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	NAPP2114845563
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.37988 Longitude -103.88676
(NAD 83 in decimal degrees to 5 decimal places)

Site Name James Ranch Unit DI 1A	Site Type CTB
Date Release Discovered 5/17/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
F	21	22S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 31	Volume Recovered (bbls) 31
	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: Internal corrosion caused a pinhole on a waterline, releasing fluids into impermeable containment. All fluids were recovered and returned to process. A 48-hour liner inspection notice was set to NMOCD District 2. Liner was inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2114845563
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? N/A

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Garrett Green to 'Mike Bratcher'; 'Victoria Venegas'; 'Rob Hamlet'; 'emily.hernandez@state.nm.us'; 'camorgan@blm.gov'; 'blm_nm_cfo_spill@blm.gov' on Monday, May 17, 2021 3:47 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: Kyle Littrell
Title: Environmental Manager
Signature: Kyle Littrell
Date: 5-28-21
email: kyle.littrell@exxonmobil.com
Telephone: 432-221-7331

OCD Only

Received by: Ramona Marcus
Date: 5/28/2021

Location:	**James Ranch Unit DI 1A**	
Spill Date:	**5/17/2021**	
Area 1		
Approximate Area =	174.05	cu.ft.
VOLUME OF LEAK		
Total Produced Water =	31.00	bbls
TOTAL VOLUME OF LEAK		
Total Produced Water =	**31.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**31.00**	**bbls**

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

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

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 29950
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	5/28/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2114845563
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	NAPP2114845563
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: SSHE Coordinator

Signature: Adrian Baker Date: 8/2/2021

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2114845563
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☒ Extents of contamination must be fully delineated.

☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Adrian Baker Date: 8/2/2021

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

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2114845563
District RP	
Facility ID	
Application ID	

Remediation Plan

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Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 8/2/2021

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

OCD Only

Received by: Robert Hamlet Date: 11/16/2021

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☒ Deferral Approved

Signature: Robert Hamlet Date: 11/16/2021

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

August 2, 2021

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

RE: Deferral Request
James Ranch Unit DI 1A
Incident Number nAPP2114845563
Eddy County, New Mexico

To Whom It May Concern:

WSP USA Inc. (WSP), on behalf of XTO Energy, Inc. (XTO), presents the following Deferral Request detailing site assessment and soil sampling activities at the James Ranch Unit DI 1A (Site) in Unit F, Section 21, Township 22 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Deferral Request, describing site assessment and delineation activities that have occurred and requesting deferral of final remediation for Incident Number nAPP2114845563 until the Site is reconstructed, and/or the well pad is abandoned.

RELEASE BACKGROUND

On May 17, 2021, internal corrosion created a pinhole in a waterline, resulting in the release of approximately 31 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 31 bbls of the released produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO reported the release to the NMOCD via email on May 17, 2021 and submitted a Release Notification Form C-141 (Form C-141) on May 28, 2021. The release was assigned Incident Number nAPP2114845563.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground

surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-03015, located approximately 0.95 miles southeast of the Site. The groundwater well has a reported depth to groundwater of 262 feet bgs and a total depth of 1,316 feet bgs. Ground surface elevation at the groundwater well location is 3,286 feet amsl, which is approximately 119 feet higher in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 601 feet northeast 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 not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES

On June 15, 2021 and July 14, 2021, WSP personnel were at the Site to evaluate the release extent and conduct site assessment activities. WSP personnel advanced one borehole (BH01) via hand auger at the location of the tear in the liner identified during the liner integrity inspection. Four additional potholes (PH01 through PH04) were advanced via truck-mounted backhoe around the lined containment to confirm the lateral extent of the release was contained. Two delineation soil samples were collected from the borehole (BH01) and potholes (PH01 through PH04) at depths of 0.5 feet and 1 feet bgs. Soil from the borehole and potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the borehole and potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The potholes were backfilled with the soil removed and XTO repaired the tear in the liner. The delineation soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Attachment 3.

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

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil sample BH01, collected at 0.5 feet bgs directly below the tear in the liner, indicated that TPH and chloride concentrations exceeded the Closure Criteria. Subsequent sample BH01A, collected at 1-foot bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for the pothole delineation soil samples PH01/PH01A through PH04/PH04A, collected at depths of 0.5 feet and 1-foot bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 4.

DEFERRAL REQUEST

Following the failed liner integrity inspection, WSP personnel advanced one borehole (BH01) via hand auger at the location of the tear in the liner and four potholes (PH01 through PH04) around the lined tank battery containment. Delineation soil samples BH01 and BH01A were collected from beneath the lined containment to assess for the presence or absence of soil impacts as a result of the May 17, 2021 produced water release. Laboratory analytical results indicated that TPH and chloride concentrations exceeded the Closure Criteria in soil sample BH01, collected beneath the liner at a depth of 0.5 feet bgs. Subsequent sample BH01A, collected at 1-foot bgs, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Alternatively, WSP advanced four potholes (PH01 through PH04) to 1-foot bgs adjacent to the containment to investigate vertical extent of the release. Laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria in all delineation pothole soil samples PH01/PH01A through PH04/PH04A, collected at depths of 0.5 feet and 1 feet bgs.

Impacted soil in the area of borehole BH01 was left in place beneath the lined containment in which active operating equipment exists. An estimated 249 cubic yards of impacted soil remains in place beneath the lined tank battery containment, assuming a maximum 1-foot depth based on soil sample BH01A collected at a depth of 1-foot bgs that indicates benzene, BTEX, TPH, and chloride concentrations are compliant with the Closure Criteria. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on the site characterization indicating depth to groundwater is greater than 100 feet, WSP and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The lined containment was repaired by XTO and will restrict potential vertical migration of residual impacts. XTO requests deferral of final remediation for Incident Number nAPP2114845563 until final reclamation of the well pad or major construction, whichever comes first.

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

Sincerely,

WSP USA Inc.

Kaleb Henry
Assistant Consultant, Geologist

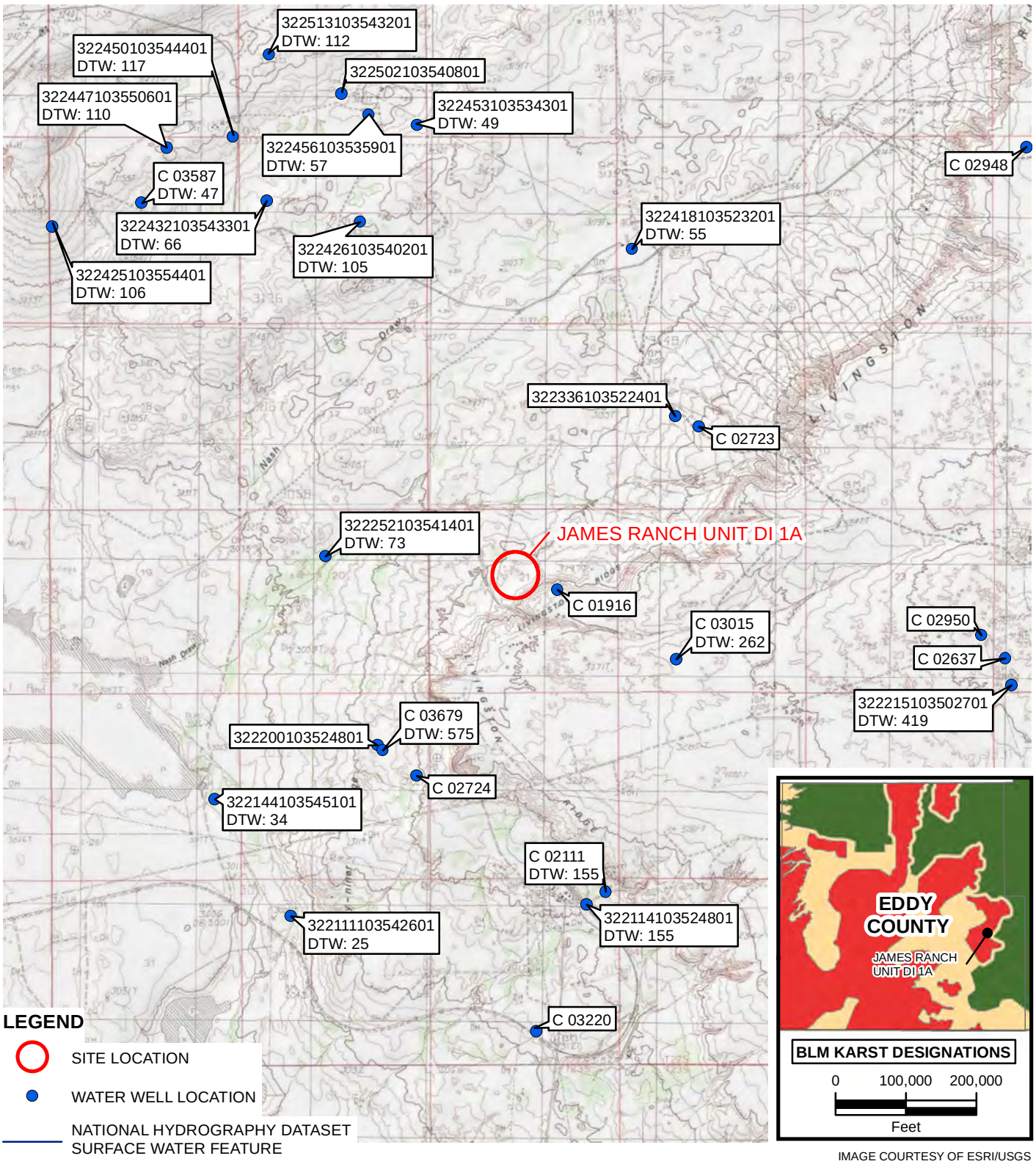
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES



LEGEND

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

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER nAPP2114845563

IMAGE COURTESY OF ESRI/USGS

0 4,000 8,000
Feet

N

FIGURE 1
SITE LOCATION MAP
JAMES RANCH UNIT DI 1A
UNIT F SEC 21 T22S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\31403236.010.0129_JAMES RANCH UNIT DI 1A\31403236.010.0129_FIG01_SL_RECEPTOR_2021.mxd

LEGEND

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS PREVIOUSLY EXCEEDING APPLICABLE CLOSURE CRITERIA
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS LINE
- WATER LINE
- INFRASTRUCTURE

NOTE: INCIDENT NUMBER nAPP2114845563
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
JAMES RANCH UNIT DI 1A
UNIT F SEC 21 T22S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\31403236.010.0129_JAMES RANCH UNIT DI 1A\31403236.010_FIG02_DELINEATION_2021_1.mxd

TABLES

Table 1

Soil Analytical Results
James Ranch Unit DI 1A
Incident Number nAPP2114845563
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Delineation Soil Samples										
BH01	06/15/2021	0.5	<0.00200	<0.00400	163	63.4	<50.0	226.4	**226**	**3,380**
BH01A	06/15/2021	1	<0.00200	<0.00399	<49.7	<49.7	<49.9	<49.7	<49.7	243
PH01	07/14/2021	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	257
PH01A	07/14/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	148
PH02	07/14/2021	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	370
PH02A	07/14/2021	1	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	182
PH03	07/14/2021	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	98.0
PH03A	07/14/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	223
PH04	07/14/2021	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	35.6
PH04A	07/14/2021	1	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	148

ATTACHMENT 1: REFERENCED WELL RECORD

New Mexico Office of the State Engineer
Water Right Summary

WR File Number: C 03015 **Subbasin:** CUB **Cross Reference:** -

Primary Purpose: MON MONITORING WELL

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: U.S. DEPT OF ENERGY - WIPP

Contact: HAROLD JOHNSON

Documents on File

Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
288525	EXPL	2003-11-25	PMT	LOG	C 03015 MONITORING WELL	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 03015		Artesian	1	4	3	22	22S	30E	606099	3582353*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	0		MON		GW	

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
	C 03015	1	4	3	22	22S	30E	606099	3582353*

Driller License:	331	**Driller Company:**	SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.		
Driller Name:					
Drill Start Date:	01/21/2004	**Drill Finish Date:**	01/25/2004	**Plug Date:**	
Log File Date:	03/04/2004	**PCW Rcv Date:**		**Source:**	Artesian
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.00	**Depth Well:**	1316 feet	**Depth Water:**	262 feet

Water Bearing Stratifications:	Top	Bottom	Description
	362	385	Other/Unknown

Casing Perforations:	Top	Bottom
	261	386

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

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- Full News

USGS 322252103541401 22S.30E.20.12310

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°22'52", Longitude 103°54'14" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 129 feet
Land surface altitude: 3,065 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1952-02-26	1959-02-19	2
Revisions	Unavailable (site:0) (timeseries:0)		

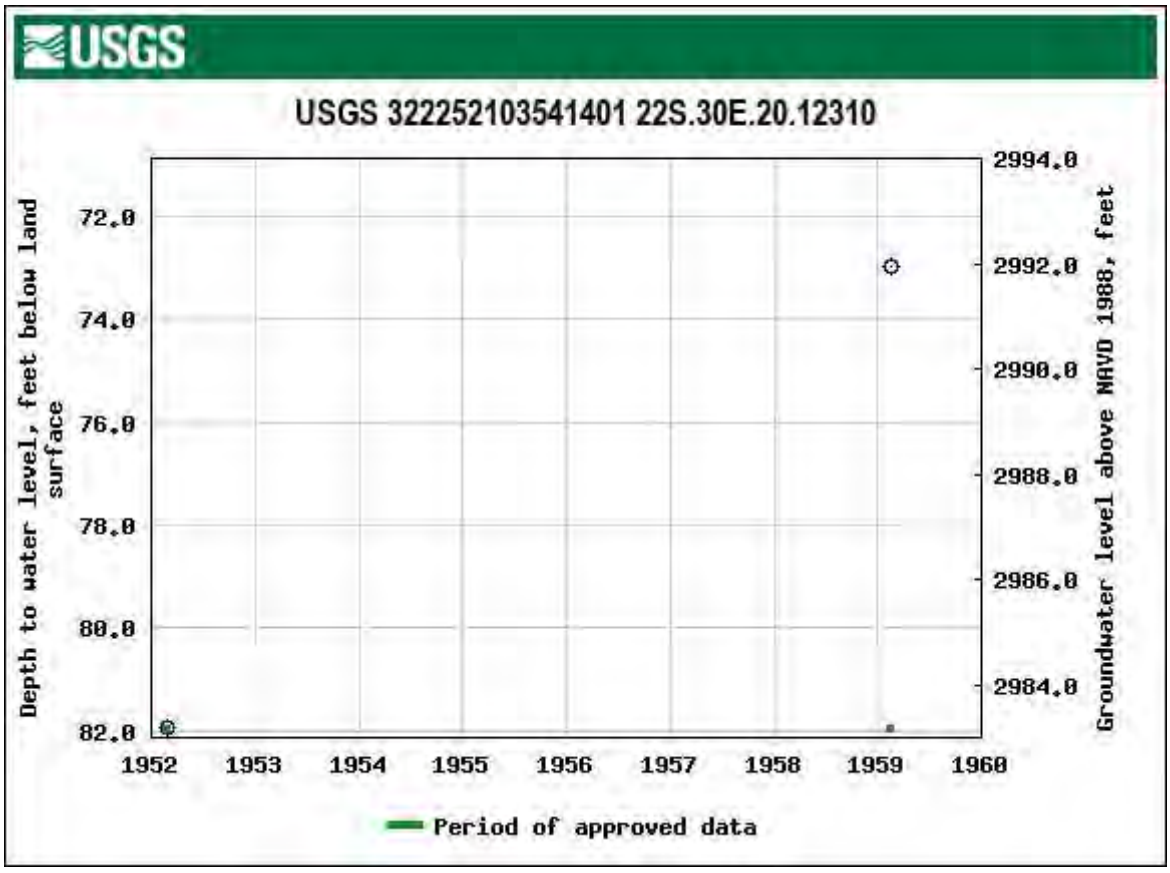
OPERATION:

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

---

Title: NWIS Site Information for USA: Site Inventory
URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=322252103541401

Page Contact Information: New Mexico Water Data Support Team
Page Last Modified: 2021-06-08 10:38:01 EDT
0.28 0.26 caww01


USGS
USGS 322252103541401 22S.30E.20.12310
Depth to water level, feet below land surface
72.0
74.0
76.0
78.0
80.0
82.0
Groundwater level above NAVD 1988, feet
2994.0
2992.0
2990.0
2988.0
2986.0
2984.0
1952
1953
1954
1955
1956
1957
1958
1959
1960
Period of approved data

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
BH01	6/5/2021

Site Name: James Ranch Unit DI 1A

RP or Incident Number: nAPP2114845563

LTE Job Number: 31403236.010.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: TC	Method: Hand Auger

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter: 3"	Total Depth: 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	23,912	10.6	N	BH01	0.5'	0	CCHE	CALICHE, dry, light tan-off white, no stain, no odor
dry	1,176	2.7	N	BH01A	1'	5		
								Total Depth: 1 foot bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH01	7/14/2021

Site Name: James Ranch Unit DI 1A

RP or Incident Number: nAPP2114845563

LTE Job Number: 31403236.010.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	226	0.3	N	PH01	0.5'	0	CCHE	CALICHE, dry, light tan-off white, no stain, no odor
dry	229	0.2	N	PH01A	1'	5		
								Total Depth: 1 foot bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH02	7/14/2021

Site Name: James Ranch Unit DI 1A

RP or Incident Number: nAPP2114845563

LTE Job Number: 31403236.010.0129

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	268	0.0	N	PH02	0.5'	0	CCHE	CALICHE, dry, light tan-off white, no stain, no odor
dry	268	0.0	N	PH02A	1'	5		
								Total Depth: 1 foot bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH03	7/14/2021
Site Name: James Ranch Unit DI 1A	
RP or Incident Number: nAPP2114845563	
LTE Job Number: 31403236.010.0129	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: FS / Method: Backhoe
Lat/Long:	Field Screening: Chloride, PID / Hole Diameter: / Total Depth: 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	<156	0.0	N	PH03	0.5'	0	CCHE	CALICHE, dry, light tan-off white, no stain, no odor
dry	313	0.0	N	PH03A	1'	5		Total Depth: 1 foot bgs

WSP USA

508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name:	Date:
PH04	7/14/2021
Site Name: James Ranch Unit DI 1A	
RP or Incident Number: nAPP2114845563	
LTE Job Number: 31403236.010.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS	Method: Backhoe

Lat/Long:	Field Screening: Chloride, PID	Hole Diameter:	Total Depth: 1'

Comments:

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
dry	<156	0.0	N	PH04	0.5'	0	CCHE	CALICHE, dry, light tan-off white, no stain, no odor
dry	229	0.0	N	PH04A	1'			
						5		
								Total Depth: 1 foot bgs

ATTACHMENT 3: PHOTOGRAPHIC LOG

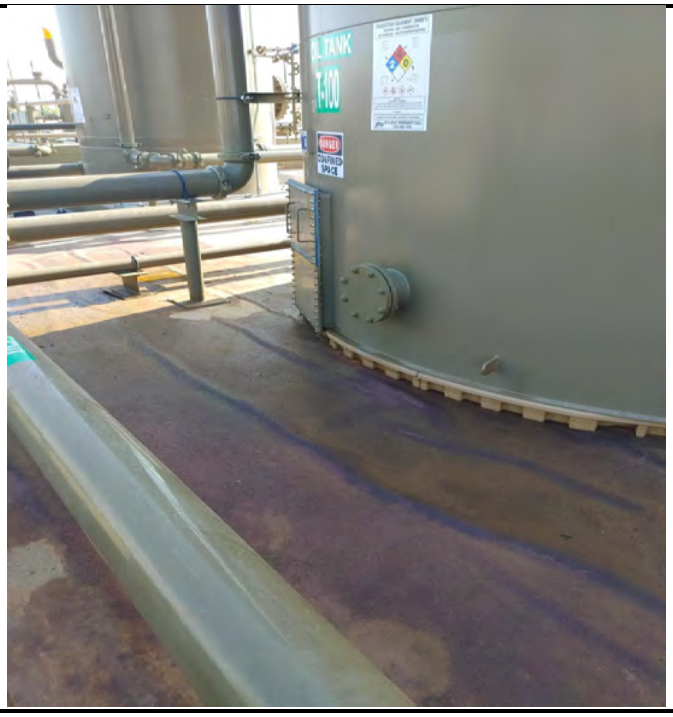
PHOTOGRAPHIC LOG		
XTO Energy, Inc.	James Ranch Unit DI 1A Eddy County, New Mexico	nAPP2114845563

Photo No.	Date
1	June 10, 2021

East facing view of release extent.

Photo No.	Date
2	June 10, 2021

Northeast facing view of release extent.



PHOTOGRAPHIC LOG		
XTO Energy, Inc.	James Ranch Unit DI 1A Eddy County, New Mexico	nAPP2114845563

Photo No.	Date
3	July 14, 2021

Southeast facing view of delineation activities.

Photo No.	Date
4	July 14, 2021

East facing view of delineation activities.

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-813-1
Client Project/Site: JRU 1A 1A CTB
Revision: 1

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
6/30/2021 3:17:37 PM

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

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

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

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Laboratory Job ID: 890-813-1

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 12
Lab Chronicle 14
Certification Summary 15
Method Summary 16
Sample Summary 17
Chain of Custody 18
Receipt Checklists 20

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Job ID: 890-813-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-813-1

REVISION

The report being provided is a revision of the original report sent on 6/21/2021. The report (revision 0) is being revised due to .

Receipt

The samples were received on 6/15/2021 4:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C

GC VOA

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: BH01A (890-813-2). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH01A (890-813-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Client Sample ID: BH01
Date Collected: 06/15/21 12:50
Date Received: 06/15/21 16:10
Sample Depth: - 0.5

Lab Sample ID: 890-813-1
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		06/17/21 11:00	06/17/21 13:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 13:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 13:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/17/21 11:00	06/17/21 13:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 13:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/17/21 11:00	06/17/21 13:50	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/17/21 11:00	06/17/21 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*06/17/21 11:00*	*06/17/21 13:50*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/17/21 11:00*	*06/17/21 13:50*	*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	**63.4**		50.0		mg/Kg		06/17/21 15:28	06/19/21 00:42	1
Diesel Range Organics (Over C10-C28)	**163**		50.0		mg/Kg		06/17/21 15:28	06/19/21 00:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/17/21 15:28	06/19/21 00:42	1
Total TPH	**226**		50.0		mg/Kg		06/17/21 15:28	06/19/21 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*06/17/21 15:28*	*06/19/21 00:42*	*1*
o-Terphenyl	*112*		*70 - 130*	*06/17/21 15:28*	*06/19/21 00:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3380**		25.3		mg/Kg			06/18/21 17:22	5

Client Sample ID: BH01A
Date Collected: 06/15/21 12:52
Date Received: 06/15/21 16:10
Sample Depth: - 1

Lab Sample ID: 890-813-2
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		06/17/21 11:00	06/17/21 14:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 14:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/17/21 11:00	06/17/21 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/17/21 11:00	06/17/21 14:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/17/21 11:00	06/17/21 14:10	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/17/21 11:00	06/17/21 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/17/21 11:00*	*06/17/21 14:10*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/17/21 11:00*	*06/17/21 14:10*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Client Sample ID: BH01A
Date Collected: 06/15/21 12:52
Date Received: 06/15/21 16:10
Sample Depth: - 1

Lab Sample ID: 890-813-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/28/21 14:59	06/29/21 15:45	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/28/21 14:59	06/29/21 15:45	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/28/21 14:59	06/29/21 15:45	1
Total TPH	<49.7	U	49.7		mg/Kg		06/28/21 14:59	06/29/21 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*06/28/21 14:59*	*06/29/21 15:45*	*1*
o-Terphenyl	*96*		*70 - 130*	*06/28/21 14:59*	*06/29/21 15:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**243**		4.99		mg/Kg			06/18/21 02:09	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

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)
890-813-1	BH01	115	101
890-813-2	BH01A	117	100
LCS 880-4197/1-A	Lab Control Sample	110	89
LCSD 880-4197/2-A	Lab Control Sample Dup	106	94
MB 880-4174/5-A	Method Blank	108	96
MB 880-4197/5-A	Method Blank	112	93

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-813-1	BH01	123	112
890-813-2	BH01A	94	96
LCS 880-4254/2-A	Lab Control Sample	102	106
LCS 880-4709/2-A	Lab Control Sample	100	97
LCSD 880-4254/3-A	Lab Control Sample Dup	100	104
LCSD 880-4709/3-A	Lab Control Sample Dup	100	96
MB 880-4254/1-A	Method Blank	108	107
MB 880-4709/1-A	Method Blank	93	100

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4174/5-A
Matrix: Solid
Analysis Batch: 4175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4174

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/16/21 10:54	06/16/21 14:16	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/16/21 10:54	06/16/21 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/16/21 10:54*	*06/16/21 14:16*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/16/21 10:54*	*06/16/21 14:16*	*1*

Lab Sample ID: MB 880-4197/5-A
Matrix: Solid
Analysis Batch: 4175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4197

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/16/21 13:58	06/17/21 02:17	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/16/21 13:58	06/17/21 02:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/16/21 13:58*	*06/17/21 02:17*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/16/21 13:58*	*06/17/21 02:17*	*1*

Lab Sample ID: LCS 880-4197/1-A
Matrix: Solid
Analysis Batch: 4175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4197

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07316		mg/Kg		73	70 - 130		
Toluene			0.100	0.1009		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.1068		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2224		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1129		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

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

Lab Sample ID: LCSD 880-4197/2-A
Matrix: Solid
Analysis Batch: 4175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4197

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08688		mg/Kg		87	70 - 130	17	35
Toluene			0.100	0.1011		mg/Kg		101	70 - 130	0	35
Ethylbenzene			0.100	0.1054		mg/Kg		105	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2159		mg/Kg		108	70 - 130	3	35
o-Xylene			0.100	0.1098		mg/Kg		110	70 - 130	3	35

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

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

Lab Sample ID: MB 880-4254/1-A
Matrix: Solid
Analysis Batch: 4283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4254

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/17/21 15:28	06/18/21 21:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/17/21 15:28	06/18/21 21:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/17/21 15:28	06/18/21 21:06	1
Total TPH	<50.0	U	50.0		mg/Kg		06/17/21 15:28	06/18/21 21:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*06/17/21 15:28*	*06/18/21 21:06*	*1*
o-Terphenyl	*107*		*70 - 130*	*06/17/21 15:28*	*06/18/21 21:06*	*1*

Lab Sample ID: LCS 880-4254/2-A
Matrix: Solid
Analysis Batch: 4283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4254

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	948.6		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1068		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: LCSD 880-4254/3-A
Matrix: Solid
Analysis Batch: 4283

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4254

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	901.2		mg/Kg		90	70 - 130	5	20

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

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

Lab Sample ID: LCSD 880-4254/3-A
Matrix: Solid
Analysis Batch: 4283

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4254

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	1048		mg/Kg		105	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

Lab Sample ID: MB 880-4709/1-A
Matrix: Solid
Analysis Batch: 4725

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4709

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/21 14:59	06/29/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/28/21 14:59	06/29/21 12:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/21 14:59	06/29/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/28/21 14:59	06/29/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*06/28/21 14:59*	*06/29/21 12:16*	*1*
o-Terphenyl	*100*		*70 - 130*	*06/28/21 14:59*	*06/29/21 12:16*	*1*

Lab Sample ID: LCS 880-4709/2-A
Matrix: Solid
Analysis Batch: 4725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4709

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	949.3		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	933.8		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4709/3-A
Matrix: Solid
Analysis Batch: 4725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4709

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	935.9		mg/Kg		94	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	919.2		mg/Kg		92	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

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

Lab Sample ID: LCSD 880-4709/3-A
Matrix: Solid
Analysis Batch: 4725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4709

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*96*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4243/1-A
Matrix: Solid
Analysis Batch: 4273

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/18/21 01:05	1

Lab Sample ID: LCS 880-4243/2-A
Matrix: Solid
Analysis Batch: 4273

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.7		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-4243/3-A
Matrix: Solid
Analysis Batch: 4273

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	231.7		mg/Kg		93	90 - 110	0	20

Lab Sample ID: MB 880-4185/1-A
Matrix: Solid
Analysis Batch: 4300

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/18/21 14:01	1

Lab Sample ID: LCS 880-4185/2-A
Matrix: Solid
Analysis Batch: 4300

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	231.1		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-4185/3-A
Matrix: Solid
Analysis Batch: 4300

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	231.3		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

GC VOA

Prep Batch: 4174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4174/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 4175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Total/NA	Solid	8021B	4197
890-813-2	BH01A	Total/NA	Solid	8021B	4197
MB 880-4174/5-A	Method Blank	Total/NA	Solid	8021B	4174
MB 880-4197/5-A	Method Blank	Total/NA	Solid	8021B	4197
LCS 880-4197/1-A	Lab Control Sample	Total/NA	Solid	8021B	4197
LCSD 880-4197/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4197

Prep Batch: 4197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Total/NA	Solid	5035	
890-813-2	BH01A	Total/NA	Solid	5035	
MB 880-4197/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4197/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4197/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 4254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Total/NA	Solid	8015NM Prep	
MB 880-4254/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4254/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4254/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Total/NA	Solid	8015B NM	4254
MB 880-4254/1-A	Method Blank	Total/NA	Solid	8015B NM	4254
LCS 880-4254/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4254
LCSD 880-4254/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4254

Prep Batch: 4709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-2	BH01A	Total/NA	Solid	8015NM Prep	
MB 880-4709/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4709/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4709/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 4725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-2	BH01A	Total/NA	Solid	8015B NM	4709
MB 880-4709/1-A	Method Blank	Total/NA	Solid	8015B NM	4709
LCS 880-4709/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4709
LCSD 880-4709/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4709

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

HPLC/IC

Leach Batch: 4185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Soluble	Solid	DI Leach	
MB 880-4185/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4185/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4185/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 4243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-2	BH01A	Soluble	Solid	DI Leach	
MB 880-4243/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4243/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4243/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-2	BH01A	Soluble	Solid	300.0	4243
MB 880-4243/1-A	Method Blank	Soluble	Solid	300.0	4243
LCS 880-4243/2-A	Lab Control Sample	Soluble	Solid	300.0	4243
LCSD 880-4243/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4243

Analysis Batch: 4300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-813-1	BH01	Soluble	Solid	300.0	4185
MB 880-4185/1-A	Method Blank	Soluble	Solid	300.0	4185
LCS 880-4185/2-A	Lab Control Sample	Soluble	Solid	300.0	4185
LCSD 880-4185/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4185

Lab Chronicle

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Client Sample ID: BH01

Date Collected: 06/15/21 12:50
Date Received: 06/15/21 16:10

Lab Sample ID: 890-813-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4197	06/17/21 11:00	MR	XEN MID
Total/NA	Analysis	8021B		1	4175	06/17/21 13:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			4254	06/17/21 15:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4283	06/19/21 00:42	AJ	XEN MID
Soluble	Leach	DI Leach			4185	06/16/21 12:10	CH	XEN MID
Soluble	Analysis	300.0		5	4300	06/18/21 17:22	CH	XEN MID

Client Sample ID: BH01A

Date Collected: 06/15/21 12:52
Date Received: 06/15/21 16:10

Lab Sample ID: 890-813-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4197	06/17/21 11:00	MR	XEN MID
Total/NA	Analysis	8021B		1	4175	06/17/21 14:10	MR	XEN MID
Total/NA	Prep	8015NM Prep			4709	06/28/21 14:59	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4725	06/29/21 15:45	AM	XEN MID
Soluble	Leach	DI Leach			4243	06/17/21 13:12	CH	XEN MID
Soluble	Analysis	300.0		1	4273	06/18/21 02:09	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: JRU 1A 1A CTB

Job ID: 890-813-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-813-1	BH01	Solid	06/15/21 12:50	06/15/21 16:10	- 0.5
890-813-2	BH01A	Solid	06/15/21 12:52	06/15/21 16:10	- 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)

www.xenco.com Page 1 of 1

Work Order No: _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A St. Bldg 1, Unit 222	Address:	3104 E Greene St.
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM
Phone:	(432) 704-5178 Email:		travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@w

Work Order Comments

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

Project Name:	JRU IA 1A CTB	Turn Around	
Project Number:	31403236.010.0129	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Temperature (°C):	4.8/4.6	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Total Containers:		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
BH01	s	6/15/2021	1250	0.5'	1	✓	✓	✓	composite
BH01A	s	6/15/2021	1252	1'	1	✓	✓	✓	composite

890-813 Chain of Custody

Work Order Notes

IN: nAPP2114845563
CC:1082151001

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6/15/21 16:10	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018 1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-264 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-813-1
Address: 1211 W Florida Ave	Due Date Requested: 6/21/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: JRU 1A 1A CTB	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:								
BH01 (890-813-1)	6/15/21	12 50 Mountain		Solid			X	X	X	1	
BH01A (890-813-2)	6/15/21	12 52 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Alex Cuffe 6.16.21				6-17-21 12:30 AM	
2						
3						

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-813-1
SDG Number:

Login Number: 813
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-813-1
SDG Number:

Login Number: 813
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/17/21 12:07 PM

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-942-1
Laboratory Sample Delivery Group: 31403236.010.0129
Client Project/Site: JRU DI 1A

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
7/20/2021 10:44:33 AM

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

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

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Laboratory Job ID: 890-942-1
SDG: 31403236.010.0129

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 18

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-942-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Job ID: 890-942-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-942-1

Receipt
The samples were received on 7/14/2021 4:16 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH01 (890-942-1) and PH01A (890-942-2).

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Client Sample ID: PH01

Lab Sample ID: 890-942-1
Matrix: Solid
Date Collected: 07/14/21 09:10
Date Received: 07/14/21 16:16
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		07/18/21 11:54	07/18/21 16:57	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		07/18/21 11:54	07/18/21 16:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/18/21 11:54	07/18/21 16:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/21 11:54	07/18/21 16:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/18/21 11:54	07/18/21 16:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/21 11:54	07/18/21 16:57	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/18/21 11:54	07/18/21 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:57*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/16/21 09:19	07/19/21 20:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/16/21 09:19	07/19/21 20:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/16/21 09:19	07/19/21 20:49	1
Total TPH	<49.9	U	49.9		mg/Kg		07/16/21 09:19	07/19/21 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*07/16/21 09:19*	*07/19/21 20:49*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/16/21 09:19*	*07/19/21 20:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**257**		4.97		mg/Kg			07/17/21 16:28	1

Client Sample ID: PH01A

Lab Sample ID: 890-942-2
Matrix: Solid
Date Collected: 07/14/21 09:12
Date Received: 07/14/21 16:16
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/18/21 11:54	07/18/21 17:18	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/18/21 11:54	07/18/21 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*07/18/21 11:54*	*07/18/21 17:18*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/18/21 11:54*	*07/18/21 17:18*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Client Sample ID: PH01A

Date Collected: 07/14/21 09:12
Date Received: 07/14/21 16:16
Sample Depth: - 1

Lab Sample ID: 890-942-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 21:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 21:10	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/16/21 09:19*	*07/19/21 21:10*	*1*
o-Terphenyl	*96*		*70 - 130*	*07/16/21 09:19*	*07/19/21 21:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**148**		4.97		mg/Kg			07/19/21 10:15	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-942-1	PH01	104	101
890-942-1 MS	PH01	103	99
890-942-1 MSD	PH01	102	99
890-942-2	PH01A	111	103
LCS 880-5334/1-A	Lab Control Sample	93	99
LCSD 880-5334/2-A	Lab Control Sample Dup	100	93
MB 880-5334/5-A	Method Blank	107	95

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)
890-942-1	PH01	93	102
890-942-2	PH01A	91	96
LCS 880-5269/2-A	Lab Control Sample	104	98
LCSD 880-5269/3-A	Lab Control Sample Dup	106	106
MB 880-5269/1-A	Method Blank	89	98

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5334/5-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5334

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:28*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:28*	*1*

Lab Sample ID: LCS 880-5334/1-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5334

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09839		mg/Kg		98	70 - 130		
Toluene			0.100	0.08993		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.09503		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1881		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.08933		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-5334/2-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5334

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09123		mg/Kg		91	70 - 130	8	35
Toluene			0.100	0.09965		mg/Kg		100	70 - 130	10	35
Ethylbenzene			0.100	0.1061		mg/Kg		106	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2136		mg/Kg		107	70 - 130	13	35
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 890-942-1 MS
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 5334

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00199	U	0.100	0.07608		mg/Kg		76	70 - 130		

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

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

Lab Sample ID: 890-942-1 MS
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 5334

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00199	U F1	0.100	0.07025		mg/Kg		70	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.07219		mg/Kg		72	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1466		mg/Kg		73	70 - 130
o-Xylene	<0.00199	U	0.100	0.07264		mg/Kg		72	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-942-1 MSD
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 5334

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07360		mg/Kg		73	70 - 130	3	35
Toluene	<0.00199	U F1	0.100	0.06839	F1	mg/Kg		68	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.100	0.07052		mg/Kg		70	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1432		mg/Kg		71	70 - 130	2	35
o-Xylene	<0.00199	U	0.100	0.07083		mg/Kg		71	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 880-5269/1-A
Matrix: Solid
Analysis Batch: 5354

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5269

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		07/16/21 09:19	07/19/21 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 12:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 12:31	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 09:19	07/19/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*07/16/21 09:19*	*07/19/21 12:31*	*1*
o-Terphenyl	*98*		*70 - 130*	*07/16/21 09:19*	*07/19/21 12:31*	*1*

Lab Sample ID: LCS 880-5269/2-A
Matrix: Solid
Analysis Batch: 5354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5269

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10			1000	902.1		mg/Kg		90	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

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

Lab Sample ID: LCS 880-5269/2-A
Matrix: Solid
Analysis Batch: 5354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5269

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	943.3		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-5269/3-A
Matrix: Solid
Analysis Batch: 5354

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5269

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	924.3		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	992.6		mg/Kg		99	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5281/1-A
Matrix: Solid
Analysis Batch: 5330

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			07/17/21 13:49	1

Lab Sample ID: LCS 880-5281/2-A
Matrix: Solid
Analysis Batch: 5330

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	246.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-5281/3-A
Matrix: Solid
Analysis Batch: 5330

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	246.1		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

GC VOA

Prep Batch: 5334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Total/NA	Solid	5035	
890-942-2	PH01A	Total/NA	Solid	5035	
MB 880-5334/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5334/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5334/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-942-1 MS	PH01	Total/NA	Solid	5035	
890-942-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 5337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Total/NA	Solid	8021B	5334
890-942-2	PH01A	Total/NA	Solid	8021B	5334
MB 880-5334/5-A	Method Blank	Total/NA	Solid	8021B	5334
LCS 880-5334/1-A	Lab Control Sample	Total/NA	Solid	8021B	5334
LCSD 880-5334/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5334
890-942-1 MS	PH01	Total/NA	Solid	8021B	5334
890-942-1 MSD	PH01	Total/NA	Solid	8021B	5334

GC Semi VOA

Prep Batch: 5269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Total/NA	Solid	8015NM Prep	
890-942-2	PH01A	Total/NA	Solid	8015NM Prep	
MB 880-5269/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5269/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5269/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Total/NA	Solid	8015B NM	5269
890-942-2	PH01A	Total/NA	Solid	8015B NM	5269
MB 880-5269/1-A	Method Blank	Total/NA	Solid	8015B NM	5269
LCS 880-5269/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5269
LCSD 880-5269/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5269

HPLC/IC

Leach Batch: 5281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Soluble	Solid	DI Leach	
890-942-2	PH01A	Soluble	Solid	DI Leach	
MB 880-5281/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5281/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5281/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-942-1	PH01	Soluble	Solid	300.0	5281
890-942-2	PH01A	Soluble	Solid	300.0	5281
MB 880-5281/1-A	Method Blank	Soluble	Solid	300.0	5281
LCS 880-5281/2-A	Lab Control Sample	Soluble	Solid	300.0	5281

QC Association Summary

Client: WSP USA Inc. Job ID: 890-942-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

HPLC/IC (Continued)

Analysis Batch: 5330 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-5281/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5281

Lab Chronicle

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Client Sample ID: PH01

Date Collected: 07/14/21 09:10
Date Received: 07/14/21 16:16

Lab Sample ID: 890-942-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5334	07/18/21 11:54	KL	XEN MID
Total/NA	Analysis	8021B		1	5337	07/18/21 16:57	KL	XEN MID
Total/NA	Prep	8015NM Prep			5269	07/16/21 09:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5354	07/19/21 20:49	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/17/21 16:28	CH	XEN MID

Client Sample ID: PH01A

Date Collected: 07/14/21 09:12
Date Received: 07/14/21 16:16

Lab Sample ID: 890-942-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5334	07/18/21 11:54	KL	XEN MID
Total/NA	Analysis	8021B		1	5337	07/18/21 17:18	KL	XEN MID
Total/NA	Prep	8015NM Prep			5269	07/16/21 09:19	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5354	07/19/21 21:10	AJ	XEN MID
Soluble	Leach	DI Leach			5281	07/16/21 12:08	CH	XEN MID
Soluble	Analysis	300.0		1	5330	07/19/21 10:15	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-942-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-942-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-942-1
SDG: 31403236.010.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-942-1	PH01	Solid	07/14/21 09:10	07/14/21 16:16	- 0.5
890-942-2	PH01A	Solid	07/14/21 09:12	07/14/21 16:16	- 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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(817) 683-2503	Email:	kalei.jennings@wsp.com

Work Order Comments

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

Project Name:	JRU DI 1A	Turn Around	
Project Number:	31403236.010.0129	Routine:	☑
Location:	Eddy County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.4 / 1.4	Thermometer ID	
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

Work Order Notes

Incident nAPP2114845563
CC: 1082151001
API 30-015-43236

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
PH01	S	7/14/2021	0910	0.5'	1			
PH01A	S	7/14/2021	0912	1'	1			

ANALYSIS REQUEST

890-942 Chain of Custody

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			7-14-21 1611	2		
3				4		
5				6		

Revised Date101419 Rev. 2019.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-942-1
SDG Number: 31403236.010.0129

Login Number: 942
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-942-1
SDG Number: 31403236.010.0129

Login Number: 942
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/16/21 11:38 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 Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-943-1
Laboratory Sample Delivery Group: 31403236.010.0129
Client Project/Site: JRU DI 1A

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
7/20/2021 10:46:02 AM

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

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

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

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Laboratory Job ID: 890-943-1
SDG: 31403236.010.0129

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 12
Lab Chronicle 14
Certification Summary 15
Method Summary 16
Sample Summary 17
Chain of Custody 18
Receipt Checklists 19

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-943-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Job ID: 890-943-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-943-1

Receipt
The samples were received on 7/14/2021 4:16 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH02 (890-943-1) and PH02A (890-943-2).

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-5277 and analytical batch 880-5356 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Client Sample ID: PH02

Lab Sample ID: 890-943-1
Matrix: Solid
Date Collected: 07/14/21 10:02
Date Received: 07/14/21 16:16
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		07/18/21 11:54	07/18/21 21:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 21:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 21:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/18/21 11:54	07/18/21 21:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 21:51	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/18/21 11:54	07/18/21 21:51	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		07/18/21 11:54	07/18/21 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/18/21 11:54*	*07/18/21 21:51*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/18/21 11:54*	*07/18/21 21:51*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0		mg/Kg		07/16/21 11:53	07/19/21 13:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 13:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 13:33	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*07/16/21 11:53*	*07/19/21 13:33*	*1*
o-Terphenyl	*91*		*70 - 130*	*07/16/21 11:53*	*07/19/21 13:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**370**		4.98		mg/Kg			07/18/21 16:18	1

Client Sample ID: PH02A

Lab Sample ID: 890-943-2
Matrix: Solid
Date Collected: 07/14/21 10:04
Date Received: 07/14/21 16:16
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/18/21 11:54	07/18/21 22:11	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		07/18/21 11:54	07/18/21 22:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/18/21 11:54*	*07/18/21 22:11*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/18/21 11:54*	*07/18/21 22:11*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Client Sample ID: PH02A

Date Collected: 07/14/21 10:04
Date Received: 07/14/21 16:16
Sample Depth: - 1

Lab Sample ID: 890-943-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8		mg/Kg		07/16/21 11:53	07/19/21 14:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 14:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 14:35	1
Total TPH	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*07/16/21 11:53*	*07/19/21 14:35*	*1*
o-Terphenyl	*104*		*70 - 130*	*07/16/21 11:53*	*07/19/21 14:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	182		25.2		mg/Kg			07/18/21 16:35	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-943-1	PH02	107	99
890-943-2	PH02A	112	100
LCS 880-5334/1-A	Lab Control Sample	93	99
LCSD 880-5334/2-A	Lab Control Sample Dup	100	93
MB 880-5334/5-A	Method Blank	107	95

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)
890-943-1	PH02	83	91
890-943-1 MS	PH02	86	84
890-943-1 MSD	PH02	86	84
890-943-2	PH02A	96	104
LCS 880-5277/2-A	Lab Control Sample	84	82
LCSD 880-5277/3-A	Lab Control Sample Dup	88	88
MB 880-5277/1-A	Method Blank	87	95

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5334/5-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5334

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/18/21 11:54	07/18/21 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:28*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*07/18/21 11:54*	*07/18/21 16:28*	*1*

Lab Sample ID: LCS 880-5334/1-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5334

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09839		mg/Kg		98	70 - 130		
Toluene			0.100	0.08993		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.09503		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1881		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.08933		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-5334/2-A
Matrix: Solid
Analysis Batch: 5337

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5334

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09123		mg/Kg		91	70 - 130	8	35
Toluene			0.100	0.09965		mg/Kg		100	70 - 130	10	35
Ethylbenzene			0.100	0.1061		mg/Kg		106	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2136		mg/Kg		107	70 - 130	13	35
o-Xylene			0.100	0.1007		mg/Kg		101	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

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

Lab Sample ID: MB 880-5277/1-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5277

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		07/16/21 11:53	07/19/21 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*

Lab Sample ID: LCS 880-5277/2-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	681.7	*-	mg/Kg		68	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	801.6		mg/Kg		80	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: LCSD 880-5277/3-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	681.5	*-	mg/Kg		68	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	862.5		mg/Kg		86	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-943-1 MS
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: PH02
Prep Type: Total/NA
Prep Batch: 5277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	996	830.4		mg/Kg		83	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	996	905.6		mg/Kg		91	70 - 130		

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

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

Lab Sample ID: 890-943-1 MS
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: PH02
Prep Type: Total/NA
Prep Batch: 5277

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 890-943-1 MSD
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: PH02
Prep Type: Total/NA
Prep Batch: 5277

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	996	726.4		mg/Kg		73	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	922.0		mg/Kg		93	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	84		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5297/1-A
Matrix: Solid
Analysis Batch: 5344

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			07/18/21 16:02	1

Lab Sample ID: LCS 880-5297/2-A
Matrix: Solid
Analysis Batch: 5344

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	244.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-5297/3-A
Matrix: Solid
Analysis Batch: 5344

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	245.0		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-943-1 MS
Matrix: Solid
Analysis Batch: 5344

Client Sample ID: PH02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	370		249	603.9		mg/Kg		94	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-943-1 MSD
Matrix: Solid
Analysis Batch: 5344

Client Sample ID: PH02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	370		249	603.5		mg/Kg		94	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

GC VOA

Prep Batch: 5334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Total/NA	Solid	5035	
890-943-2	PH02A	Total/NA	Solid	5035	
MB 880-5334/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5334/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5334/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Total/NA	Solid	8021B	5334
890-943-2	PH02A	Total/NA	Solid	8021B	5334
MB 880-5334/5-A	Method Blank	Total/NA	Solid	8021B	5334
LCS 880-5334/1-A	Lab Control Sample	Total/NA	Solid	8021B	5334
LCSD 880-5334/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5334

GC Semi VOA

Prep Batch: 5277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Total/NA	Solid	8015NM Prep	
890-943-2	PH02A	Total/NA	Solid	8015NM Prep	
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-943-1 MS	PH02	Total/NA	Solid	8015NM Prep	
890-943-1 MSD	PH02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Total/NA	Solid	8015B NM	5277
890-943-2	PH02A	Total/NA	Solid	8015B NM	5277
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015B NM	5277
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5277
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5277
890-943-1 MS	PH02	Total/NA	Solid	8015B NM	5277
890-943-1 MSD	PH02	Total/NA	Solid	8015B NM	5277

HPLC/IC

Leach Batch: 5297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Soluble	Solid	DI Leach	
890-943-2	PH02A	Soluble	Solid	DI Leach	
MB 880-5297/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-943-1 MS	PH02	Soluble	Solid	DI Leach	
890-943-1 MSD	PH02	Soluble	Solid	DI Leach	

Analysis Batch: 5344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-943-1	PH02	Soluble	Solid	300.0	5297
890-943-2	PH02A	Soluble	Solid	300.0	5297

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

HPLC/IC (Continued)

Analysis Batch: 5344 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-5297/1-A	Method Blank	Soluble	Solid	300.0	5297
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	300.0	5297
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5297
890-943-1 MS	PH02	Soluble	Solid	300.0	5297
890-943-1 MSD	PH02	Soluble	Solid	300.0	5297

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-943-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Client Sample ID: PH02 Lab Sample ID: 890-943-1

Date Collected: 07/14/21 10:02 **Matrix: Solid**
Date Received: 07/14/21 16:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5334	07/18/21 11:54	KL	XEN MID
Total/NA	Analysis	8021B		1	5337	07/18/21 21:51	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 13:33	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		1	5344	07/18/21 16:18	CH	XEN MID

Client Sample ID: PH02A Lab Sample ID: 890-943-2

Date Collected: 07/14/21 10:04 **Matrix: Solid**
Date Received: 07/14/21 16:16

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5334	07/18/21 11:54	KL	XEN MID
Total/NA	Analysis	8021B		1	5337	07/18/21 22:11	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 14:35	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		5	5344	07/18/21 16:35	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-943-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-943-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-943-1
SDG: 31403236.010.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-943-1	PH02	Solid	07/14/21 10:02	07/14/21 16:16	- 0.5
890-943-2	PH02A	Solid	07/14/21 10:04	07/14/21 16:16	- 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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(817) 683-2503	Email:	kalei.jennings@wsp.com

Work Order Comments

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

Project Name:	JRU DI 1A	Turn Around	
Project Number:	31403236.010.0129	Routine:	☑
Location:	Eddy County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.6/1.4	Thermometer ID	TM1007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

Work Order Notes

Incident: nAPP2114845563
CC: 1082151001
API: 30-015-43236

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
PH02	S	7/14/2021	1002	0.5'	1	X	X	X	
PH02A	S	7/14/2021	1004	1'	1	X	X	X	

890-943 Chain of Custody

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			7.14.21 1616	2		
3				4		
5				6		

Revised Date101419 Rev. 2019.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-943-1
SDG Number: 31403236.010.0129

Login Number: 943
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-943-1
SDG Number: 31403236.010.0129

Login Number: 943
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/16/21 11:38 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 Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-944-1
Laboratory Sample Delivery Group: 31403236.010.0129
Client Project/Site: JRU DI 1A

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
7/20/2021 10:50:40 AM

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

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

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

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Laboratory Job ID: 890-944-1
SDG: 31403236.010.0129

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 13
Certification Summary 14
Method Summary 15
Sample Summary 16
Chain of Custody 17
Receipt Checklists 18

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-944-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Job ID: 890-944-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-944-1

Receipt
The samples were received on 7/14/2021 4:16 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-5277 and analytical batch 880-5356 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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

Client Sample Results

Client: WSP USA Inc. Job ID: 890-944-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Client Sample ID: PH03 — Lab Sample ID: 890-944-1

Date Collected: 07/14/21 09:28 **Matrix: Solid**
Date Received: 07/14/21 16:16
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		07/18/21 11:45	07/18/21 16:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:43	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:43	1
m-Xylene & p-Xylene	<0.00399	U F1	0.00399		mg/Kg		07/18/21 11:45	07/18/21 16:43	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:43	1
Xylenes, Total	<0.00399	U F1	0.00399		mg/Kg		07/18/21 11:45	07/18/21 16:43	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		07/18/21 11:45	07/18/21 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:43*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:43*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0		mg/Kg		07/16/21 11:53	07/19/21 14:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 14:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 14:56	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/16/21 11:53*	*07/19/21 14:56*	*1*
o-Terphenyl	*106*		*70 - 130*	*07/16/21 11:53*	*07/19/21 14:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98.0**		4.96		mg/Kg			07/18/21 16:40	1

Client Sample ID: PH03A — Lab Sample ID: 890-944-2

Date Collected: 07/14/21 09:32 **Matrix: Solid**
Date Received: 07/14/21 16:16
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/18/21 11:45	07/18/21 17:03	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		07/18/21 11:45	07/18/21 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/18/21 11:45*	*07/18/21 17:03*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/18/21 11:45*	*07/18/21 17:03*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Client Sample ID: PH03A

Date Collected: 07/14/21 09:32
Date Received: 07/14/21 16:16
Sample Depth: - 1

Lab Sample ID: 890-944-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0		mg/Kg		07/16/21 11:53	07/19/21 15:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 15:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 15:17	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:17*	*1*
o-Terphenyl	*100*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**223**		24.8		mg/Kg			07/18/21 16:46	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-944-1	PH03	112	100
890-944-1 MS	PH03	97	108
890-944-1 MSD	PH03	107	110
890-944-2	PH03A	105	107
LCS 880-5301/1-A	Lab Control Sample	105	106
LCSD 880-5301/2-A	Lab Control Sample Dup	105	107
MB 880-5301/5-A	Method Blank	103	99

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)
890-944-1	PH03	97	106
890-944-2	PH03A	94	100
LCS 880-5277/2-A	Lab Control Sample	84	82
LCSD 880-5277/3-A	Lab Control Sample Dup	88	88
MB 880-5277/1-A	Method Blank	87	95

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5301/5-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5301

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:21*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:21*	*1*

Lab Sample ID: LCS 880-5301/1-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1032		mg/Kg		103	70 - 130		
Toluene			0.100	0.09323		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.08978		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			0.200	0.1837		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09097		mg/Kg		91	70 - 130		

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

Lab Sample ID: LCSD 880-5301/2-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5301

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09710		mg/Kg		97	70 - 130	6	35
Toluene			0.100	0.08804		mg/Kg		88	70 - 130	6	35
Ethylbenzene			0.100	0.08578		mg/Kg		86	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1750		mg/Kg		87	70 - 130	5	35
o-Xylene			0.100	0.08638		mg/Kg		86	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-944-1 MS
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 5301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.0992	0.09117		mg/Kg		92	70 - 130		

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QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

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

Lab Sample ID: 890-944-1 MS
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 5301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.0992	0.07579		mg/Kg		76	70 - 130
Ethylbenzene	<0.00200	U F1	0.0992	0.06708	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.198	0.1350	F1	mg/Kg		68	70 - 130
o-Xylene	<0.00200	U F1	0.0992	0.06789	F1	mg/Kg		68	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-944-1 MSD
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: PH03
Prep Type: Total/NA
Prep Batch: 5301

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.101	0.1023		mg/Kg		102	70 - 130	12	35
Toluene	<0.00200	U	0.101	0.08640		mg/Kg		86	70 - 130	13	35
Ethylbenzene	<0.00200	U F1	0.101	0.07661		mg/Kg		76	70 - 130	13	35
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1562		mg/Kg		77	70 - 130	15	35
o-Xylene	<0.00200	U F1	0.101	0.07849		mg/Kg		78	70 - 130	14	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

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

Lab Sample ID: MB 880-5277/1-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5277

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		07/16/21 11:53	07/19/21 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/16/21 11:53	07/19/21 12:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/16/21 11:53	07/19/21 12:31	1
Total TPH	<50.0	U	50.0	mg/Kg		07/16/21 11:53	07/19/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*

Lab Sample ID: LCS 880-5277/2-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	681.7	*-	mg/Kg		68	70 - 130

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

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

Lab Sample ID: LCS 880-5277/2-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	801.6		mg/Kg		80	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: LCSD 880-5277/3-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	681.5	*-	mg/Kg		68	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	862.5		mg/Kg		86	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5297/1-A
Matrix: Solid
Analysis Batch: 5344

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			07/18/21 16:02	1

Lab Sample ID: LCS 880-5297/2-A
Matrix: Solid
Analysis Batch: 5344

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	244.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-5297/3-A
Matrix: Solid
Analysis Batch: 5344

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	245.0		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

GC VOA

Prep Batch: 5301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Total/NA	Solid	5035	
890-944-2	PH03A	Total/NA	Solid	5035	
MB 880-5301/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5301/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5301/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-944-1 MS	PH03	Total/NA	Solid	5035	
890-944-1 MSD	PH03	Total/NA	Solid	5035	

Analysis Batch: 5339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Total/NA	Solid	8021B	5301
890-944-2	PH03A	Total/NA	Solid	8021B	5301
MB 880-5301/5-A	Method Blank	Total/NA	Solid	8021B	5301
LCS 880-5301/1-A	Lab Control Sample	Total/NA	Solid	8021B	5301
LCSD 880-5301/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5301
890-944-1 MS	PH03	Total/NA	Solid	8021B	5301
890-944-1 MSD	PH03	Total/NA	Solid	8021B	5301

GC Semi VOA

Prep Batch: 5277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Total/NA	Solid	8015NM Prep	
890-944-2	PH03A	Total/NA	Solid	8015NM Prep	
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Total/NA	Solid	8015B NM	5277
890-944-2	PH03A	Total/NA	Solid	8015B NM	5277
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015B NM	5277
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5277
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5277

HPLC/IC

Leach Batch: 5297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Soluble	Solid	DI Leach	
890-944-2	PH03A	Soluble	Solid	DI Leach	
MB 880-5297/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-944-1	PH03	Soluble	Solid	300.0	5297
890-944-2	PH03A	Soluble	Solid	300.0	5297
MB 880-5297/1-A	Method Blank	Soluble	Solid	300.0	5297
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	300.0	5297

QC Association Summary

Client: WSP USA Inc. Job ID: 890-944-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

HPLC/IC (Continued)

Analysis Batch: 5344 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5297

Lab Chronicle

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Client Sample ID: PH03

Date Collected: 07/14/21 09:28
Date Received: 07/14/21 16:16

Lab Sample ID: 890-944-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5301	07/18/21 11:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5339	07/18/21 16:43	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 14:56	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		1	5344	07/18/21 16:40	CH	XEN MID

Client Sample ID: PH03A

Date Collected: 07/14/21 09:32
Date Received: 07/14/21 16:16

Lab Sample ID: 890-944-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5301	07/18/21 11:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5339	07/18/21 17:03	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 15:17	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		5	5344	07/18/21 16:46	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc. Job ID: 890-944-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-944-1
SDG: 31403236.010.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-944-1	PH03	Solid	07/14/21 09:28	07/14/21 16:16	- 0.5
890-944-2	PH03A	Solid	07/14/21 09:32	07/14/21 16:16	- 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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(817) 683-2503	Email:	kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level ☐ PST/US ☐ TRR ☐ Level ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	JRU DI 1A	Turn Around	
Project Number:	31403236.010.0129	Routine:	☑
Location:	Eddy County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Temperature (°C):	1-6 / 1.9	Thermometer ID		
Received Intact:	Yes No			
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Total Containers:		

ANALYSIS REQUEST

Work Order Notes

Incident: nAPP2114845563
CC: 10821510O1
API: 30-015-43236

890-944 Chain of Custody

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
PH03	S	7/14/2021	0928	0.5'	1				
PH03A	S	7/14/2021	0932	1'	1				

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		7-14-21 1616	2		
3			4		
5			6		

Revised Date 101419 Rev. 2019.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-944-1
SDG Number: 31403236.010.0129

Login Number: 944
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-944-1
SDG Number: 31403236.010.0129

Login Number: 944
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/16/21 11:37 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 Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-945-1
Laboratory Sample Delivery Group: 31403236.010.0129
Client Project/Site: JRU DI 1A

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
7/20/2021 10:51:49 AM

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

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

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

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Laboratory Job ID: 890-945-1
SDG: 31403236.010.0129

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Client Sample Results 5
Surrogate Summary 7
QC Sample Results 8
QC Association Summary 11
Lab Chronicle 12
Certification Summary 13
Method Summary 14
Sample Summary 15
Chain of Custody 16
Receipt Checklists 17

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-945-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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. Job ID: 890-945-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Job ID: 890-945-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-945-1

Receipt
The samples were received on 7/14/2021 4:16 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: PH04A (890-945-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-5277 and analytical batch 880-5356 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Client Sample ID: PH04

Date Collected: 07/14/21 09:52
Date Received: 07/14/21 16:16
Sample Depth: - 0.5

Lab Sample ID: 890-945-1
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		07/18/21 11:45	07/18/21 21:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/18/21 11:45	07/18/21 21:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/18/21 11:45	07/18/21 21:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/18/21 11:45	07/18/21 21:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/18/21 11:45	07/18/21 21:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/18/21 11:45	07/18/21 21:08	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		07/18/21 11:45	07/18/21 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/18/21 11:45*	*07/18/21 21:08*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/18/21 11:45*	*07/18/21 21:08*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8		mg/Kg		07/16/21 11:53	07/19/21 15:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 15:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 15:37	1
Total TPH	<49.8	U	49.8		mg/Kg		07/16/21 11:53	07/19/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:37*	*1*
o-Terphenyl	*97*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35.6**		5.02		mg/Kg			07/18/21 16:51	1

Client Sample ID: PH04A

Date Collected: 07/14/21 09:56
Date Received: 07/14/21 16:16
Sample Depth: - 1

Lab Sample ID: 890-945-2
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		07/18/21 11:45	07/18/21 21:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 21:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 21:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/18/21 11:45	07/18/21 21:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 21:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/18/21 11:45	07/18/21 21:28	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		07/18/21 11:45	07/18/21 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*07/18/21 11:45*	*07/18/21 21:28*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*07/18/21 11:45*	*07/18/21 21:28*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Client Sample ID: PH04A

Date Collected: 07/14/21 09:56
Date Received: 07/14/21 16:16
Sample Depth: - 1

Lab Sample ID: 890-945-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *-	49.7		mg/Kg		07/16/21 11:53	07/19/21 15:58	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/16/21 11:53	07/19/21 15:58	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/16/21 11:53	07/19/21 15:58	1
Total TPH	<49.7	U	49.7		mg/Kg		07/16/21 11:53	07/19/21 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:58*	*1*
o-Terphenyl	*87*		*70 - 130*	*07/16/21 11:53*	*07/19/21 15:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**148**		5.00		mg/Kg			07/18/21 17:07	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-945-1	PH04	103	107
890-945-2	PH04A	129	103
LCS 880-5301/1-A	Lab Control Sample	105	106
LCSD 880-5301/2-A	Lab Control Sample Dup	105	107
MB 880-5301/5-A	Method Blank	103	99

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)
890-945-1	PH04	91	97
890-945-2	PH04A	81	87
LCS 880-5277/2-A	Lab Control Sample	84	82
LCSD 880-5277/3-A	Lab Control Sample Dup	88	88
MB 880-5277/1-A	Method Blank	87	95

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-5301/5-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5301

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		07/18/21 11:45	07/18/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:21*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/18/21 11:45*	*07/18/21 16:21*	*1*

Lab Sample ID: LCS 880-5301/1-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5301

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1032		mg/Kg		103	70 - 130		
Toluene			0.100	0.09323		mg/Kg		93	70 - 130		
Ethylbenzene			0.100	0.08978		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			0.200	0.1837		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09097		mg/Kg		91	70 - 130		

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

Lab Sample ID: LCSD 880-5301/2-A
Matrix: Solid
Analysis Batch: 5339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5301

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09710		mg/Kg		97	70 - 130	6	35
Toluene			0.100	0.08804		mg/Kg		88	70 - 130	6	35
Ethylbenzene			0.100	0.08578		mg/Kg		86	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1750		mg/Kg		87	70 - 130	5	35
o-Xylene			0.100	0.08638		mg/Kg		86	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

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

Lab Sample ID: MB 880-5277/1-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 5277

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		07/16/21 11:53	07/19/21 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1
Total TPH	<50.0	U	50.0		mg/Kg		07/16/21 11:53	07/19/21 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/16/21 11:53*	*07/19/21 12:31*	*1*

Lab Sample ID: LCS 880-5277/2-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	681.7	*-	mg/Kg		68	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	801.6		mg/Kg		80	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: LCSD 880-5277/3-A
Matrix: Solid
Analysis Batch: 5356

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 5277

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	681.5	*-	mg/Kg		68	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	862.5		mg/Kg		86	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-5297/1-A
Matrix: Solid
Analysis Batch: 5344

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			07/18/21 16:02	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-5297/2-A
Matrix: Solid
Analysis Batch: 5344

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	244.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-5297/3-A
Matrix: Solid
Analysis Batch: 5344

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	245.0		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

GC VOA

Prep Batch: 5301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Total/NA	Solid	5035	
890-945-2	PH04A	Total/NA	Solid	5035	
MB 880-5301/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-5301/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-5301/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 5339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Total/NA	Solid	8021B	5301
890-945-2	PH04A	Total/NA	Solid	8021B	5301
MB 880-5301/5-A	Method Blank	Total/NA	Solid	8021B	5301
LCS 880-5301/1-A	Lab Control Sample	Total/NA	Solid	8021B	5301
LCSD 880-5301/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	5301

GC Semi VOA

Prep Batch: 5277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Total/NA	Solid	8015NM Prep	
890-945-2	PH04A	Total/NA	Solid	8015NM Prep	
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 5356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Total/NA	Solid	8015B NM	5277
890-945-2	PH04A	Total/NA	Solid	8015B NM	5277
MB 880-5277/1-A	Method Blank	Total/NA	Solid	8015B NM	5277
LCS 880-5277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	5277
LCSD 880-5277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	5277

HPLC/IC

Leach Batch: 5297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Soluble	Solid	DI Leach	
890-945-2	PH04A	Soluble	Solid	DI Leach	
MB 880-5297/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 5344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-945-1	PH04	Soluble	Solid	300.0	5297
890-945-2	PH04A	Soluble	Solid	300.0	5297
MB 880-5297/1-A	Method Blank	Soluble	Solid	300.0	5297
LCS 880-5297/2-A	Lab Control Sample	Soluble	Solid	300.0	5297
LCSD 880-5297/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	5297

Lab Chronicle

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Client Sample ID: PH04

Date Collected: 07/14/21 09:52
Date Received: 07/14/21 16:16

Lab Sample ID: 890-945-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5301	07/18/21 11:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5339	07/18/21 21:08	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		1	5344	07/18/21 16:51	CH	XEN MID

Client Sample ID: PH04A

Date Collected: 07/14/21 09:56
Date Received: 07/14/21 16:16

Lab Sample ID: 890-945-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5301	07/18/21 11:45	MR	XEN MID
Total/NA	Analysis	8021B		1	5339	07/18/21 21:28	KL	XEN MID
Total/NA	Prep	8015NM Prep			5277	07/16/21 11:53	DM	XEN MID
Total/NA	Analysis	8015B NM		1	5356	07/19/21 15:58	AJ	XEN MID
Soluble	Leach	DI Leach			5297	07/16/21 15:24	SC	XEN MID
Soluble	Analysis	300.0		1	5344	07/18/21 17:07	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-945-1
Project/Site: JRU DI 1A SDG: 31403236.010.0129

Laboratory: Eurofins Xenco, Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

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
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: JRU DI 1A

Job ID: 890-945-1
SDG: 31403236.010.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-945-1	PH04	Solid	07/14/21 09:52	07/14/21 16:16	- 0.5
890-945-2	PH04A	Solid	07/14/21 09:56	07/14/21 16:16	- 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, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

Work Order No: _____

Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(817) 683-2503 Email:		kalei.jennings@wsp.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level ☐ PST/US ☐ TRP ☐ Level ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	JRU DI 1A	Turn Around	
Project Number:	31403236.010.0129	Routine:	☑
Location:	Eddy County	Rush:	
Sampler's Name:	Fatima Smith	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	No 1.4	Thermometer ID	IR007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
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 8021)	Chloride (EPA 300.0)
PH04	S	7/14/2021	0952	0.5'	1	X	X	X
PH04A	S	7/14/2021	0956	1'	1	X	X	X

890-945 Chain of Custody

Work Order Notes

Incident: nAPP2114855563
CC: 1082151001
API: 30-015-43236

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7.14.21 1616	2		
3			4		
5			6		

Revised Date101419 Rev 2019 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-945-1
SDG Number: 31403236.010.0129

Login Number: 945
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-945-1
SDG Number: 31403236.010.0129

Login Number: 945
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 07/16/21 11:37 AM

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

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

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

CONDITIONS

Action 40341

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 40341
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	XTO's deferral requests to complete final remediation of impacted soil in the area of borehole BH01 during any future major deconstruction/alteration and/or abandonment, whichever occurs first. At this time, OCD approves the request. The Deferral Request and C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site and will require like approval from BLM.	11/16/2021