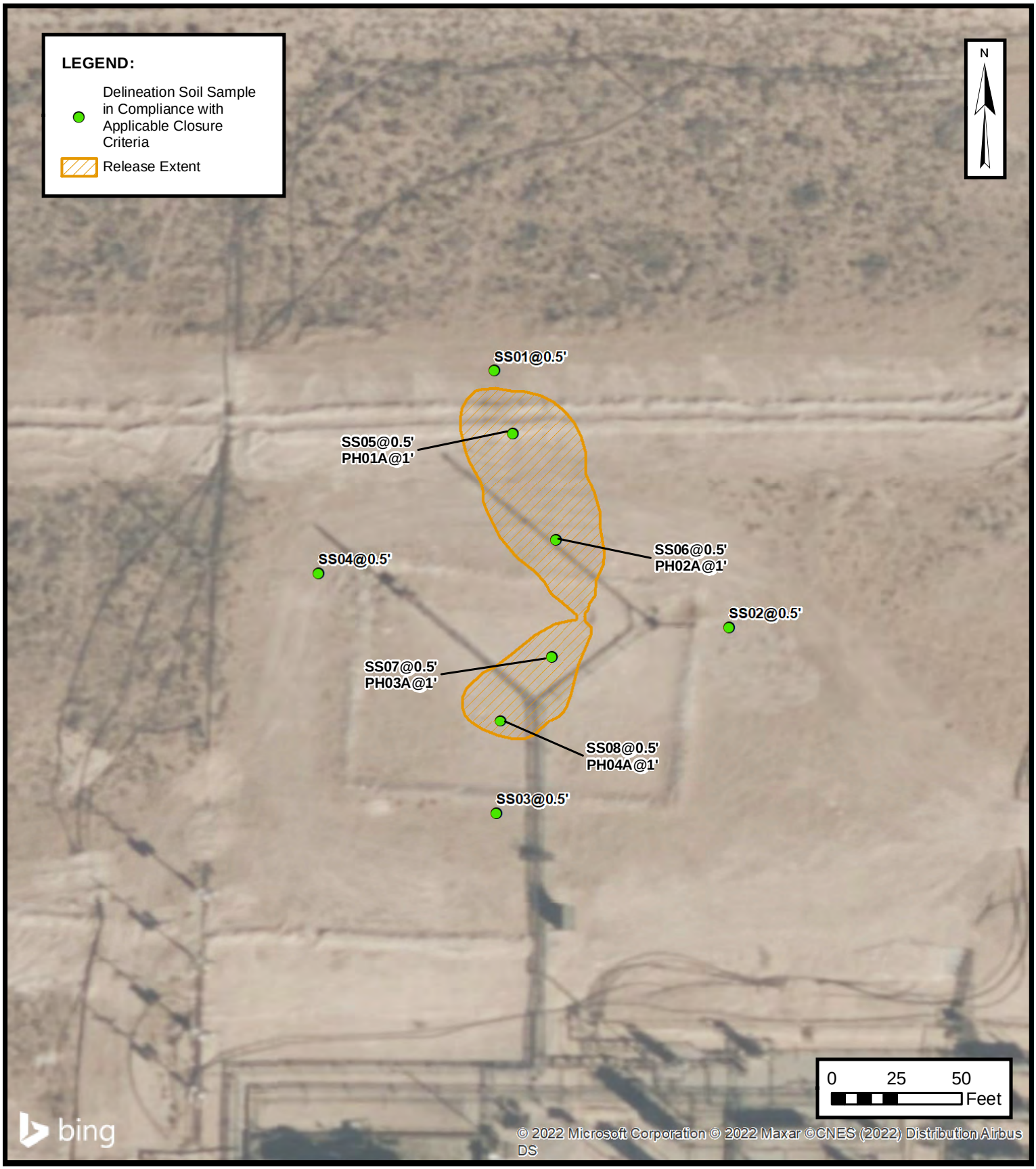


ENSOLUM
Environmental & Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
BIG EDDY UNIT DI 4
NAPP2203453168 & NAPP2205649749
Unit B, Section 05, Township 20S, Range 31E
Eddy County, New Mexico

FIGURE
1



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Environmental & Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
BIG EDDY UNIT DI 4
NAPP2203453168 & NAPP2205649749
Unit B, Section 05, Township 20S, Range 31E
Eddy County, New Mexico

FIGURE
2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Big Eddy Unit DI 4
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total 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	03/24/2022	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	<4.97
SS02	03/24/2022	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	8.51
SS03	03/24/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	10.1
SS04	03/24/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	<5.01
SS05	03/24/2022	0.5	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	22.1
SS06	03/24/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	5.49
SS07	03/24/2022	0.5	<0.00199	<0.00398	<49.8	<49.8	94.0	94.0	94.0	18.9
SS08	03/24/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	6.05
Delineation Soil Samples										
PH01A	03/24/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	38.5
PH02A	03/24/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	6.21
PH03A	03/24/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99
PH04A	03/24/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	68.3

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	CP 00722 POD3	2	4	1	33	19S	31E	605519	3609673*

Driller License: 1058 **Driller Company:** KEY'S DRILLING & PUMP SERVICE

Driller Name: KEY, CASEY

Drill Start Date: 05/02/2011 **Drill Finish Date:** 05/04/2011 **Plug Date:**

Log File Date: 05/17/2011 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 100 GPM

Casing Size: 5.00 **Depth Well:** 220 feet **Depth Water:** 140 feet

Water Bearing Stratifications:	Top	Bottom	Description
	140	150	Sandstone/Gravel/Conglomerate
	170	220	Sandstone/Gravel/Conglomerate

Meter Number: 19084 **Meter Make:** SEAMETRICS

Meter Serial Number: 101903750408 **Meter Multiplier:** 1000.0000

Number of Dials: 8 **Meter Type:** Diversion

Unit of Measure: Gallons **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
07/01/2020	2020	0	A	RPT		0	
10/12/2020	2020	409	A	RPT		1.256	
12/31/2020	2020	724	A	RPT		0.966	

**YTD Meter Amounts:	Year	Amount
	2020	2.222

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

National Water Information System: Web Interface

USGS Water Resources (Cooperator Access) Data Category: Groundwater Geographic Area: United States GO

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =
- 323725103523702

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

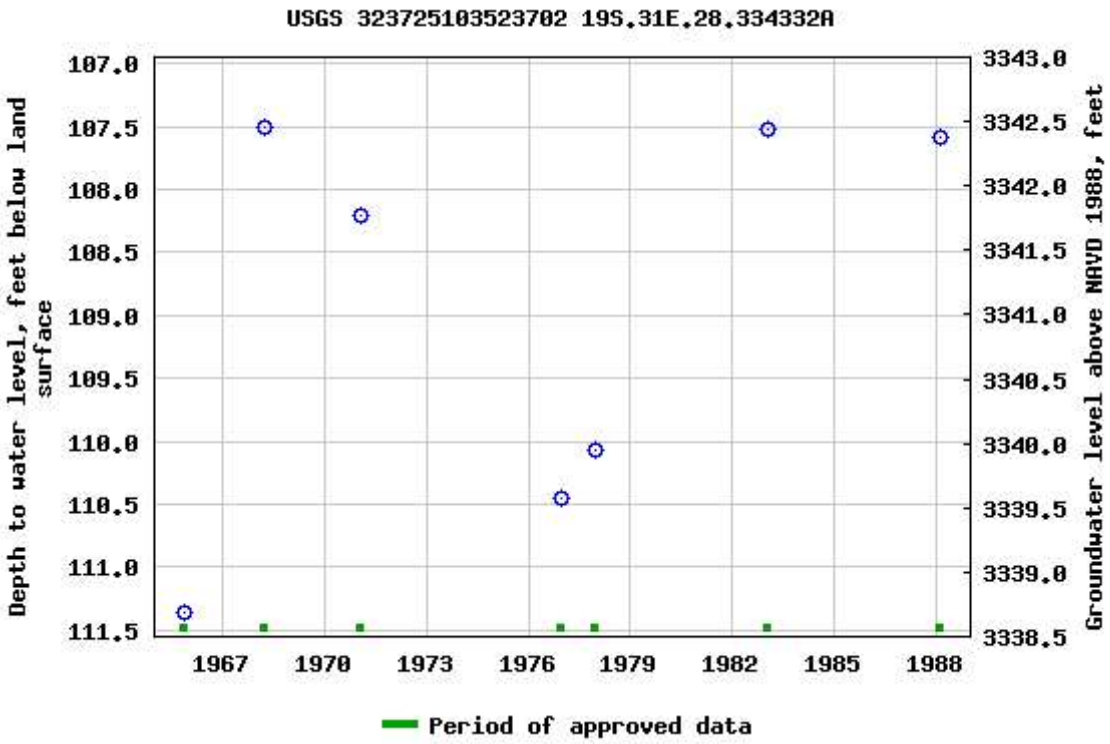
USGS 323725103523702 19S.31E.28.334332A

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°37'25", Longitude 103°52'37" NAD27
Land-surface elevation 3,450 feet above NAVD88
The depth of the well is 190 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2022-05-05 23:30:51 EDT
0.54 0.48 nadww01

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM	Sample Name: PH01	Date: 03/24/2022
	Site Name: Big Eddy Unit DI 4	
	Incident Number: NAPP2203453168/NAPP2205649749	
	Job Number: 03E1558012	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Hand Auger
Coordinates:32.609508, -103.890591	Hole Diameter: 12"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0.0		
						0.5		
	<168	0.0		PH01A	1.0	1.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts, no odor.
						1.5		
	<168	0.0		PH01B	2.0	2.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.

TD @ 2.0 feet bgs

ENSOLUM	Sample Name: PH02	Date: 03/24/2022
	Site Name: Big Eddy Unit DI 4	
	Incident Number: NAPP2203453168/NAPP2205649749	
	Job Number: 03E1558012	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Hand Auger
Coordinates:32.609396, -103.890546	Hole Diameter: 12"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0.0		
						0.5		
	<168	0.0		PH02A	1.0	1.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.
						1.5		
	<168	0.0		PH02B	2.0	2.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.

TD @ 2.0 feet bgs

ENSOLUM	Sample Name: PH03	Date: 03/24/2022
	Site Name: Big Eddy Unit DI 4	
	Incident Number: NAPP2203453168/NAPP2205649749	
	Job Number: 03E1558012	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Hand Auger
Coordinates:32.609272, -103.890550	Hole Diameter: 12"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0.0		
						0.5		
	<168	0.0		PH03A	1.0	1.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.
						1.5		
	<168	0.0		PH03B	2.0	2.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.

TD @ 2.0 feet bgs

ENSOLUM	Sample Name: PH04	Date: 03/24/2022
	Site Name: Big Eddy Unit DI 4	
	Incident Number: NAPP2203453168/NAPP2205649749	
	Job Number: 03E1558012	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: Hand Auger
Coordinates:32.609205, -103.890604	Hole Diameter: 12"	Total Depth: 2'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0.0		
						0.5		
	<168	0.1		PH04A	1.0	1.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.
						1.5		
	<168	0.0		PH04B	2.0	2.0	CCHE	CALICHE, white to light tan, well cemented, some angular clasts.

TD @ 2.0 feet bgs

ENSOLUM

APPENDIX C

Photographic Log

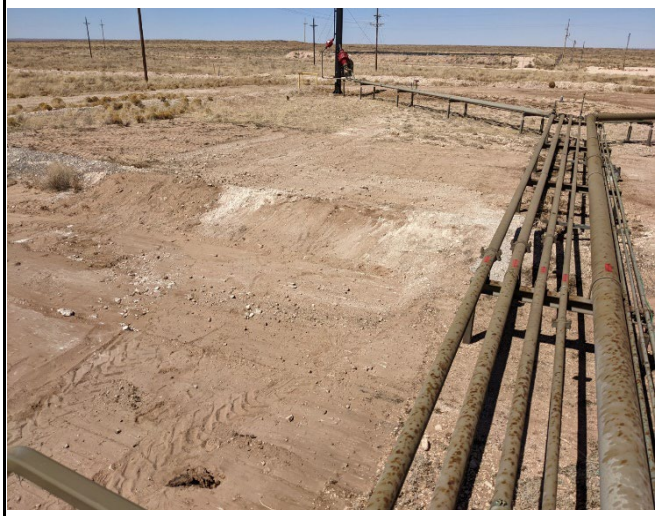
ENSOLUM

Photographic Log
XTO Energy, Inc.
Big Eddy Unit DI 4
Incident Numbers NAPP2203453168 and NAPP2205649749

Photograph 1 Date: 03/24/2022
Description: View of release extent facing north.

Photograph 2 Date: 03/24/2022
Description: View of release extent and staining from the flare fire.

Photograph 3 Date: 03/24/2022
Description: View of release extent following removal of surficial staining.



Photograph 4 Date: 03/24/2022
Description: View of release extent following removal of surficial staining.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2138-1
Laboratory Sample Delivery Group: 31403236.029 TASK 12.02
Client Project/Site: BEU DI 4

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
4/8/2022 10:08:18 AM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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

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

Client: WSP USA Inc.
Project/Site: BEU DI 4

Laboratory Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2138-1
Project/Site: BEU DI 4 SDG: 31403236.029 TASK 12.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Job ID: 890-2138-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2138-1

Comments
No additional comments.

Receipt
The samples were received on 3/24/2022 4:43 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 was 1.4º C.

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22440 and analytical batch 880-22425 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-22425 recovered above the upper control limit for m-Xylene & p-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-22425/51).

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

GC Semi VOA
Method 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-22469 and analytical batch 880-22434 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and 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.

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: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS01

Lab Sample ID: 890-2138-1
Matrix: Solid
Date Collected: 03/24/22 14:50
Date Received: 03/24/22 16:43
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		03/28/22 08:36	03/29/22 15:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 15:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 15:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/28/22 08:36	03/29/22 15:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 15:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/28/22 08:36	03/29/22 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/28/22 08:36*	*03/29/22 15:38*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/28/22 08:36*	*03/29/22 15:38*	*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			03/29/22 16:50	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			03/29/22 10:55	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 *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 19:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 19:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/28/22 10:57	03/28/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/28/22 10:57*	*03/28/22 19:03*	*1*
o-Terphenyl	*128*		*70 - 130*	*03/28/22 10:57*	*03/28/22 19:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			04/07/22 17:42	1

Client Sample ID: SS02

Lab Sample ID: 890-2138-2
Matrix: Solid
Date Collected: 03/24/22 14:55
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 15:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 15:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 15:58	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/28/22 08:36	03/29/22 15:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 15:58	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/28/22 08:36	03/29/22 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/28/22 08:36*	*03/29/22 15:58*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS02

Lab Sample ID: 890-2138-2
Matrix: Solid
Date Collected: 03/24/22 14:55
Date Received: 03/24/22 16:43
Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/28/22 08:36*	*03/29/22 15:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/29/22 16:50	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			03/29/22 10:55	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 *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 19:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 19:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/28/22 10:57	03/28/22 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*117*		*70 - 130*	*03/28/22 10:57*	*03/28/22 19:24*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*03/28/22 10:57*	*03/28/22 19:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.51**		5.00		mg/Kg			04/07/22 17:48	1

Client Sample ID: SS03

Lab Sample ID: 890-2138-3
Matrix: Solid
Date Collected: 03/24/22 15:00
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 16:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 16:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 16:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 16:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 16:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*03/28/22 08:36*	*03/29/22 16:19*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/28/22 08:36*	*03/29/22 16:19*	*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			03/29/22 16:50	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			03/29/22 10:55	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS03

Lab Sample ID: 890-2138-3
Matrix: Solid
Date Collected: 03/24/22 15:00
Date Received: 03/24/22 16:43
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 19:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 19:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/28/22 10:57*	*03/28/22 19:45*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/28/22 10:57*	*03/28/22 19:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.1**		4.99		mg/Kg			04/07/22 17:53	1

Client Sample ID: SS04

Lab Sample ID: 890-2138-4
Matrix: Solid
Date Collected: 03/24/22 15:05
Date Received: 03/24/22 16:43
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		03/28/22 08:36	03/29/22 16:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 16:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 16:39	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/28/22 08:36	03/29/22 16:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 16:39	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/28/22 08:36	03/29/22 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/28/22 08:36*	*03/29/22 16:39*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 08:36*	*03/29/22 16:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/29/22 16:50	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			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 20:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 20:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/28/22 10:57*	*03/28/22 20:06*	*1*
o-Terphenyl	*108*		*70 - 130*	*03/28/22 10:57*	*03/28/22 20:06*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS04
Date Collected: 03/24/22 15:05
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2138-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01		mg/Kg			04/07/22 17:59	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

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)
890-2138-1	SS01	111	104
890-2138-2	SS02	111	103
890-2138-3	SS03	103	91
890-2138-4	SS04	106	98
890-2139-A-1-A MS	Matrix Spike	96	105
890-2139-A-1-B MSD	Matrix Spike Duplicate	78	102
LCS 880-22440/1-A	Lab Control Sample	105	104
LCSD 880-22440/2-A	Lab Control Sample Dup	118	100
MB 880-22418/5-A	Method Blank	98	101
MB 880-22440/5-A	Method Blank	98	98

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2138-1	SS01	112	128
890-2138-2	SS02	117	134 S1+
890-2138-3	SS03	104	115
890-2138-4	SS04	97	108
890-2139-A-1-E MS	Matrix Spike	120	134 S1+
890-2139-A-1-F MSD	Matrix Spike Duplicate	108	116

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO2	OTPH2
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCS 880-22469/2-A	Lab Control Sample	109	120
LCSD 880-22469/3-A	Lab Control Sample Dup	94	104
MB 880-22469/1-A	Method Blank	103	116

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-22418/5-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22418

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/22 09:00	03/28/22 18:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 09:00*	*03/28/22 18:08*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/28/22 09:00*	*03/28/22 18:08*	*1*

Lab Sample ID: MB 880-22440/5-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22440

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 05:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 08:36*	*03/29/22 05:43*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 08:36*	*03/29/22 05:43*	*1*

Lab Sample ID: LCS 880-22440/1-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22440

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1072		mg/Kg		107	70 - 130		
Toluene			0.100	0.1006		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1029		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2474		mg/Kg		124	70 - 130		
o-Xylene			0.100	0.1219		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-22440/2-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22440

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08758		mg/Kg		88	70 - 130	20	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

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

Lab Sample ID: LCSD 880-22440/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09000		mg/Kg		90	70 - 130	11	35
Ethylbenzene			0.100	0.09433		mg/Kg		94	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2330		mg/Kg		117	70 - 130	6	35
o-Xylene			0.100	0.1183		mg/Kg		118	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2139-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1	0.100	0.01667	F1	mg/Kg		17	70 - 130
Toluene	<0.00198	U F1	0.100	0.01424	F1	mg/Kg		14	70 - 130
Ethylbenzene	<0.00198	U F2 F1	0.100	0.009383	F1	mg/Kg		9	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.02545	F1	mg/Kg		13	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.01679	F1	mg/Kg		17	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2139-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0996	0.01395	F1	mg/Kg		14	70 - 130	18	35
Toluene	<0.00198	U F1	0.0996	0.01110	F1	mg/Kg		11	70 - 130	25	35
Ethylbenzene	<0.00198	U F2 F1	0.0996	0.006320	F2 F1	mg/Kg		6	70 - 130	39	35
m-Xylene & p-Xylene	<0.00397	U F1	0.199	0.01959	F1	mg/Kg		10	70 - 130	26	35
o-Xylene	<0.00198	U F1	0.0996	0.01230	F1	mg/Kg		12	70 - 130	31	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-22469/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22434 — **Prep Batch: 22469**

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		03/28/22 10:57	03/28/22 11:23	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
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Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-22469/1-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22469

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		03/28/22 10:57	03/28/22 11:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/28/22 10:57*	*03/28/22 11:23*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/28/22 10:57*	*03/28/22 11:23*	*1*

Lab Sample ID: LCS 880-22469/2-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	950.2		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	975.9		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: LCSD 880-22469/3-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22469

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	749.9	*1	mg/Kg		75	70 - 130	24	20
Diesel Range Organics (Over C10-C28)			1000	794.2	*1	mg/Kg		79	70 - 130	21	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: 890-2139-A-1-E MS
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 22469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	998	995.7		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U *1	998	844.0		mg/Kg		80	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*134*	*S1+*	*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

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

Lab Sample ID: 890-2139-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22434 — **Prep Batch: 22469**

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	<49.8	U *1	997	887.0		mg/Kg		87	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	<49.8	U *1	997	742.4		mg/Kg		70	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22993/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23129

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/07/22 13:12	1

Lab Sample ID: LCS 880-22993/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23129

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.6		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-22993/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23129

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2135-A-1-I MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23129

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	59.6		248	300.1		mg/Kg		97	90 - 110		

Lab Sample ID: 890-2135-A-1-J MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 23129

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	59.6		248	310.6		mg/Kg		101	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

GC VOA

Prep Batch: 22418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22418/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 22425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	8021B	22440
890-2138-2	SS02	Total/NA	Solid	8021B	22440
890-2138-3	SS03	Total/NA	Solid	8021B	22440
890-2138-4	SS04	Total/NA	Solid	8021B	22440
MB 880-22418/5-A	Method Blank	Total/NA	Solid	8021B	22418
MB 880-22440/5-A	Method Blank	Total/NA	Solid	8021B	22440
LCS 880-22440/1-A	Lab Control Sample	Total/NA	Solid	8021B	22440
LCSD 880-22440/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22440
890-2139-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	22440
890-2139-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	22440

Prep Batch: 22440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	5035	
890-2138-2	SS02	Total/NA	Solid	5035	
890-2138-3	SS03	Total/NA	Solid	5035	
890-2138-4	SS04	Total/NA	Solid	5035	
MB 880-22440/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22440/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22440/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2139-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-2139-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	Total BTEX	
890-2138-2	SS02	Total/NA	Solid	Total BTEX	
890-2138-3	SS03	Total/NA	Solid	Total BTEX	
890-2138-4	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	8015B NM	22469
890-2138-2	SS02	Total/NA	Solid	8015B NM	22469
890-2138-3	SS03	Total/NA	Solid	8015B NM	22469
890-2138-4	SS04	Total/NA	Solid	8015B NM	22469
MB 880-22469/1-A	Method Blank	Total/NA	Solid	8015B NM	22469
LCS 880-22469/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22469
LCSD 880-22469/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22469
890-2139-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	22469
890-2139-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	22469

Prep Batch: 22469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

GC Semi VOA (Continued)

Prep Batch: 22469 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-2	SS02	Total/NA	Solid	8015NM Prep	
890-2138-3	SS03	Total/NA	Solid	8015NM Prep	
890-2138-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-22469/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22469/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22469/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2139-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2139-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 22543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Total/NA	Solid	8015 NM	
890-2138-2	SS02	Total/NA	Solid	8015 NM	
890-2138-3	SS03	Total/NA	Solid	8015 NM	
890-2138-4	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 22993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Soluble	Solid	DI Leach	
890-2138-2	SS02	Soluble	Solid	DI Leach	
890-2138-3	SS03	Soluble	Solid	DI Leach	
890-2138-4	SS04	Soluble	Solid	DI Leach	
MB 880-22993/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 23129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2138-1	SS01	Soluble	Solid	300.0	22993
890-2138-2	SS02	Soluble	Solid	300.0	22993
890-2138-3	SS03	Soluble	Solid	300.0	22993
890-2138-4	SS04	Soluble	Solid	300.0	22993
MB 880-22993/1-A	Method Blank	Soluble	Solid	300.0	22993
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	300.0	22993
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22993
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	300.0	22993
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22993

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS01
Date Collected: 03/24/22 14:50
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2138-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 15:38	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22590	03/29/22 16:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22543	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 19:03	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 17:42	CH	XEN MID

Client Sample ID: SS02
Date Collected: 03/24/22 14:55
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2138-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 15:58	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22590	03/29/22 16:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22543	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 19:24	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 17:48	CH	XEN MID

Client Sample ID: SS03
Date Collected: 03/24/22 15:00
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2138-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 16:19	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22590	03/29/22 16:50	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22543	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 19:45	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 17:53	CH	XEN MID

Client Sample ID: SS04
Date Collected: 03/24/22 15:05
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2138-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 16:39	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22590	03/29/22 16:50	AJ	XEN MID

Eurofins Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS04
Date Collected: 03/24/22 15:05
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2138-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	22543	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 20:06	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 17:59	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

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

Sample Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2138-1
SDG: 31403236.029 TASK 12.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2138-1	SS01	Solid	03/24/22 14:50	03/24/22 16:43	0.5
890-2138-2	SS02	Solid	03/24/22 14:55	03/24/22 16:43	0.5
890-2138-3	SS03	Solid	03/24/22 15:00	03/24/22 16:43	0.5
890-2138-4	SS04	Solid	03/24/22 15:05	03/24/22 16:43	0.5

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 1

4/8/2022

Project Manager:	Tacoma Morissey	Bill to: (if different)	Adrian Baker
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:	conner.shore@wsp.com; Tacoma.morissey@wsp.com

Work Order Comments

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

Project Name:	BEU DI 4	Turn Around	
Project Number:	31403236.029 Task 12.02	Routine	X
P.O. Number:	CC:1080851001	Rush:	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.6/1.4	Thermometer ID	
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)
SS01	s	3/24/2022	1450	0.5'	1	x	x	x
SS02	s	3/24/2022	1455	0.5'	1	x	x	x
SS03	s	3/24/2022	1500	0.5'	1	x	x	x
SS04	s	3/24/2022	1505	0.5'	1	x	x	x

890-2138 Chain of Custody

Work Order Notes

NAPP2205649749& NAPP 2203453168

API: 30-15-43285

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

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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		3.24.22 1648			
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Eurofins 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: 890-687 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica.kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2138-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/30/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: BEU DI 4	Project #: 89000004			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B - NaOH, C Zn Acetate, D - Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J - DI Water, K EDTA, L - EDA, M - Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, 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=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/6036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS01 (890-2138-1)	3/24/22	14 50 Mountain		Solid			X	X	X	X	X	1	
SS02 (890-2138-2)	3/24/22	14 55 Mountain		Solid			X	X	X	X	X	1	
SS03 (890-2138-3)	3/24/22	15 00 Mountain		Solid			X	X	X	X	X	1	
SS04 (890-2138-4)	3/24/22	15 05 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, 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 Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central 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: Dee Coy 3-25-22	Date/Time:	Company	Received by:	Date/Time: 3/26/22	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: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2138-1
SDG Number: 31403236.029 TASK 12.02

Login Number: 2138
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2138-1
SDG Number: 31403236.029 TASK 12.02

Login Number: 2138
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 03/28/22 08:20 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2139-1
Laboratory Sample Delivery Group: 31403236.029 TASK 12.02
Client Project/Site: BEU DI 4
Revision: 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
5/2/2022 2:34:08 PM

Jessica Kramer, Project Manager
(432)704-5440
Jessica.Kramer@et.eurofinsus.com

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

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

Client: WSP USA Inc.
Project/Site: BEU DI 4

Laboratory Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2139-1
Project/Site: BEU DI 4 SDG: 31403236.029 TASK 12.02

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Job ID: 890-2139-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2139-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 4/8/2022. The report (revision 1) is being revised to change sample IDs per Tacoma Morrissey (email)..

Receipt
The samples were received on 3/24/2022 4:43 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 was 1.4º C.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-22425 recovered above the upper control limit for m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-22440 and analytical batch 880-22425 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 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-22469 and analytical batch 880-22434 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and 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.

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: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS05

Date Collected: 03/24/22 10:50
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1	0.00198		mg/Kg		03/28/22 08:36	03/29/22 06:12	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		03/28/22 08:36	03/29/22 06:12	1
Ethylbenzene	<0.00198	U F2 F1	0.00198		mg/Kg		03/28/22 08:36	03/29/22 06:12	1
m-Xylene & p-Xylene	<0.00397	U F1	0.00397		mg/Kg		03/28/22 08:36	03/29/22 06:12	1
o-Xylene	<0.00198	U F1	0.00198		mg/Kg		03/28/22 08:36	03/29/22 06:12	1
Xylenes, Total	<0.00397	U F1	0.00397		mg/Kg		03/28/22 08:36	03/29/22 06:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:12*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:12*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/29/22 14:02	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			03/29/22 10:55	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 *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 12:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 12:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/28/22 10:57	03/28/22 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/28/22 10:57*	*03/28/22 12:25*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/28/22 10:57*	*03/28/22 12:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**22.1**		4.97		mg/Kg			04/07/22 18:05	1

Client Sample ID: SS06

Date Collected: 03/24/22 10:55
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 06:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 06:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 06:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 06:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 06:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:33*	*1*

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Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS06

Date Collected: 03/24/22 10:55
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:33*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/29/22 10:55	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 *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 13:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 13:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/28/22 10:57	03/28/22 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/28/22 10:57*	*03/28/22 13:27*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/28/22 10:57*	*03/28/22 13:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.49**		4.95		mg/Kg			04/07/22 18:11	1

Client Sample ID: SS07

Date Collected: 03/24/22 12:00
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 06:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 06:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 06:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 06:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 06:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 06:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:53*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/28/22 08:36*	*03/29/22 06:53*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**94.0**		49.8		mg/Kg			03/29/22 10:55	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS07
Date Collected: 03/24/22 12:00
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 13:48	1
Diesel Range Organics (Over C10-C28)	**94.0**	***1**	49.8		mg/Kg		03/28/22 10:57	03/28/22 13:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/28/22 10:57	03/28/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/28/22 10:57*	*03/28/22 13:48*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/28/22 10:57*	*03/28/22 13:48*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18.9**		5.03		mg/Kg			04/07/22 18:17	1

Client Sample ID: SS08
Date Collected: 03/24/22 12:05
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-4
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 07:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 07:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 07:13	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/28/22 08:36	03/29/22 07:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/28/22 08:36	03/29/22 07:13	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/28/22 08:36	03/29/22 07:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:13*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/29/22 10:55	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 *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 14:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/28/22 10:57	03/28/22 14:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/28/22 10:57	03/28/22 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:09*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:09*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS08

Date Collected: 03/24/22 12:05
Date Received: 03/24/22 16:43
Sample Depth: 0.5

Lab Sample ID: 890-2139-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.05		5.00		mg/Kg			04/02/22 20:16	1

Client Sample ID: PH01A

Date Collected: 03/24/22 13:10
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-5
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 07:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 07:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 07:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 07:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 07:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 07:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:34*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:34*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 14:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 14:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:30*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.5		4.99		mg/Kg			04/02/22 20:43	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH01B
Date Collected: 03/24/22 13:15
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-6
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 07:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 07:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 07:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 07:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 07:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:54*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/28/22 08:36*	*03/29/22 07:54*	*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			03/29/22 14:02	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			03/29/22 10:55	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 *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 14:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		03/28/22 10:57	03/28/22 14:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/28/22 10:57	03/28/22 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:51*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/28/22 10:57*	*03/28/22 14:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**74.4**		4.95		mg/Kg			04/02/22 20:52	1

Client Sample ID: PH02A
Date Collected: 03/24/22 13:25
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-7
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 08:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 08:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:15*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH02A
Date Collected: 03/24/22 13:25
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:15*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/29/22 10:55	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 *1	50.0	mg/Kg		03/28/22 10:57	03/28/22 15:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		03/28/22 10:57	03/28/22 15:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/28/22 10:57	03/28/22 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:12*	*1*
o-Terphenyl	*119*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.21**		4.97	mg/Kg			04/02/22 21:01	1

Client Sample ID: PH02B
Date Collected: 03/24/22 13:30
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-8
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		03/28/22 08:36	03/29/22 08:35	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/28/22 08:36	03/29/22 08:35	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/28/22 08:36	03/29/22 08:35	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		03/28/22 08:36	03/29/22 08:35	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/28/22 08:36	03/29/22 08:35	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		03/28/22 08:36	03/29/22 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:35*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/29/22 10:55	1

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Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH02B
Date Collected: 03/24/22 13:30
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-8
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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:33*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.3**		5.04		mg/Kg			04/02/22 21:10	1

Client Sample ID: PH03A
Date Collected: 03/24/22 13:45
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-9
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 08:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 08:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 08:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:55*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/28/22 08:36*	*03/29/22 08:55*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:54*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/28/22 10:57*	*03/28/22 15:54*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH03A
Date Collected: 03/24/22 13:45
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-9
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			04/02/22 21:36	1

Client Sample ID: PH03B
Date Collected: 03/24/22 13:50
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-10
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 09:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 09:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 09:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 09:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 09:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/28/22 08:36	03/29/22 09:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*03/28/22 08:36*	*03/29/22 09:16*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/28/22 08:36*	*03/29/22 09:16*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/28/22 10:57*	*03/28/22 16:15*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/28/22 10:57*	*03/28/22 16:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			04/02/22 21:45	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH04A
Date Collected: 03/24/22 13:55
Date Received: 03/24/22 16:43
Sample Depth: 1

Lab Sample ID: 890-2139-11
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 13:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 13:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 13:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 13:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/28/22 08:36	03/29/22 13:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/28/22 08:36	03/29/22 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*03/28/22 08:36*	*03/29/22 13:35*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/28/22 08:36*	*03/29/22 13:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/28/22 10:57*	*03/28/22 16:57*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/28/22 10:57*	*03/28/22 16:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.3**		4.99		mg/Kg			04/02/22 21:54	1

Client Sample ID: PH04B
Date Collected: 03/24/22 14:00
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-12
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 13:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 13:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 13:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/28/22 08:36	03/29/22 13:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/28/22 08:36	03/29/22 13:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/28/22 08:36	03/29/22 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/28/22 08:36*	*03/29/22 13:56*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH04B
Date Collected: 03/24/22 14:00
Date Received: 03/24/22 16:43
Sample Depth: 2

Lab Sample ID: 890-2139-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*03/28/22 08:36*	*03/29/22 13:56*	*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			03/29/22 14:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/22 10:55	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 *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 17:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/28/22 10:57	03/28/22 17:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/28/22 10:57*	*03/28/22 17:18*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/28/22 10:57*	*03/28/22 17:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.3**		5.00		mg/Kg			04/04/22 11:19	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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)
890-2139-1	SS05	105	94
890-2139-1 MS	SS05	96	105
890-2139-1 MSD	SS05	78	102
890-2139-2	SS06	109	103
890-2139-3	SS07	108	104
890-2139-4	SS08	110	88
890-2139-5	PH01A	119	94
890-2139-6	PH01B	106	95
890-2139-7	PH02A	119	97
890-2139-8	PH02B	114	99
890-2139-9	PH03A	113	105
890-2139-10	PH03B	115	95
890-2139-11	PH04A	115	96
890-2139-12	PH04B	111	105
LCS 880-22440/1-A	Lab Control Sample	105	104
LCSD 880-22440/2-A	Lab Control Sample Dup	118	100
MB 880-22418/5-A	Method Blank	98	101
MB 880-22440/5-A	Method Blank	98	98

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-2139-1	SS05	106	123
890-2139-1 MS	SS05	120	134 S1+
890-2139-1 MSD	SS05	108	116
890-2139-2	SS06	103	114
890-2139-3	SS07	100	113
890-2139-4	SS08	102	112
890-2139-5	PH01A	99	114
890-2139-6	PH01B	103	113
890-2139-7	PH02A	106	119
890-2139-8	PH02B	96	113
890-2139-9	PH03A	101	116
890-2139-10	PH03B	103	116
890-2139-11	PH04A	101	115
890-2139-12	PH04B	98	109

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Surrogate Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO2 (70-130)	OTPH2 (70-130)								
LCS 880-22469/2-A	Lab Control Sample	109	120								
LCSD 880-22469/3-A	Lab Control Sample Dup	94	104								
MB 880-22469/1-A	Method Blank	103	116								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-22418/5-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22418

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 09:00	03/28/22 18:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/22 09:00	03/28/22 18:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 09:00*	*03/28/22 18:08*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/28/22 09:00*	*03/28/22 18:08*	*1*

Lab Sample ID: MB 880-22440/5-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22440

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/22 08:36	03/29/22 05:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/22 08:36	03/29/22 05:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 08:36*	*03/29/22 05:43*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/28/22 08:36*	*03/29/22 05:43*	*1*

Lab Sample ID: LCS 880-22440/1-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22440

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1072		mg/Kg		107	70 - 130		
Toluene			0.100	0.1006		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1029		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2474		mg/Kg		124	70 - 130		
o-Xylene			0.100	0.1219		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-22440/2-A
Matrix: Solid
Analysis Batch: 22425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22440

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08758		mg/Kg		88	70 - 130	20	35

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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

Lab Sample ID: LCSD 880-22440/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09000		mg/Kg		90	70 - 130	11	35
Ethylbenzene			0.100	0.09433		mg/Kg		94	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2330		mg/Kg		117	70 - 130	6	35
o-Xylene			0.100	0.1183		mg/Kg		118	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2139-1 MS — **Client Sample ID: SS05**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1	0.100	0.01667	F1	mg/Kg		17	70 - 130
Toluene	<0.00198	U F1	0.100	0.01424	F1	mg/Kg		14	70 - 130
Ethylbenzene	<0.00198	U F2 F1	0.100	0.009383	F1	mg/Kg		9	70 - 130
m-Xylene & p-Xylene	<0.00397	U F1	0.200	0.02545	F1	mg/Kg		13	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.01679	F1	mg/Kg		17	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2139-1 MSD — **Client Sample ID: SS05**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22425 — **Prep Batch: 22440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.0996	0.01395	F1	mg/Kg		14	70 - 130	18	35
Toluene	<0.00198	U F1	0.0996	0.01110	F1	mg/Kg		11	70 - 130	25	35
Ethylbenzene	<0.00198	U F2 F1	0.0996	0.006320	F2 F1	mg/Kg		6	70 - 130	39	35
m-Xylene & p-Xylene	<0.00397	U F1	0.199	0.01959	F1	mg/Kg		10	70 - 130	26	35
o-Xylene	<0.00198	U F1	0.0996	0.01230	F1	mg/Kg		12	70 - 130	31	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-22469/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22434 — **Prep Batch: 22469**

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		03/28/22 10:57	03/28/22 11:23	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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

Lab Sample ID: MB 880-22469/1-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22469

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		03/28/22 10:57	03/28/22 11:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/28/22 10:57	03/28/22 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/28/22 10:57*	*03/28/22 11:23*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/28/22 10:57*	*03/28/22 11:23*	*1*

Lab Sample ID: LCS 880-22469/2-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	950.2		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	975.9		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: LCSD 880-22469/3-A
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 22469

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	749.9	*1	mg/Kg		75	70 - 130	24	20
Diesel Range Organics (Over C10-C28)			1000	794.2	*1	mg/Kg		79	70 - 130	21	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: 890-2139-1 MS
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 22469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	998	995.7		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U *1	998	844.0		mg/Kg		80	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*134*	*S1+*	*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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

Lab Sample ID: 890-2139-1 MSD
Matrix: Solid
Analysis Batch: 22434

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 22469

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	<49.8	U *1	997	887.0		mg/Kg		87	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	<49.8	U *1	997	742.4		mg/Kg		70	70 - 130	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22795/1-A
Matrix: Solid
Analysis Batch: 22867

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/02/22 19:50	1

Lab Sample ID: LCS 880-22795/2-A
Matrix: Solid
Analysis Batch: 22867

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	256.9		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-22795/3-A
Matrix: Solid
Analysis Batch: 22867

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-2139-4 MS
Matrix: Solid
Analysis Batch: 22867

Client Sample ID: SS08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	6.05		250	262.0		mg/Kg		102	90 - 110		

Lab Sample ID: 890-2139-4 MSD
Matrix: Solid
Analysis Batch: 22867

Client Sample ID: SS08
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6.05		250	257.4		mg/Kg		101	90 - 110	2	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-22993/1-A
Matrix: Solid
Analysis Batch: 23129

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/07/22 13:12	1

Lab Sample ID: LCS 880-22993/2-A
Matrix: Solid
Analysis Batch: 23129

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.6		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-22993/3-A
Matrix: Solid
Analysis Batch: 23129

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-2135-A-1-I MS
Matrix: Solid
Analysis Batch: 23129

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	59.6		248	300.1		mg/Kg		97	90 - 110		

Lab Sample ID: 890-2135-A-1-J MSD
Matrix: Solid
Analysis Batch: 23129

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	59.6		248	310.6		mg/Kg		101	90 - 110	3	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

GC VOA

Prep Batch: 22418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-22418/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 22425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	8021B	22440
890-2139-2	SS06	Total/NA	Solid	8021B	22440
890-2139-3	SS07	Total/NA	Solid	8021B	22440
890-2139-4	SS08	Total/NA	Solid	8021B	22440
890-2139-5	PH01A	Total/NA	Solid	8021B	22440
890-2139-6	PH01B	Total/NA	Solid	8021B	22440
890-2139-7	PH02A	Total/NA	Solid	8021B	22440
890-2139-8	PH02B	Total/NA	Solid	8021B	22440
890-2139-9	PH03A	Total/NA	Solid	8021B	22440
890-2139-10	PH03B	Total/NA	Solid	8021B	22440
890-2139-11	PH04A	Total/NA	Solid	8021B	22440
890-2139-12	PH04B	Total/NA	Solid	8021B	22440
MB 880-22418/5-A	Method Blank	Total/NA	Solid	8021B	22418
MB 880-22440/5-A	Method Blank	Total/NA	Solid	8021B	22440
LCS 880-22440/1-A	Lab Control Sample	Total/NA	Solid	8021B	22440
LCSD 880-22440/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	22440
890-2139-1 MS	SS05	Total/NA	Solid	8021B	22440
890-2139-1 MSD	SS05	Total/NA	Solid	8021B	22440

Prep Batch: 22440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	5035	
890-2139-2	SS06	Total/NA	Solid	5035	
890-2139-3	SS07	Total/NA	Solid	5035	
890-2139-4	SS08	Total/NA	Solid	5035	
890-2139-5	PH01A	Total/NA	Solid	5035	
890-2139-6	PH01B	Total/NA	Solid	5035	
890-2139-7	PH02A	Total/NA	Solid	5035	
890-2139-8	PH02B	Total/NA	Solid	5035	
890-2139-9	PH03A	Total/NA	Solid	5035	
890-2139-10	PH03B	Total/NA	Solid	5035	
890-2139-11	PH04A	Total/NA	Solid	5035	
890-2139-12	PH04B	Total/NA	Solid	5035	
MB 880-22440/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-22440/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-22440/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2139-1 MS	SS05	Total/NA	Solid	5035	
890-2139-1 MSD	SS05	Total/NA	Solid	5035	

Analysis Batch: 22577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	Total BTEX	
890-2139-2	SS06	Total/NA	Solid	Total BTEX	
890-2139-3	SS07	Total/NA	Solid	Total BTEX	
890-2139-4	SS08	Total/NA	Solid	Total BTEX	
890-2139-5	PH01A	Total/NA	Solid	Total BTEX	
890-2139-6	PH01B	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

GC VOA (Continued)

Analysis Batch: 22577 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-7	PH02A	Total/NA	Solid	Total BTEX	
890-2139-8	PH02B	Total/NA	Solid	Total BTEX	
890-2139-9	PH03A	Total/NA	Solid	Total BTEX	
890-2139-10	PH03B	Total/NA	Solid	Total BTEX	
890-2139-11	PH04A	Total/NA	Solid	Total BTEX	
890-2139-12	PH04B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	8015B NM	22469
890-2139-2	SS06	Total/NA	Solid	8015B NM	22469
890-2139-3	SS07	Total/NA	Solid	8015B NM	22469
890-2139-4	SS08	Total/NA	Solid	8015B NM	22469
890-2139-5	PH01A	Total/NA	Solid	8015B NM	22469
890-2139-6	PH01B	Total/NA	Solid	8015B NM	22469
890-2139-7	PH02A	Total/NA	Solid	8015B NM	22469
890-2139-8	PH02B	Total/NA	Solid	8015B NM	22469
890-2139-9	PH03A	Total/NA	Solid	8015B NM	22469
890-2139-10	PH03B	Total/NA	Solid	8015B NM	22469
890-2139-11	PH04A	Total/NA	Solid	8015B NM	22469
890-2139-12	PH04B	Total/NA	Solid	8015B NM	22469
MB 880-22469/1-A	Method Blank	Total/NA	Solid	8015B NM	22469
LCS 880-22469/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22469
LCSD 880-22469/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22469
890-2139-1 MS	SS05	Total/NA	Solid	8015B NM	22469
890-2139-1 MSD	SS05	Total/NA	Solid	8015B NM	22469

Prep Batch: 22469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	8015NM Prep	
890-2139-2	SS06	Total/NA	Solid	8015NM Prep	
890-2139-3	SS07	Total/NA	Solid	8015NM Prep	
890-2139-4	SS08	Total/NA	Solid	8015NM Prep	
890-2139-5	PH01A	Total/NA	Solid	8015NM Prep	
890-2139-6	PH01B	Total/NA	Solid	8015NM Prep	
890-2139-7	PH02A	Total/NA	Solid	8015NM Prep	
890-2139-8	PH02B	Total/NA	Solid	8015NM Prep	
890-2139-9	PH03A	Total/NA	Solid	8015NM Prep	
890-2139-10	PH03B	Total/NA	Solid	8015NM Prep	
890-2139-11	PH04A	Total/NA	Solid	8015NM Prep	
890-2139-12	PH04B	Total/NA	Solid	8015NM Prep	
MB 880-22469/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22469/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22469/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2139-1 MS	SS05	Total/NA	Solid	8015NM Prep	
890-2139-1 MSD	SS05	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

GC Semi VOA

Analysis Batch: 22541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Total/NA	Solid	8015 NM	
890-2139-2	SS06	Total/NA	Solid	8015 NM	
890-2139-3	SS07	Total/NA	Solid	8015 NM	
890-2139-4	SS08	Total/NA	Solid	8015 NM	
890-2139-5	PH01A	Total/NA	Solid	8015 NM	
890-2139-6	PH01B	Total/NA	Solid	8015 NM	
890-2139-7	PH02A	Total/NA	Solid	8015 NM	
890-2139-8	PH02B	Total/NA	Solid	8015 NM	
890-2139-9	PH03A	Total/NA	Solid	8015 NM	
890-2139-10	PH03B	Total/NA	Solid	8015 NM	
890-2139-11	PH04A	Total/NA	Solid	8015 NM	
890-2139-12	PH04B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 22795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-4	SS08	Soluble	Solid	DI Leach	
890-2139-5	PH01A	Soluble	Solid	DI Leach	
890-2139-6	PH01B	Soluble	Solid	DI Leach	
890-2139-7	PH02A	Soluble	Solid	DI Leach	
890-2139-8	PH02B	Soluble	Solid	DI Leach	
890-2139-9	PH03A	Soluble	Solid	DI Leach	
890-2139-10	PH03B	Soluble	Solid	DI Leach	
890-2139-11	PH04A	Soluble	Solid	DI Leach	
890-2139-12	PH04B	Soluble	Solid	DI Leach	
MB 880-22795/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22795/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22795/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2139-4 MS	SS08	Soluble	Solid	DI Leach	
890-2139-4 MSD	SS08	Soluble	Solid	DI Leach	

Analysis Batch: 22867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-4	SS08	Soluble	Solid	300.0	22795
890-2139-5	PH01A	Soluble	Solid	300.0	22795
890-2139-6	PH01B	Soluble	Solid	300.0	22795
890-2139-7	PH02A	Soluble	Solid	300.0	22795
890-2139-8	PH02B	Soluble	Solid	300.0	22795
890-2139-9	PH03A	Soluble	Solid	300.0	22795
890-2139-10	PH03B	Soluble	Solid	300.0	22795
890-2139-11	PH04A	Soluble	Solid	300.0	22795
890-2139-12	PH04B	Soluble	Solid	300.0	22795
MB 880-22795/1-A	Method Blank	Soluble	Solid	300.0	22795
LCS 880-22795/2-A	Lab Control Sample	Soluble	Solid	300.0	22795
LCSD 880-22795/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22795
890-2139-4 MS	SS08	Soluble	Solid	300.0	22795
890-2139-4 MSD	SS08	Soluble	Solid	300.0	22795

QC Association Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

HPLC/IC

Leach Batch: 22993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Soluble	Solid	DI Leach	
890-2139-2	SS06	Soluble	Solid	DI Leach	
890-2139-3	SS07	Soluble	Solid	DI Leach	
MB 880-22993/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 23129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2139-1	SS05	Soluble	Solid	300.0	22993
890-2139-2	SS06	Soluble	Solid	300.0	22993
890-2139-3	SS07	Soluble	Solid	300.0	22993
MB 880-22993/1-A	Method Blank	Soluble	Solid	300.0	22993
LCS 880-22993/2-A	Lab Control Sample	Soluble	Solid	300.0	22993
LCSD 880-22993/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22993
890-2135-A-1-I MS	Matrix Spike	Soluble	Solid	300.0	22993
890-2135-A-1-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22993

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS05
Date Collected: 03/24/22 10:50
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 06:12	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 12:25	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 18:05	CH	XEN MID

Client Sample ID: SS06
Date Collected: 03/24/22 10:55
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 06:33	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 13:27	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 18:11	CH	XEN MID

Client Sample ID: SS07
Date Collected: 03/24/22 12:00
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 06:53	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 13:48	AJ	XEN MID
Soluble	Leach	DI Leach			22993	04/05/22 09:10	CH	XEN MID
Soluble	Analysis	300.0		1	23129	04/07/22 18:17	CH	XEN MID

Client Sample ID: SS08
Date Collected: 03/24/22 12:05
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 07:13	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: SS08
Date Collected: 03/24/22 12:05
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 14:09	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 20:16	CH	XEN MID

Client Sample ID: PH01A
Date Collected: 03/24/22 13:10
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 07:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 14:30	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 20:43	CH	XEN MID

Client Sample ID: PH01B
Date Collected: 03/24/22 13:15
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 07:54	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 14:51	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 20:52	CH	XEN MID

Client Sample ID: PH02A
Date Collected: 03/24/22 13:25
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 08:15	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 15:12	AJ	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH02A
Date Collected: 03/24/22 13:25
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 21:01	CH	XEN MID

Client Sample ID: PH02B
Date Collected: 03/24/22 13:30
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 08:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 15:33	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 21:10	CH	XEN MID

Client Sample ID: PH03A
Date Collected: 03/24/22 13:45
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 08:55	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 15:54	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 21:36	CH	XEN MID

Client Sample ID: PH03B
Date Collected: 03/24/22 13:50
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 09:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 16:15	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 21:45	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Client Sample ID: PH04A
Date Collected: 03/24/22 13:55
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 13:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 16:57	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/02/22 21:54	CH	XEN MID

Client Sample ID: PH04B
Date Collected: 03/24/22 14:00
Date Received: 03/24/22 16:43

Lab Sample ID: 890-2139-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			22440	03/28/22 08:36	KL	XEN MID
Total/NA	Analysis	8021B		1	22425	03/29/22 13:56	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22577	03/29/22 14:02	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22541	03/29/22 10:55	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22469	03/28/22 10:57	AM	XEN MID
Total/NA	Analysis	8015B NM		1	22434	03/28/22 17:18	AJ	XEN MID
Soluble	Leach	DI Leach			22795	04/01/22 11:44	CH	XEN MID
Soluble	Analysis	300.0		1	22867	04/04/22 11:19	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

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

Sample Summary

Client: WSP USA Inc.
Project/Site: BEU DI 4

Job ID: 890-2139-1
SDG: 31403236.029 TASK 12.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2139-1	SS05	Solid	03/24/22 10:50	03/24/22 16:43	0.5
890-2139-2	SS06	Solid	03/24/22 10:55	03/24/22 16:43	0.5
890-2139-3	SS07	Solid	03/24/22 12:00	03/24/22 16:43	0.5
890-2139-4	SS08	Solid	03/24/22 12:05	03/24/22 16:43	0.5
890-2139-5	PH01A	Solid	03/24/22 13:10	03/24/22 16:43	1
890-2139-6	PH01B	Solid	03/24/22 13:15	03/24/22 16:43	2
890-2139-7	PH02A	Solid	03/24/22 13:25	03/24/22 16:43	1
890-2139-8	PH02B	Solid	03/24/22 13:30	03/24/22 16:43	2
890-2139-9	PH03A	Solid	03/24/22 13:45	03/24/22 16:43	1
890-2139-10	PH03B	Solid	03/24/22 13:50	03/24/22 16:43	2
890-2139-11	PH04A	Solid	03/24/22 13:55	03/24/22 16:43	1
890-2139-12	PH04B	Solid	03/24/22 14:00	03/24/22 16:43	2

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Tacoma Morissey	Bill to: (if different)	Adrian Baker
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:		conner.shore@wsp.com; Tacoma.morissey@wsp.com

Work Order Comments

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

Project Name:	BEU DI 4	Turn Around	
Project Number:	31403236.029 Task 12.02	Routine	X
P.O. Number:	CC:1080851001	Rush:	
Sampler's Name:	Conner Shore	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	1.4/1.4	Thermometer ID	TWM007	
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)
FS01	s	3/24/2022	1050	0.5'	1	x	x	x
FS02	s	3/24/2022	1055	0.5'	1	x	x	x
FS03	s	3/24/2022	1200	0.5'	1	x	x	x
FS04	s	3/24/2022	1205	0.5'	1	x	x	x
PH01A	s	3/24/2022	1310	1'	1	x	x	x
PH01B	s	3/24/2022	1315	2'	1	x	x	x
PH02A	s	3/24/2022	1325	1'	1	x	x	x
PH02B	s	3/24/2022	1330	2'	1	x	x	x
PH03A	s	3/24/2022	1345	1'	1	x	x	x
PH03B	s	3/24/2022	1350	2'	1	x	x	x

890-2139 Chain of Custody

Work Order Notes

NAPP2205649749& NAPP 2203453168
API: 30-15-43285

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

Sample Comments

COMPOSITE
COMPOSITE

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		3.24.22 1643			
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Tacoma Morissey	Bill to: (if different)	Adrian Baker
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:		conner.shore@wsp.com; Tacoma.morissey@wsp.com

Work Order Comments

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

Project Name:	BEU DI 4	Turn Around	
Project Number:	31403236.029 Task 12.02	Routine	☒
P.O. Number:	CC:1080851001	Rush:	
Sampler's Name:	Conner Shore	Due Date:	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
PH04A	s	3/24/2022	1355	1'	1	x	x	x	COMPOSITE
PH04B	s	3/24/2022	1400	2'	1	x	x	x	COMPOSITE

Work Order Notes

NAPP2205649749& NAPP 2203453168
API: 30-15-43285

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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr 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		3.24.22 1643			
3			4		
5			6		

Revised Date 051418 Rev 2018 1

Eurofins 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: 890-687 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-2139-1
Address: 1211 W Florida Ave, ,	Due Date Requested: 3/30/2022	Analysis Requested		Preservation Codes:
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: BEU DI 4	Project #: 89000004			
Site:	SSOW#:			Other:

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

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
FS01 (890-2139-1)	3/24/22	10 50 Mountain		Solid			X	X	X	X	X	1	
FS02 (890-2139-2)	3/24/22	10 55 Mountain		Solid			X	X	X	X	X	1	
FS03 (890-2139-3)	3/24/22	12 00 Mountain		Solid			X	X	X	X	X	1	
FS04 (890-2139-4)	3/24/22	12 05 Mountain		Solid			X	X	X	X	X	1	
PH01A (890-2139-5)	3/24/22	13 10 Mountain		Solid			X	X	X	X	X	1	
PH01B (890-2139-6)	3/24/22	13 15 Mountain		Solid			X	X	X	X	X	1	
PH02A (890-2139-7)	3/24/22	13 25 Mountain		Solid			X	X	X	X	X	1	
PH02B (890-2139-8)	3/24/22	13 30 Mountain		Solid			X	X	X	X	X	1	
PH03A (890-2139-9)	3/24/22	13 45 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central 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 Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *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: [signature] 3·25·22	Date/Time.	Company	Received by: [signature]	Date/Time: 3/28/22	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: 06/08/2021

Eurofins 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: 890-687 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-2139-1
Address: 1211 W Florida Ave ,	Due Date Requested: 3/30/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: BEU DI 4	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G - Amchlor, H Ascorbic Acid, I - Ice, J DI Water, K - EDTA, L EDA, M Hexane, N - None, O AsNaO2, P Na2O4S, Q Na2SO3, R - Na2S2O3, S H2SO4, T TSP Dodecahydrate, 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=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
PH03B (890-2139-10)	3/24/22	13 50 Mountain		Solid			X	X	X	X	X	1	
PH04A (890-2139-11)	3/24/22	13 55 Mountain		Solid			X	X	X	X	X	1	
PH04B (890-2139-12)	3/24/22	14 00 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central 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 Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

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

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	Relinquished by: 3.25.22			Received by:		
	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: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2139-1
SDG Number: 31403236.029 TASK 12.02

Login Number: 2139
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-2139-1
SDG Number: 31403236.029 TASK 12.02

Login Number: 2139
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 03/28/22 08:20 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	

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Green, Garrett J
To: Tacoma Morrissey
Subject: FW: XTO Site Activities for the Week of Mar 21
Date: Friday, May 6, 2022 10:38:40 AM
Attachments: image002.png

[**EXTERNAL EMAIL**]

From: Morrissey, Tacoma [mailto:Tacoma.Morrissey@wsp.com]
Sent: Thursday, March 17, 2022 10:51 AM
To: OCD.Enviro@state.nm.us
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; WSP-XTO-Project-Team <WSP-XTO-Project-Team@wsp.com>
Subject: XTO Site Activities for the Week of Mar 21

All,

XTO will be completing excavation and sampling activities at the following sites next week. We anticipate collecting final confirmation samples.

Monday:

Tuesday:

- Remuda Basin #1 / NAB1836137253

Wednesday:

- Remuda Basin #1 / NAB1836137253
- BEU 29W Vader 100H / nAPP2102831345

Thursday:

- Remuda Basin #1 / NAB1836137253
- BEU DI 4 / NAPP2203453168 & NAPP2205649749

Friday

- Remuda Basin #1 / NAB1836137253
- BEU DI 4 / NAPP2203453168 & NAPP2205649749

Saturday

- Remuda Basin #1 / NAB1836137253

Sunday

- Remuda Basin #1 / NAB1836137253

Thank you,

Tacoma Morrissey
Consultant Geologist
Office Manager, Midland

M+ 1 337-257-8307
WSP USA
3300 North A Street
Bldg 1, Unit 222
Midland, Texas 79705

wsp.com

-LAEmHhHzdJzBITWfa4Hgs7pbKl

From: Hamlet, Robert, EMNRD
To: Baker, Adrian
Cc: DelawareSpills /SM; Tacoma Morrissey; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD
Subject: (Extension Approval) Big Eddy Unit DI 4 Tank Battery/ NAPP2203453168 & NAPP2205649749
Date: Wednesday, April 20, 2022 11:59:37 AM

[**EXTERNAL EMAIL**]

RE: Incident #**NAPP2203453168 & NAPP2205649749**

Adrian,

Your request for an extension to **May 12th, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Sent: Wednesday, April 20, 2022 10:18 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Subject: Fw: [EXTERNAL] XTO-Extension Request - Big Eddy Unit DI 4 Tank Battery/ NAPP2203453168 & NAPP2205649749

From: Baker, Adrian <adrian.baker@exxonmobil.com>
Sent: Wednesday, April 20, 2022 10:15 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO-Extension Request - Big Eddy Unit DI 4 Tank Battery/ NAPP2203453168 & NAPP2205649749

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on

links or opening attachments.

All,
XTO is requesting an extension of the current April 21, 2022, due date for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the Big Eddy Unit DI 4 Tank Battery (Incident Numbers NAPP2203453168 and NAPP2205649749). The releases occurred on January 21, 2022, and February 11, 2022, respectively. Following scheduling with XTO operations to have the flare turned off to ensure the safety of all personnel, excavation of impacted soil was completed at the end of March 2022. Final laboratory analytical results are pending. In order to review the final analytical results and draft a remediation work plan or closure report XTO requests an extension until May 12, 2022, the due date of Incident Number NAPP2205649749.

Adrian Baker
Environmental Coordinator
Permian Business Unit

XTO Energy Inc.
6401 N. Holiday Hill Dr.
Midland, Tx 79707
Mobile:(432)-236-3808
adrian.baker@exxonmobil.com

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 106359

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 106359
	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 #NAPP2205649749 BIG EDDY UNIT DI 4 TANK BATTERY, thank you. This closure is approved.	6/21/2022